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# AN EXPLORATORY STUDY OF DIFFERENCES IN STUDENTS' VIEWS OF THE MARKET SYSTEM

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## ABSTRACT

*This study examines data gathered in an anonymous in-class survey of first-year university students regarding the perception of markets. 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. This study found that although 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 differences in the perception of markets to be somewhat striking.*

## THE SURVEY INSTRUMENT AND ASSOCIATED MATERIAL

This study uses the survey instrument (Market Attitude Inventory, MAI) 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 provides 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 agreements to each statement by writing a number between

‘0%’ and ‘100%’ for the statement, with ‘0’ indicating “strongly disagree” with the statement and “100%” strongly agree with the statement. Some of the statements portray a positive slant towards a market economy and some portray a negative slant towards a market economy (Thomas and Campbell 2006, 33). 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 (23-27, inclusive) was revised to read “In my opinion, the federal government of the United States should:” All 27 statements are listed in Table 1.

Table 1  
The MAI Survey Questions

| Situation/Scenario   |
|--|
| <i>In my opinion, the economic system in the United States:</i>  |
| <ol style="list-style-type: none"> <li>1. ... leads to an unfair distribution of income.</li> <li>2. ... rewards people fairly for their productivity and hard work.</li> <li>3. ... encourages unethical business behavior.</li> <li>4. ... leads to quality and technological advancement in products and services.</li> <li>5. ... leads to inadequate amounts of important public services (like police, roads, fire prevention).</li> <li>6. ... provides opportunities and incentives for success.</li> <li>7. ... encourages greed and excessive materialism.</li> <li>8. ... allows equal access to work opportunities.</li> <li>9. ... leads to erratic cycles of growth and then decline in economic activity.</li> <li>10. ... raises the living standard for most people.</li> <li>11. ... leads to monopoly power among businesses.</li> <li>12. ... leads to an efficient use of resources.</li> <li>13. ... encourages the abuse of the environment.</li> <li>14. ... leads to unemployment and worker insecurity.</li> <li>15. ... leads to excessive risk of business failure.</li> <li>16. ... requires a lot of government control to work well.</li> <li>17. ... allows too much foreign competition.</li> <li>18. ... provides consumers the goods and services they want.</li> <li>19. ... provides employment opportunities for all who desire work.</li> <li>20. ... encourages innovation and the development of new businesses.</li> <li>21. ... provide goods and services at an affordable price.</li> <li>22. “Overall, I believe that the economic system in the United States is a fair and ethical system.”</li> </ol> |
| <i>In my opinion, the federal government of the U.S. should:</i>   |

23. ... take a greater responsibility for solving the problems in society.
24. ... balance the budget every year.
25. ... limit the importation of foreign products to protect the American economy.
26. ... use tax policies to promote a more equal distribution of income.
27. ... provide a job to any one who wants one.

## 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 course. 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 2 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 2 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 market than were the mean female responses. This was true for statements that held either a positive slant or a negative slant towards the role of markets. However, in only two of the original 22 MAI statements (19 and 21) is the difference in the mean responses *statistically different* at the ten percent level.

This study added five 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. This was true for statements that held either a positive slant or a negative slant towards the role of markets. For six of the original 22 MAI statements was the difference in the mean responses *statistically different* at the ten percent 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 promoting an unfair distribution of income, Statement 3 commented upon encouraging unethical business behavior, Statement 7 addressed greed and excessive materialism, and Statement 11 referenced the attempts by business to promote monopoly power. The two positive statements pertained to providing employment opportunities for all who desire to work (Statement 19) and encouraging innovation and the development of new businesses (Statement 20). None of the five statements that pertained to the role to the federal government were found to be statistically significant at even the 20 percent 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 learning experiences found in general management degree programs. AACSB International specifies undergraduate degree programs include experiences in management specific knowledge and skills areas, including domestic and global economic environments of organizations, and, 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 of these experiences, business majors (relative to non-business majors) should have a more thorough, balanced, and in-depth understanding of the role and limits of the economic system and 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 particularly strong in a statistical framework. This study also found a pronounced difference in the perception of markets along major fields of study.

## REFERENCES

- Breeden, Charles H., & Noreen E. Lephardt (2002). Student Attitudes Towards the Market System: An Inquiry and Analysis. *The Journal of Private Enterprise*, 17, 153-171.
- King, Amanda S., & John T. King (2007). Attitudes Toward Free Markets and Interest in Pro-Market Organizations: Evidence from Students in Free Enterprise. *The Journal of Private Enterprise*, 23, 165-171.
- Lephardt, Noreen E., & Charles H. Breeden (2005). The Market Attitudes Inventory: The Development and Testing of Reliability and Validity. *Journal of Economics and Economic Education Research*, 6, 63-72.
- Parker, Darrell, & Martha C. Spears (2002). Personality Type, Gender, and Risk: A Framing Analysis. *Economics and Economic Education Research*, 3, 69-86.
- Thomas, M. Kathleen, & Randall C. Campbell (2006). Teacher Training and Market Attitudes in Transitioning Economies. *The American Economist*, 50, 32-41.

**Table 2**  
**Response Summaries and Tests of Hypotheses**

| Situation/Scenario  | Cohort         | Characteristics: |              | H <sub>1</sub> : μ <sub>x</sub> - μ <sub>y</sub> ≠ 0<br>Pr >   t |
|---|----------------|------------------|--------------|--|
|   |                | mean             | st. dev.     |  |
| <i>In my opinion, the economic system in the United States:</i>                                       |                |                  |              |  |
| 1. ...leads to an unfair distribution of income.  | <b>Overall</b> | <b>53.45</b>     | <b>24.56</b> | 0.149  |
|   | Females        | 56.31            | 22.05        |  |
|   | Males          | 51.07            | 26.34        |  |
|   | Business       | 48.75            | 23.70        |  |
|   | Non-Bus        | 59.22            | 24.51        |  |
| 2. ...rewards people fairly for their productivity and hard work.                                     | <b>Overall</b> | <b>54.95</b>     | <b>23.94</b> | 0.143  |
|   | Females        | 52.12            | 22.46        |  |
|   | Males          | 57.30            | 24.97        |  |
|   | Business       | 56.18            | 24.10        |  |
|   | Non-Bus        | 53.43            | 23.80        |  |
| 3. ...encourages unethical business behavior.   | <b>Overall</b> | <b>44.76</b>     | <b>22.56</b> | 0.413  |
|   | Females        | 46.25            | 21.23        |  |
|   | Males          | 43.51            | 23.65        |  |
|   | Business       | 41.27            | 23.26        |  |
|   | Non-Bus        | 49.04            | 21.03        |  |
| 4. ...leads to quality and technological advancement in products and services.                        | <b>Overall</b> | <b>74.34</b>     | <b>18.14</b> | 0.445  |
|   | Females        | 73.21            | 19.32        |  |
|   | Males          | 75.27            | 17.13        |  |
|   | Business       | 74.36            | 17.32        |  |
|   | Non-Bus        | 74.30            | 19.20        |  |
| 5. ...leads to inadequate amounts of important public services (like police, roads, fire prevention). | <b>Overall</b> | <b>44.46</b>     | <b>21.70</b> | 0.987  |
|   | Females        | 44.43            | 21.82        |  |
|   | Males          | 44.49            | 21.70        |  |
|   | Business       | 44.48            | 21.76        |  |
|   | Non-Bus        | 44.43            | 21.76        |  |
| 6. ...provides opportunities and incentives for success.  | <b>Overall</b> | <b>71.25</b>     | <b>21.58</b> | 0.534  |
|   | Females        | 70.17            | 20.09        |  |
|   | Males          | 72.16            | 22.81        |  |
|   | Business       | 71.21            | 22.18        |  |

**Table 2 (continued)**  
**Response Summaries and Tests of Hypotheses**

| Situation/Scenario   | Cohort         | Characteristics: |              | H <sub>1</sub> : μ <sub>x</sub> - μ <sub>y</sub> ≠ 0<br>Pr >   t |
|--|----------------|------------------|--------------|--|
|  |                | mean             | st. dev.     |  |
| <i>In my opinion, the economic system in the U.S.:</i>                         |                |                  |              |  |
| 9. ...leads to erratic cycles of growth and then decline in economic activity. | <b>Overall</b> | <b>59.77</b>     | <b>20.92</b> |  |
|  | Females        | 60.12            | 22.05        |  |
|  | Males          | 59.49            | 20.04        | 0.838  |
|  | Business       | 59.98            | 20.61        |  |
|  | Non-Bus        | 59.52            | 21.42        | 0.882  |
| 10. ...raises the living standard for most people.                             | <b>Overall</b> | <b>58.56</b>     | <b>19.78</b> |  |
|  | Females        | 58.07            | 19.32        |  |
|  | Males          | 58.96            | 20.24        | 0.665  |
|  | Business       | 58.87            | 18.53        |  |
|  | Non-Bus        | 58.17            | 21.32        | 0.811  |
| 11. ...leads to monopoly power among businesses.                               | <b>Overall</b> | <b>53.91</b>     | <b>22.92</b> |  |
|  | 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.                                 | <b>Overall</b> | <b>44.64</b>     | <b>22.79</b> |  |
|  | Females        | 45.33            | 22.21        |  |
|  | Males          | 44.06            | 23.36        | 0.706  |
|  | Business       | 46.76            | 22.71        |  |
|  | Non-Bus        | 42.01            | 22.76        | 0.160  |
| 13. ...encourages the abuse of the environment.                                | <b>Overall</b> | <b>53.63</b>     | <b>24.88</b> |  |
|  | 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.                            | <b>Overall</b> | <b>50.03</b>     | <b>22.27</b> |  |
|  | Females        | 52.07            | 23.15        |  |
|  | Males          | 48.34            | 21.49        | 0.257  |

**Table 2** (continued)  
**Response Summaries and Tests of Hypotheses**

| Situation/Scenario   | Cohort         | Characteristics: |              | H <sub>1</sub> : μ <sub>x</sub> - μ <sub>y</sub> ≠ 0<br>Pr >   t |
|--|----------------|------------------|--------------|--|
|  |                | mean             | st. dev.     |  |
| <i>In my opinion, the economic system in the U.S.:</i>   |                |                  |              |  |
| 17. ...allows too much foreign competition.  | <b>Overall</b> | <b>48.60</b>     | <b>24.14</b> |  |
|  | 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.  | <b>Overall</b> | <b>71.68</b>     | <b>22.65</b> |  |
|  | 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 to work.                                 | <b>Overall</b> | <b>50.76</b>     | <b>27.21</b> |  |
|  | 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 businesses.                                  | <b>Overall</b> | <b>65.24</b>     | <b>22.08</b> |  |
|  | 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.  | <b>Overall</b> | <b>54.64</b>     | <b>21.03</b> |  |
|  | 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 States is a fair and ethical system.” | <b>Overall</b> | <b>57.44</b>     | <b>23.29</b> |  |
|  | Females        | 55.07            | 22.12        |  |
|  | Males          | 59.81            | 24.46        |  |
|  | Business       | 56.67            | 21.68        |  |
|  | Non-Bus        | 52.16            | 20.05        |  |



**Table 2** (continued)  
**Response Summaries and Tests of Hypotheses**

| Situation/Scenario  | Cohort         | Characteristics: |              | H <sub>1</sub> : μ <sub>x</sub> - μ <sub>y</sub> ≠ 0<br>Pr >   t |
|---|----------------|------------------|--------------|--|
|   |                | mean             | st. dev.     |  |
| <i>In my opinion, the federal government of the U.S. should:</i>                  |                |                  |              |  |
| 23. ...take a greater responsibility for solving the problems in society.         | <b>Overall</b> | <b>59.43</b>     | <b>27.21</b> |  |
|   | 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.   | <b>Overall</b> | <b>72.22</b>     | <b>23.18</b> |  |
|   | 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 American economy. | <b>Overall</b> | <b>53.92</b>     | <b>24.43</b> |  |
|   | 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 income.           | <b>Overall</b> | <b>50.24</b>     | <b>28.37</b> |  |
|   | Females        | 50.89            | 28.71        |  |
|   | Males          | 49.69            | 28.21        | 0.863  |
|   | Business       | 48.45            | 25.84        |  |

