The Honors Program Senior Capstone Project

Student's Name: Anthony Nader Faculty Sponsor: Jongsung Kim

May 2012

Table	e of	Contents

Introduction:	2
Compilation of Literature Review:	3
Narrative of Methodology:	8
Findings:	. 14
Conclusion and Recommendations:	. 19
Appendices:	. 22
Appendix A: Quiz Issued with Consent Form	22
Appendix B: Regression Results	28
Appendix C: Survey Result Averages	33
Appendix D: Survey Results	36
Bibliography	. 39

#### Introduction:

This research is based on a June 2010 Wall Street Journal article outlining a study conducted on the economic literacy of adults versus their political affiliation (Klein, 2010). Adults were surveyed on eight questions regarding simple economic knowledge and then asked their political affiliation. The study found that people who consider themselves very conservative on average answered 1.3 questions wrong, versus an average of 5.26 questions wrong for people who consider themselves very liberal. This same effect was to be measured in the classroom as to whether or not conservatives tended to fare better in economics classes than liberals. The hypothesis being tested, however, was that the right leaning politically affiliated (very conservative and conservative) would perform the same as the left leaning (very liberal and liberal). The reasons for this hypothesis are outlined below in the compilation of literature review. The variables known to affect success in the classroom have been thoroughly studied. However, none of these studies have analyzed the effect of political affiliation on success in the classroom. Leveraging the student body at Bryant University, the author examined the performance of undergraduate students in micro and macro economics courses, compared to their political affiliation. Data was collected and proved inconclusive; few relationships could be shown with statistical significance. However, the results give reason for further testing to explore if a relationship does exist, using a larger sample size.

#### Compilation of Literature Review:

Determining the affects of political affiliation on success in economics is rather difficult, particularly gauging how to rank success. Furthermore, a challenge exists in how to definitively prove a relationship between political affiliation and economic aptitude.

Controlling for variables that were proven to have an effect on academic success, while developing a method to rank student achievement, allows for the desired relationship to be shown true. These control variables are used to give validity to the data collected, while the ranking would show the effect of political affiliation. In order to define the control variables, same or similar studies were used. Below we will explore potential reasons for why there may be a link between political affiliation and economic aptitude. Then we will expand our literature review to begin building the basis for our study.

After initial research, the closest study found was conducted by the Federal Reserve's Bank of New York outlining the long term effects of taking economics courses on political affiliation (Allgood, Bosshardt, van der Klaauw and Watts, 2010). In summary the Allgood, Bosshardt, van der Klaauw and Watts hypothesized:

studying economics may be related to decisions people make about which candidates and policies to support or oppose either because the coursework in economics changed their understanding or attitudes on some issues and policies, or because people with different ideas on the policies tend to selfselect into or away from taking economics courses. (p. 3-4) Although this study found the inverse relationship between political affiliation and economics, it provided a format that could be emulated. The researchers set up the study by surveying 2,000 college graduates nationwide. They asked about a graduate's major, number of economics courses and then their civic behavior. To then exemplify the relationship, the researchers controlled for a number of personal background variables found to affect civic behavior. A summary of their findings can be amalgamated as,

Those who completed more economics courses were more likely to agree that tariffs reduce economic welfare and less likely to think that trade deficits adversely affect the economy. The more economics courses taken the less likely respondents were to believe that government should regulate oil prices, and the more likely they were to believe that the minimum wage increases unemployment. Finally, the more economics courses taken the less likely respondents were to believe that the distribution of income should be more equal. (p. 21)

This study postulates that conservatives may perform significantly better in an economics class than their liberal counterparts. The Federal Reserve study found adults who took more economics classes were far more likely to be conservative and have conservative attributes. Reasons for this could include: first, people with this affiliation are originally drawn to the field because they are surrounded by likeminded individuals who in turn could

allow them to perform better since they are more comfortable<sup>1</sup> (Dynan and Rouse, 1997). A second and much more controversial reason could be that conservatives may gain their beliefs from a far better understanding of economics than liberals, which moves them towards the affiliation.

At the same time, however, rationally one would assume that neither affiliation should affect success in the class. As economics is a social science, like other sciences, rational human beings should be able to grasp the concepts equally, based on the other proven variables that influence success in an academic setting. Economics is "the science which studies human behavior as a relation between scarce means having alternative uses"<sup>2</sup> (Robbins, 1932). Being a rational human, our political affiliation should have no bearing on the ability to allocate scarce resources. Furthermore, a study by the Pew Research Firm in 2005 showed that high income earners (\$75,000+) are split according to exactly the same percentage being highly conservative or highly liberal. This would hold firm one of the major drivers behind success in the classroom, family income, in determining success. Meaning, neither affiliation should have an upper hand because there may be a large proportion of higher earners. For instance, if it were shown that liberals were one hundred percent of high

<sup>&</sup>lt;sup>1</sup> The study by Dynan and Rouse (1997) examined the factors that influence undergraduate students' decisions to become economic majors by analyzing a survey of students in introductory economics courses at Harvard University. They concluded like minded individuals are drawn to the subject based on their similarities.
<sup>2</sup> Robbins (1932) explored the precise nature of the "Economic Science", specifically the bounds of economics

as a science. This paramount essay on the field of economics lays forth the ground work for the jurisdiction of the science today.

income earners, then we would have a hard time equating success in the classroom to political affiliation and not to income level. As you can see, however, political affiliation is split for high income earners, so no student should have an advantage based on their political affiliation derived from wealth.

Lastly, the results of this study may prove controversial; the highly polarized nature of political viewpoints may cause disagreement that one affiliation has an advantage over the other in economics. Due to this political controversy, the researcher attempted to be as unbiased as possible in testing. To accomplish this, the mindset was assumed that the data should prove equal. As a researcher, leaning in one direction or another, would convolute the findings and readers may complain of biases. The combination of all of these insights resulted in the hypothesis that conservatives and liberals should perform equally, holding all else constant.

Based on this hypothesis, the research was set up to emulate the Federal Reserve's study. A February 2001 study by Borman and Rachuba<sup>3</sup> on academic success among poor and minority students was found to locate control variables. The study drew conclusions regarding "individual characteristics that distinguished academically successful, or resilient, elementary school students from…their less successful, or non-resilient, counterparts" (p.1).

3

<sup>&</sup>lt;sup>3</sup> Borman and Rachuba (2001) utilized national data to show that minority students were exposed to greater risk of failure than otherwise similar white students. Furthermore, these students could be positively influenced by supportive school communities to offset the negative affects realized.

Although the study did not directly correlate with what we were measuring, it was used to locate some of the control variables that would be necessary for this study. This research paper utilized studies by Boykin (1997), Delpit (1995) and Taylor (1991); all of which amalgamated statistically significant variables to control for in an academic setting as family income level and race. The studies found that due to advantages gained with higher income families (better schooling, more structured lifestyle, etc.), student's from high income backgrounds performed better in the classroom. Furthermore, white students were found to perform better in the classroom as compared to their peers. Both of these variables were included in our study, to see if the same pattern persisted.

Upon further due-diligence studies by Swope and Schmitt (2007), along with Anderson, Benjamin and Fuss (1994), were located that researched key variables that drive success in economics classes specifically. Neither study, however, tested the effect of political affiliation. The first study, by Swope and Schmitt<sup>4</sup> (2007), was done on similar demographics of the student body of Bryant University, which makes this the most relevant study in variables considered. The similarities were that Swope and Schmitt (2007) utilized the Naval Academy data set, which included a greater proportion of males than females, similar to the demographic at Bryant University. Also, all students were required to take introductory

\_

<sup>&</sup>lt;sup>4</sup> Swope and Schmitt (2007) utilized the U.S. Naval Academy data set to examine the performance of economics majors over an entire curriculum. They found gender was not a significant predictor of GPA in economics but did find that GPA and SAT scores were statistically significant.

macroeconomics and microeconomics courses, similar to Bryant University. However, Swope and Schmitt (2007) were able to secure a very large sample size, 1,011 students, as compared to our study. Swope and Schmitt (2007) found race and SAT scores to be statistically significant. The next study, by Anderson, Benjamin and Fuss<sup>5</sup> (1994), found that overall high school achievement and taking a calculus course in high school were the most significant variables. All of these variables were included in our study to analyze if our findings were reflective of theirs.

### Narrative of Methodology:

To complete the desired research, a random study was conducted on the sophomore class at Bryant University throughout the second semester of 2012. In gathering research, door to door surveying was conducted in five resident halls that primarily house sophomores. In issuing the survey, students were advised to take it seriously. However, it is important to note the surveys were not issued in an academic setting. Furthermore, consideration had been made to conduct the survey at both the beginning and the end of the semester. However, we found that this would be unnecessary, as all of the variables needed could be located on a survey at any point in the semester. Secondly, we considered conducting the study on

\_

<sup>&</sup>lt;sup>5</sup> Anderson, Benjamin and Fuss (1994) analyzed the factors that determine a student's success in introductory university economics courses. They utilized a sample of 6,718 students from the University of Toronto. As specified, having taken a prior calculus course and high school achievement were shown to have the highest significance.

freshman. However, sophomores proved better candidates as they have taken both macro and micro economics classes. Also, they potentially have more defined political affiliations, having a year longer to develop them.

A consent form was issued with the surveys to identify the purpose and possible complications to the participants (Appendix A). All participants signed and dated the consent forms, but each form was then separated from the surveys to give full anonymity. Each survey was then numbered from 1 to 100, so that after inputting the data, it could be easily tracked back to the original survey.

The survey issued asked a set of questions to control for a number of personal background variables found to significantly affect success in an academic setting and economic classes: family income level (I), race (R), SAT scores (S), high school success (HS) and prior high school calculus classes (C) (Boykin, 1986; Delpit, 1995; Taylor, 1991; Swope and Schmitt, 2006; Anderson, Benjamin and Fuss, 1994). These were used to show if our study was reflective of the findings of other researchers, as they were all found to be significant at the 5% level. However, we must note that none of these variables were taken from a database. Students answered their opinion of what each of these are and should be understood that their answers may not be in line with reality. The most direct examples of this are family income level and SAT scores. Students inferred their family income level, or answered what they assumed their family made. Furthermore, many could not recall their

SAT scores, so had to infer these also. We believe that these variables are indication of what a student perceives their income level and SAT scores to have been.

Continuing on to the questions relative to our study; a series of questions were asked about the grade students achieved in each of their economics classes, along with their political affiliation (PA) (Very Conservative, Conservative, Moderate, Liberal, and Very Liberal), two questions to determine their political affiliation and a series of six questions to test economic literacy to control for each student taking different professors. Clarifying these two questions on political affiliation, the first question asks about the distribution of income and whether or not it should be equally distributed or should be distributed based on their contribution, the second asks about tax increases and whether or not they should be proportional or progressive (Appendix A: #13 & #14). These questions were necessary as a student may state a different political affiliation than his/her actual beliefs. This was considered the indirect method for defining a student's political affiliation. The direct method was considered the answer a student specified when asked their political affiliation. The two questions were developed to give another set of independent variables to test, but the dependent variable was analyzed using both the direct and indirect method. Next, the questions for the six question quiz were based on practice problems issued by McConnell and Brue from their Introduction to Macroeconomics textbook. However, these questions were slightly altered in order to reduce the difficulty. We found, after a test survey of ten students, that many of them could not

Senior Capstone Project for Anthony Nader

answer more than two questions correctly. Originally, we had also included fifteen quiz questions, but found students lost focus and attention to complete the quiz. The result was the six question quiz. Also, questions #2 and #3 were designed to see if the participant was able to recognize either a reduction in taxes or an increase in government spending as expansionary fiscal policy. The 20 question survey issued is attached in Appendix A.

In essence, the formula for the dependent variable, success in an economics class (E), was derived to be a function of the above independent variables, expressed as

(1) 
$$E = \beta_0 + \beta_1 PA + \beta_2 I + \beta_3 R + \beta_4 S + \beta_5 HS + \beta_6 SATM + \beta_7 SATV + \beta_8 C + u$$

Success in economics classes (E) was defined multiple ways: success in the introductory macroeconomics class based on grade achieved<sup>6</sup>, success in the introductory microeconomics class based on grade achieved, and the grade achieved on the issued quiz. Each of these were used as dependent variables in the equation

- 11 -

 $<sup>^{6}~</sup>A=4.0,~A-=3.67,~B+=3.33,~B=3.0,~B-=2.67,~C+=2.33,~C=2.0,~C-=1.67,~D=1.0,~F=0$ 

Senior Capstone Project for Anthony Nader

**TABLE 1. Subject Summary by Independent Variables (Averages)** 

Variable	Description	Average
S	Gender (% male)	44%
I	Family Income Level (% of sample)	
	Less than \$50,000	3%
	Between \$50,001 and \$75,000	14%
	Between \$75,001 and \$100,000	25%
	Greater than \$100,000	57%
R	Race/Ethnicity	
	White, Non Hispanic	87%
	Black or African American	2%
	Hispanic or Latino	7%
	American Indian or Alaska Native	2%
	Asian	2%
SATM	SAT Math	592.02
SATV	SAT Verbal	578.65
HS	High School GPA	3.43
С	Calculus Course Before Economics (% taken)	53%
	Political Affiliation	
PA	(1 VC, 2 C, 3 M, 4 L, 5 VL)	3.00
	Change Due to Economics Courses (% who changed)	15%
	Established Political Affiliation (% with established) $E = [Mi,Ma,Q]$	71%
E	Grade in Macroeconomics (GPA)	2.94
E	Grade in Microeconomics (GPA)	2.88
E	Quiz Questions Correct (% answered correct)	
	1	56%
	2	33%
	3	51%
	4	12%
	5	83%
	6	17%
E	Quiz Questions Correct (average per student)	2.52

Furthermore, in the case of the quiz, the micro and macro economics grade achieved were added as independent variables to see the affect on the student's ability to perform the

quiz and to show whether or not the quiz was indicative of their learning in the classroom.

This allowed for ordinary least squared (OLS) regression analysis on the data set, to

determine if political affiliation is significant and if the findings of this study are consistent
with findings of prior studies.

Lastly, one question raised in conducting this study is which way the relationship is going, in other words is political affiliation a function of economics classes or is success in economics classes a function of political affiliation. In order to solve this problem, students were asked if their political affiliation changed due to having taken economics classes. This controlled for the relationship variable in the short term and for reverse causality; as unless a statistically significant amount of students state they changed affiliation, then reverse causality can be ruled out. In other words, if a student agrees that their political affiliation has not changed due to taking economics classes, this would mean that their political affiliation was not a function of their having taken economics courses. Therefore, reverse causality is ruled out in the short term. We know it is the short term though, because the study conducted by the Federal Reserve (Allgood, Bosshardt, van der Klaauw and Watts, 2010) listed above shows that in the long term, having taken economics courses does affect political affiliation. The alternative was to do a two-stage least squared regression analysis to rule out reverse causality. However, after significant research (Pearl, 2000) we found that a study of this type will not work, as the variables that drive political affiliation and success in the classroom are

too interrelated<sup>7</sup>. For this reason, only the question on whether or not a student's political affiliation changed after taking economics was asked.

Once all the data was collected, consideration was taken as to stratify the results, as it was expected there may be considerably more conservatives than liberals at Bryant

University. The expectation was that there would be a disproportional number of conservative students at Bryant; due to the increased enrollment in the business school, as compared to the liberal arts school, with like minded individuals (Dynan and Rouse, 1997). However, this was not necessary as there were proportional results. Following this, in order to find any relationship between political affiliation and performance in economics, equation (1) was estimated. The purpose of this was to not only reveal the relationship between what grade was received by each affiliation, but also show our study reflected the findings of past researchers.

### Findings:

After collecting the primary research (Appendix F), the data was input into an Excel spreadsheet for analysis. Questions 2, 3, 4 & 8 were analyzed using a dummy variable. The rest of the variables were analyzed using the data given (questions 5, 6, 7, 9, 12 & the quiz results). The quiz results were based on the number of correct answers a student received

\_

<sup>&</sup>lt;sup>7</sup> Pearl (2000) explored the causal relationships of many variables across scientific disciplines. A method is presented for a unified account of the probabilistic, manipulative, counterfactual and structural approaches to causation, which devise simple mathematical tools for analyzing the relationships between causal connections and statistical associations.

(Appendix E). Eleven of the initial surveys were then dropped because they were incomplete. This resulted in a sample size of 89 students for the regression. We ran multiple regressions on the data set, as no one had attempted this research before we were not sure as how to best test the data set. We also analyzed the correlation of the variables; however, there was no indication of multicolinearity. The most interesting four regressions are explained below.

The first regression was run using question 9 to define political affiliation (Table 2). In other words, the answer to a student's political affiliation was directly input into the regression using the number 1-5 to represent very conservative to very liberal (1 = very conservative, 2 = conservative etc.). The first regression displayed uses the six quiz questions as the dependent variable, the second uses the student's grade in microeconomics as the dependent variable and the third uses the student's grade in macroeconomics as the dependent variable. Before analyzing the coefficients of the independent variables, it is important to preface that the only variables showing significance, based on the p-value calculated, are student's microeconomics grade in the quiz regression and the student's SAT math grade in the microeconomics regression, meaning that all other variables are showing less significance than the 10% level. After taking this into consideration, we can see that the political affiliation variable has a negative coefficient for the first two regressions and a slightly positive one for the last. These coefficients represent that as a student becomes more liberal, their quiz score decreased, as well as their grade in microeconomics, while their grade in macroeconomics

was not strongly affected. However, as noted above, this is not significant at the 10% level and, therefore, is not showing significance in the regression. However, political affiliation is showing more statistical significance than many other variables which had been found in the past to show significance.

From here additional regressions were run using alternative variables to see if there was any effect. The most notable of these are displayed in Appendix B as Regressions 2 and 3. The first of these, regression 2, uses questions 13 and 14 to calculate a student's political affiliation. If a student answered B to both questions, they were considered conservative, but if they answered A to both questions they were considered liberal whereas if they answered any other combination was considered moderate. This lowered the significance of political affiliation to about the 20% level, but this still would be considered statistically insignificant. Furthermore, the same pattern can be seen in the coefficients for each regression. Finally, we used a dummy variable to try and isolate the effect of being conservative or liberal. The effects of being conservative are displayed in Table 2 as Regression 3. However, the p-value increased above that of regression 2, but showed similar coefficient patterns.

The final regression worth noting is regression 4. For this regression, we attempted to analyze all the variables using a dummy form. In order to accomplish this, we looked if political affiliation had an effect on high achievement. High achievement was defined as

Senior Capstone Project for Anthony Nader

receiving greater than a 3.0 (B) in either microeconomics or macroeconomics or above 3 questions correct on the quiz. Furthermore, political affiliation was defined using questions 13 and 14 in a similar dummy form. We assumed that a student was either liberal or conservative, based on their answer to question 13. If a student said they wanted income equally distributed, they were considered liberal, and if they said income should go to those who produce it, they were considered conservative. As you can see from the appendix below, political affiliation did show significance at the 1% level for the quiz. However, it did not show significance for grade received in macroeconomics or microeconomics.

The Politics of Economics: A study on the effect of Political Affiliation on Economic Aptitude

Senior Capstone Project for Anthony Nader

**TABLE 2. Regression Results for Success in Economics Classes** 

IABLE 2. Regression Results for Success in Economics Classes									
	R	egression 1	Re	gression 2					
Independen	t								
Variable	Quiz	Micro	Macro	Quiz	Micro	Macro			
Intercept	0.4305	-1.046	1.0504	1.1258	-0.937	0.9782			
Macro	0.1339			0.151					
Micro	0.4402 **			0.4158 **					
Sex	-0.048	0.1589	0.2751	-0.12	0.1294	0.2956			
Income	0.2225	0.0165	0.1095	-0.006	0.0231	0.1046			
Race	-0.356	0.1923	-0.032	-0.382	0.1497	-0.002			
SATM	0.0003	0.002 **	-8E-06	7E-05	0.0019 *	6E-05			
SATV	0.0027	0.0004	0.0007	0.0024	0.0003	0.0008			
HGPA	-0.395	0.7403 ***	0.351	-0.409	0.7277 ***	0.3596			
CALC	-0.037	-0.088	0.0496	0.0303	-0.067	0.0349			
PA	-0.016	-0.039	0.0276	-0.264 -0.081		0.055			
	R	egression 3		Re	gression 4				
	Quiz	Micro	Macro	Quiz	Micro	Macro			
Intercept	0.8383	-1.116	0.8574	0.2386	-0.41	0.1725			
Macro	0.1625			0.1517					
Micro	0.4271 *			0.3523 ***					
Sex									
	-0.094	0.1469	0.3049	0.036	0.1862	0.0222			
Income	-0.094 0.0023	0.1469 0.0304	0.3049 0.1116	0.036 -0.026	0.1862 0.0502	0.0222 0.1079			
Income	0.0023	0.0304	0.1116	-0.026	0.0502	0.1079			
Income Race	0.0023 -0.372	0.0304 0.1609	0.1116 0.0104	-0.026 -0.109	0.0502 0.0563	0.1079 0.0224			
Income Race SATM	0.0023 -0.372 -2E-04	0.0304 0.1609 0.002 ***	0.1116 0.0104 0.0005	-0.026 -0.109 -8E-04	0.0502 0.0563 0.0011	0.1079 0.0224 -4E-04			
Income Race SATM SATV	0.0023 -0.372 -2E-04 0.0025	0.0304 0.1609 0.002 *** 0.0004	0.1116 0.0104 0.0005 0.0008	-0.026 -0.109 -8E-04 0.0006	0.0502 0.0563 0.0011 0.0002	0.1079 0.0224 -4E-04 0.0008			
Income Race SATM SATV HGPA	0.0023 -0.372 -2E-04 0.0025 -0.341	0.0304 0.1609 0.002 *** 0.0004 0.7392 ***	0.1116 0.0104 0.0005 0.0008 0.3176	-0.026 -0.109 -8E-04 0.0006 -0.013	0.0502 0.0563 0.0011 0.0002 0.3761 ***	0.1079 0.0224 -4E-04 0.0008 -0.051			

<sup>\*</sup>Significant at .10 \*\*Significant at .05 \*\*\*Significant at .01

#### Conclusion and Recommendations:

The hypothesis being tested was that the right leaning politically affiliated (very conservative and conservative) would perform the same as the left leaning (very liberal and liberal) in economics classes. The variables known to affect success in the classroom have been thoroughly studied. However, none of these studies had analyzed the effect of political affiliation on success in the classroom. Leveraging the student body at Bryant University, we examined the performance of undergraduate students in micro and macro economics courses, compared to their political affiliation.

Our findings proved inconclusive. Political affiliation proved not to significantly affect success in economics. This would prove our hypothesis true, that there is no effect based on political affiliation. However, as described above, there is reason to suspect there may be a relationship better explained by additional testing. Because we were able to only secure a sample size of 100 students, future researchers should be able to show a more definitive relationship with a larger sample size. As explained above, although the political affiliation was shown to be statistically insignificant at the 10% level, it did outperform many variables which had been proven to be significant in past studies. Also, we found it did prove statistically significant on high achievement on our quiz at the 1% level. We assume that if

the study could be expanded to a wider sample, a statistically significant relationship may exist.

Further considerations regard the testing method and how it was carried out. It would be more effective to conduct the surveys in an academic setting, rather than in students' dorm rooms. Many students appeared to take the survey too jovially, even after being prompted to take the survey with seriousness. Also, many students had trouble recalling their SAT scores or did not know their family income level. It would be advantageous if a researcher could acquire more of the data from a proven reliable source. For example, if past grades, SAT scores etc. were given from the school anonymously, then the data set would be considerably more reliable. Lastly, it may be possible to design a more advanced regression to eliminate any reverse causality by analyzing what variables had proven insignificant in the past for success in economics classes but are statistically significant to political affiliation. These are the considerations we had in our study that should be passed on to future researchers.

Analyzing the affects of political affiliation on success in economics showed no statistical significance. This finding, confirmed our hypothesis that political affiliation should not affect performance in an economics class. However, due to sample size restraints and not securing optimal testing environments, many questions still remain as to whether or not a

Senior Capstone Project for Anthony Nader

relationship exists. Our hope is that our study can be used as a baseline model for future testing on the subject matter.

Senior Capstone Project for Anthony Nader

### **Appendices:**

Appendix A: Quiz Issued with Consent Form

### **Consent Form**

#### 1. Statement of purpose

You are invited to participate in a study of the relationship between political affiliation and success in economics classes. We hope to learn more about the link between these two subject matters and whether or not they affect each other. You were selected as a possible participant in this study because of your sophomore status and having completed both the introduction to macro and mico economics courses.

#### 2. Description, Including Risks and Benefits

If you decide to participate, we will conduct an experiment involving the following procedures: A survey will be issued of roughly 20 questions. Completing the questionnaire will take 10 minutes. As with all research projects, there are risks and benefits associated with this study. The benefits of this study do not accrue to you directly. The benefits are to the economic and political sciences. The risks to you are reliant on your ability to complete the survey. In the event you are troubled by any question, please let us know so we can be of assistance.

#### 4. Confidentiality

Any information obtained in connection with this study will remain confidential and will not be disclosed to the general public in a way that can be traced to you. In any written reports or publications, no participant other than the researchers will be identified, and only anonymous data will be presented.

This consent form, with your signature, will be stored separately and independently from the data collected so that your responses will not be identifiable.

The Politics of Economics: A study on the effect of Political Affiliation on Economic
Aptitude
Senior Capstone Project for Anthony Nader

#### 6. Statement that Participation Is Voluntary

Your participation is totally voluntary, and your decision whether or not to participate will not affect your future relations with Bryant University or its employees in any way. If you decide to participate, you are also free to discontinue participation at any time without affecting such relationships. However, it is requested that you notify the investigator of this.

#### 7. Persons to Contact

If you have any questions, please contact Anthony Nader, 617-510-8057, anader@bryant.edu. If you have any additional questions later, we will be happy to answer them. You can have a copy of this form to keep.

#### 8. Signature Indicating Informed Consent

Please sign below if you have decided to participate. Your signature indicates only that you are at least 18 years of age and have read the information provided above. Your signature does not obligate you to participate, and you may withdraw from the study at any time without consequences.

Signature of Participant	Date
Signature of Principal Investigator	Date

Senior Capstone Project for Anthony Nader

Dear Participant,

I want to begin by personally thanking you for your participation in this brief survey. The survey is being conducted, as part of my capstone project, to test the effect of political affiliation on economic aptitude. A study of this kind has never been conducted before; due to this it is of the upmost importance you answer all questions as truthfully and to the best of your knowledge as possible. As a reminder, all your answers are strictly confidential and will remain anonymous from your identity. If you have any further questions please reference the confidentiality agreement and/or email me at anader@bryant.edu. Thank you again, the survey should only take a maximum of 10 minutes time.

#### Part I

Wh	nat is your current year?
	Freshman
	Sophomore
	Junior
	Senior
Wh	nat is you gender?
	Male
	Female
Wh	nat would you consider your family income level?
	Less than \$50,000
	Between \$50,001 and \$75,000
	Between \$75,001 and \$100,000
	Greater than \$100,000
	C C C Wh C C C

4.	Please select your race/ethnicity:  White, Non Hispanic  Black or African American  Hispanic or Latino  American Indian or Alaska Native  Asian
5.	What did you score on the SAT Math section?
6.	What did you score on the SAT Verbal section?
7.	What was your high school GPA?
8.	Did you take a calculus course before taking any economics courses?  Yes No
9.	How do you define yourself politically?  Very Conservative  Conservative  Moderate  Liberal  Very Liberal
10.	Did this viewpoint (political viewpoint from prior question) change as a result of your economics classes?  Yes No
11.	. Do you consider yourself to have an established political affiliation? $Y_{es} \square_{No}$

12.	Wha Univ		tter grade did you receive in your introductory level economics classes at Bryant ity?
	ECC	11	4 Macroeconomic Principles -
	ECC	11	3 Microeconomic Principles -
	C j	A) B) ive	e distribution (allocation) of GDP, what is the ideal policy?  Equally distributed among the people, regardless of individual contribution  Distributed to those who produce it (for ex. the person who contributed more, will more)
14.		A)	vent of a tax increase, which would be more ideal in your opinion?  Progressively, with higher earners having larger percentage increases  Proportionally, with all percentage increases being the same for everyone
	<u>Part</u>	II	
1.		•	red to a command system, economists typically favor a competitive market system it promotes:
		A)	efficiency
		B)	an active government
	200		limited use of capital goods
		D)	high economic profits
2.		\$22	e the full-employment level of GDP is \$250 billion. Currently, aggregate expenditures 20 billion. Which of the following would be appropriate to reach full-employment
		A)	Reduce tax rates on personal income
		B)	Reduce government expenditures
		C)	Raise the tax on corporate income to discourage investment
		D)	Raise the interest rate on government bonds to encourage saving

3.	Which of the following discretionary policy stimulates the economy, if the economy is currently under full-employment?	
	A) An increase in interest rates	
	B) A tax increase	
	C) An increase in government spending	
	<b>D</b> ) A decrease in government spending	
4.	Fed sales of bonds to the public will cause:	
	A) investment to increase	
	B) aggregate demand to shift to the left	
	C) an increase in the money supply	
	<b>D</b> ) lower interest rates	
5.	Economic growth is measured by:	
	A) reductions in the rate of unemployment	
	B) increases in the overall price level	
	C) decreases in the rate of inflation	
	<b>D</b> ) increases in real GDP	
6.	The market system is characterized by:	
	A) widespread use of government price controls	
	B) centralized decision-making	
	C) limited use of capital goods	
	<b>D</b> ) private property rights	

Senior Capstone Project for Anthony Nader

### Appendix B: Regression Results

Regression 1

SUMMARY OUTPUT  Regression St				ession 1				
Regression St								
Regression St								
Multiple R	0.381663826							
R Square	0.145667276							
Adjusted R Square	0.03613744							
Standard Error	1.175813456							
Observations	89							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	10	18.38681099	1.838681099	1.32993238	0.229676677			
Residual	78	107.8379081	1.382537283					
Total	88	126.2247191						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%		Upper 95.0%
Intercept	0.43053128	1.704615691	0.252567944	0.8012665	-2.963097817		-2.963097817	
Macro	0.133909555	0.200846421		0.506914538	-0.265944946			
Micro	0.440223708	0.216987079	2.028801481	0.045891001	0.008235624	0.872211792	0.008235624	0.872211792
Sex	-0.047795126	0.28444312	-0.168030523	0.866994191	-0.614077868	0.518487615	-0.614077868	0.518487615
Income	0.222538554	0.552640707	0.402682161	0.688283585	-0.877684559	1.322761666	-0.877684559	1.322761666
Race	-0.355635484	0.402732021	-0.883057381	0.379918826	-1.157413334	0.446142366	-1.157413334	0.446142366
SATM	0.000280855	0.001918087	0.146424661	0.88396394	-0.003537763	0.004099473	-0.003537763	0.004099473
SATV	0.002660768	0.00190429	1.397248888	0.166300875	-0.001130383	0.006451919	-0.001130383	0.006451919
HGPA	-0.395118199	0.394139846	-1.00248225	0.31921061	-1.179790343	0.389553944	-1.179790343	0.389553944
CALC	-0.037205048	0.271585256	-0.136992149	0.891389992	-0.577889749	0.503479654	-0.577889749	0.503479654
P/A Orig	-0.015629926	0.163727636	-0.095462969	0.924191935	-0.341586605	0.310326753	-0.341586605	0.310326753
SUMMARY OUTPUT								
Regression St	atistics							
Multiple R	0.458071158							
R Square	0.209829186							
Adjusted R Square	0.130812105							
Standard Error	0.709503072							
Observations	89							
ANOVA				_				
Dograssian	df	SS 10.60408074	MS	F 2.655401477	Significance F			
Regression	8	10.69408074	1.336760093	2.655491477	0.012285847			
Residual	80	40.27156869	0.503394609					
Total	88	50.96564944						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-1.045872415		-1.100278629	0.274510547	-2.937531805			
	0.158921415	0.178616033		0.376274534	-0.196535812			
Sex	0.016496539	0.169986084		0.922932257	-0.321786543		-0.321786543	
				0.424866859	-0.284800459		-0.284800459	
Sex	0.192297345	0.239740004	0.802107875	0.424000033			0.204000433	0.009393149
Sex Income		0.239740004 0.001138473		0.078650015		0.004293657	-0.00023761	
Sex Income Race	0.192297345	0.001138473	1.781354014	0.078650015		0.004293657	-0.00023761	0.004293657
Sex Income Race SATM SATV	0.192297345 0.002028023	0.001138473 0.001146578	1.781354014 0.365059039	0.078650015 0.716030681	-0.00023761 -0.001863194	0.004293657 0.002700332	-0.00023761 -0.001863194	0.004293657 0.002700332
Sex Income Race SATM	0.192297345 0.002028023 0.000418569	0.001138473	1.781354014 0.365059039 3.325982635	0.078650015 0.716030681 0.001332176	-0.00023761	0.004293657	-0.00023761	0.004293657 0.002700332 1.18318448

### Senior Capstone Project for Anthony Nader

Regression S	tatistics							
Multiple R	0.266754395							
R Square	0.071157907							
Adjusted R Square	-0.021726302							
Standard Error	0.765760967							
Observations	89							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	8	3.593831533	0.449228942	0.766092617	0.633435407			
Residual	80	46.91118869	0.586389859					
Total	88	50.50502022						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.05036408	1.025923496	1.023823008	0.309004845	-0.991288707	3.092016867	-0.991288707	3.092016867
Sex	0.275129817	0.19277885	1.427178433	0.157420086	-0.108512314	0.658771948	-0.108512314	0.658771948
Income	0.109537383	0.183464616	0.597049096	0.552160657	-0.255568831	0.474643597	-0.255568831	0.474643597
Race	-0.032164832	0.258749461	-0.124308787	0.901382607	-0.547092659	0.482762996	-0.547092659	0.482762996
SATM	-7.5348E-06	0.001228745	-0.006132111	0.99512258	-0.002452815	0.002437745	-0.002452815	0.002437745
SATV	0.000704064	0.001237493	0.568943988	0.57098802	-0.001758625	0.003166753	-0.001758625	0.003166753
HGPA	0.351038153	0.240216413	1.46134125	0.147838659	-0.127007735	0.829084041	-0.127007735	0.829084041
CALC	0.04961862	0.175902507	0.282080233	0.778610446	-0.300438518	0.399675758	-0.300438518	0.399675758
P/A	0.027565586	0.108460262	0.25415378	0.800028868	-0.188277211	0.243408382	-0.188277211	0.243408382

### Regression 2

SUMMARY OUTPUT								
Regression S	tatistics							
Multiple R	0.402070112							
R Square	0.161660375							
Adjusted R Square	0.054180936							
Standard Error	1.164755855							
Observations	89							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	10	20.40553545	2.040553545	1.504105125	0.153840508			
Residual	78	105.8191837	1.356656201					
Total	88	126.2247191						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.125838341	1.634098126	0.688966178	0.492888896		4.379077752	-2.12740107	4.379077752
Macro	0.15102004	0.199513061	0.756943125	0.451364392	-0.246179946	0.548220025	-0.246179946	0.548220025
Micro	0.415818649	0.215561065	1.929006282	0.057367659	-0.013330459	0.844967757	-0.013330459	0.844967757
Sex	-0.119773568	0.296104319	-0.404497874	0.686953715	-0.709271974	0.469724839	-0.709271974	0.469724839
Income	-0.005503365	0.274107185	-0.020077419	0.984032885	-0.551208842	0.540202112	-0.551208842	0.540202112
Race	-0.381627683	0.372541941	-1.024388507	0.308818341	-1.123301703	0.360046337	-1.123301703	0.360046337
SATM	6.77829E-05	0.00191905	0.035321093	0.971913941	-0.003752752	0.003888317	-0.003752752	0.003888317
SATV	0.00244149	0.001879151	1.299251764	0.197684833	-0.001299612	0.006182592	-0.001299612	0.006182592
HGPA	-0.408523847	0.390377392	-1.046484389	0.298569573	-1.185705521	0.368657827	-1.185705521	0.368657827
CALC	0.03034321	0.27466068	0.110475259	0.912316233	-0.516464191	0.577150611	-0.516464191	0.577150611
P/A 1	-0.264331034	0.204852911	-1.290345514	0.200742817	-0.672161844	0.143499776	-0.672161844	0.143499776

SUMMARY OUTPUT								
Pagraccian C	tatistics							
Regression Si	0.461010687							
R Square	0.401010087							
Adjusted R Square	0.133783939							
Standard Error	0.708289105							
Observations	0.708289103							
Observations	85							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	8	10.83177297	1.353971622	2.698910229	0.011080019			
Residual	80	40.13387647	0.501673456					
Total	88	50.96564944						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	IInner 05 00/
Intercept	-0.937443281	0.971092609	-0.965349002				-2.869979128	
Sex	0.129448924	0.971092609	0.729551567		-0.223660541			0.482558388
	0.129448924	0.17743029	0.729331367				-0.223000341	0.462336366
Income	0.023127933	0.225678546	0.159078803			0.598837754		0.598837754
Race								
SATM	0.001925553	0.001140211	1.688769118		-0.000343539			0.004194645
SATV	0.000326008	0.001139928	0.285990217	0.775624864		0.002594536	-0.00194252	0.002594536
HGPA	0.72767032	0.222927565	3.264155872			1.171310305	0.284030335	1.171310305
CALC P/A 1	-0.066543357 -0.080597967	0.166624163 0.123646104	-0.39936199 -0.651843972	0.690690659 0.516370217	-0.398136004 -0.326661552		-0.398136004 -0.326661552	0.265049289 0.165465617
Regression Si	tatistics							
Multiple R	0.269017698							
R Square	0.072370522							
Adjusted R Square	-0.020392426							
Standard Error	0.765260949							
Observations	89							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	8		0.456884333	0.780166255	0.621315083			
Residual	80	46.84994556	0.58562432					
Total	88	50.50502022						
Intercent	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.978214293		0.932340103		-1.109766738		-1.109766738 -0.085958426	3.066195325
Sex	0.295553702	0.191708531	1.541682577	0.127097246				
Income	0.104649579	0.179669788	0.582455069	0.561898255	-0.252904688			
Race	-0.002294954	0.243831194		0.992513803	-0.487534487			0.482944578
SATM	6.30633E-05	0.001231925	0.051190857	0.95930104				0.002514672
SATV	0.000768458	0.001231619	0.623941228		-0.001682542			0.003219457
HGPA	0.359641122	0.240858936	1.493160805	0.139328675			-0.119683427	0.838965671
CALC	0.034883372	0.180026721	0.193767747	0.846848897	-0.323381214			0.393147959
P/A 1	0.054960613	0.133591685	0.41140744	0.68187389	-0.210895307	U.32U81b533	-0.210895307	0.320816533

### Senior Capstone Project for Anthony Nader

### Regression 3

SUMMARY OUTPUT								
Regression St	atistics							
Multiple R	0.394316071							
R Square	0.155485164							
Adjusted R Square	0.047214031							
Standard Error	1.169037781							
Observations	1.103037781							
Observations	03							
ANOVA					_			
	df	SS	MS	F	Significance F			
Regression	10	19.62607117	1.962607117	1.436072203	0.180431706			
Residual	78	106.5986479	1.366649332					
Total	88	126.2247191						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.83830605	1.60544077	0.522165667	0.603034811		4.034493047	-2.357880948	
Macro	0.162512863	0.202379431	0.803010774		-0.240393626			0.565419353
Micro	0.427084331	0.215839867	1.978709199	0.051378734	-0.002619829	0.85678849		0.85678849
Sex	-0.093719457	0.29533293					-0.681682145	
Income	0.002256546	0.274926657	0.008207811					0.549593467
Race	-0.371536651		-0.994281126	0.32316055	-1.115463716			0.372390414
SATM	-0.000246336	0.001979601	-0.124437392					0.003694746
SATV	0.002475467	0.001885772	1.312707056				-0.001278818	0.006229751
HGPA	-0.341141207	0.393493366	-0.866955422				-1.124526308	0.442243894
CALC	-0.004480854	0.272226887	-0.016459998	0.986909445	-0.546442944	0.537481236	-0.546442944	0.537481236
P/A 6	-0.42906371	0.412395445	-1.040418159		-1.250079959	0.39195254		0.39195254
r/A U	-0.42300371	0.412393443	-1.040418133	0.301333337	-1.230079939	0.33133234	-1.230079939	0.39193234
SUMMARY OUTPUT								
Regression St	atistics							
Multiple R	0.456454708							
R Square	0.208350901							
Adjusted R Square	0.129185991							
Standard Error	0.710166446							
Observations	89							
ANOVA	16		146	_	c: :c: -			
Di	df	SS 40.64072006	MS	F	Significance F			
Regression	8	10.61873896	1.327342369	2.63185925	0.012995697			
Residual	80	40.34691048	0.504336381					
Total	88	50.96564944						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-1.11594865	0.950011171		0.243611848			-3.006531098	0.774633798
Sex	0.146855892	0.176537307	0.831868879	0.407959208			-0.204464539	0.498176323
Income	0.030412076	0.166571668	0.182576523	0.85559219	-0.301076102	0.361900254	-0.301076102	0.361900254
Race	0.1609325	0.226074874				0.61083583	-0.288970829	0.61083583
						0.0043514		0.0043514
SATM	0.002005707	0.001178703	1.701621799	0.092/09891	-0.000339987	0.0043514	-0.000339987	
SATM SATV	0.002005707 0.000371394	0.001178703 0.001142325	1.701621799 0.325120961		-0.000339987 -0.001901906			
SATV	0.000371394	0.001142325	0.325120961	0.745938262	-0.001901906	0.002644694	-0.001901906	0.002644694
					-0.001901906			

Regression S	tatistics							
Multiple R	0.302208066							
R Square	0.091329715							
Adjusted R Square	0.000462687							
Standard Error	0.75740025							
Observations	89							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	8	4.612609118	0.57657614	1.005091911	0.438961596			
Residual	80	45.89241111	0.573655139					
Total	88	50.50502022						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.857366444	1.013197262	0.846198936	0.399965853	-1.158960329	2.873693218	-1.158960329	2.873693218
Sex	0.304947286	0.188278961	1.619656729	0.109241712	-0.069739781	0.679634352	-0.069739781	0.679634352
Income	0.111601574	0.177650498	0.62820862	0.531656652	-0.241934178	0.465137327	-0.241934178	0.465137327
Race	0.010391261	0.241111316	0.043097358	0.965731313	-0.469435541	0.490218062	-0.469435541	0.490218062
SATM	0.000459656	0.001257099	0.36564808	0.71559275	-0.002042052	0.002961364	-0.002042052	0.002961364
SATV	0.000820718	0.001218303	0.673657076	0.502471069	-0.001603781	0.003245217	-0.001603781	0.003245217
HGPA	0.317607344	0.238897336	1.329472106	0.187470964	-0.157813497	0.793028186	-0.157813497	0.793028186
CALC	0.015766482	0.175825752	0.089671065	0.92877273	-0.334137908	0.365670873	-0.334137908	0.365670873
P/A 6	0.357077707	0.263100449	1.357191555	0.17853712	-0.166508863	0.880664277	-0.166508863	0.880664277

### Senior Capstone Project for Anthony Nader

### Regression 4

SUMMARY OUTPUT								
Regression St	tatistics							
Multiple R	0.480725867							
R Square	0.231097359							
Adjusted R Square	0.132520097							
Standard Error	0.397701726							
Observations	89							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	10	3.707944138		2.344327229	0.017787013			
Residual	78	12.33699968	0.158166663					
Total	88	16.04494382						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.238550802	0.436698377	0.546259877	0.58644646	-0.630848868		-0.630848868	
Macro	0.151709644	0.113932061		0.186876672			-0.075111661	0.37853095
Micro	0.352284825	0.115691988		0.003172127	0.121959772	0.58261	0.121959772	
Sex	0.036046182	0.100635106		0.721170974	-0.164302921			
Income	-0.025844074	0.096311567					-0.217585671	0.165897524
Race	-0.10917084	0.125850991					-0.359720913	
SATM	-0.000757913		-1.167228396		-0.002050624			0.000534798
SATV	0.000737313	0.000648295	0.933658664		-0.00068537		-0.00068537	0.000334730
HGPA	-0.012990668	0.106399923	-0.122092834		-0.224816639			
CALC	0.103466015	0.100399923		0.262185864	-0.224810039		-0.224810039	0.198833303
P/A 8	-0.258787148	0.091610387	-2.185125792	0.202185804	-0.078916649	-0.02301	-0.078916649	-0.023008673
P/A 6	-0.236767146	0.118431230	-2.163123792	0.03100120	-0.494303022	-0.02301	-0.494303022	-0.023006073
SUMMARY OUTPUT								
Regression St	tatistics							
Multiple R	0.401172839							
R Square	0.160939647							
Adjusted R Square	0.065350493							
Standard Error	0.459594354							
Observations	89							
ANOVA								
ANOVA	df	SS	MS	F	Significance F			
Regression	9	3.200709836	0.355634426	1.683660124	0.106855472			
Residual	79	16.68693061	0.21122697					
Total	88	19.88764045						
	Caefficiant	Charadand Furr	4.04-4	0	1 aa. 050/	11050	1 aa. 05 00/	11 OF 00/
1.1	Coefficients	Standard Error	t Stat	P-value			Lower 95.0%	
Intercept	0.17245818	0.497029826		0.729530805			-0.816854924	
Micro	0.343941377	0.107621634		0.002004847	0.129725876			
Sex	0.022160857	0.115416838		0.848229301			-0.207570609	
Income	0.107868811	0.110703852		0.332836767	-0.11248169		-0.11248169	
Race	0.022376694	0.145005366		0.877753884			-0.266249261	0.31100265
SATM	-0.00039202	0.000747706					-0.001880292	
SATV	0.000812629	0.00074559	1.089915211	0.279063909	-0.000671429	0.002297	-0.000671429	0.002296688
HGPA	-0.050914484	0.126764212	-0.401647151	0.689028213	-0.303232332	0.201403	-0.303232332	0.201403363
CALC	-0.034931298	0.103482449	-0.3375577	0.736591804	-0.240907957	0.171045	-0.240907957	0.171045361
P/A 8	0.114159302	0.13474054	0.847252813	0.399413712	-0.15403503	0.382354	-0.15403503	0.382353634

Regression S	tatistics							
Multiple R	0.414605136							
R Square	0.171897419							
Adjusted R Square	0.08908716							
Standard Error	0.47745243							
Observations	89							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	8	3.785606072	0.473200759	2.075798608	0.047820549			
Residual	80	18.23686584	0.227960823					
Total	88	22.02247191						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.410024188	0.514303491	-0.797241698	0.427670566	-1.433520735	0.613472	-1.433520735	0.613472359
Sex	0.18615514	0.118081314	1.576499568	0.118857156	-0.048834159	0.421144	-0.048834159	0.421144439
Income	0.050207995	0.114868302	0.437091823	0.663222366	-0.178387206	0.278803	-0.178387206	0.278803197
Race	0.056308813	0.150508111	0.374124774	0.709301261	-0.243211868	0.355829	-0.243211868	0.355829494
SATM	0.00108651	0.000767202	1.416198367	0.160599355	-0.00044027	0.002613	-0.00044027	0.00261329
SATV	0.000151719	0.000774375	0.195924699	0.84516592	-0.001389335	0.001693	-0.001389335	0.001692774
HGPA	0.376143441	0.124794433	3.014104332	0.003451695	0.127794609	0.624492	0.127794609	0.624492272
CALC	0.006974002	0.107500553	0.064874104	0.948436077	-0.206958913	0.220907	-0.206958913	0.220906917
P/A 8	0.03700277	0.139914893	0.264466275	0.792100803	-0.241436735	0.315442	-0.241436735	0.315442276

Appendix C: Survey Result Averages

Quiz#	1	2	3	4	5	6	# Correct
	0.56	0.33	0.51	0.12	0.83	0.17	2.52

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Average	2.00	0.44	3.29	1.31	592.02	578.65	3.43	0.53	3.00	0.15	0.29	2.94	2.88	0.19	0.61

Appendix E: Quiz Answer Key

Quiz Answer Key	1	2	3	4	5	6
	1	1	3	2	4	4

Senior Capstone Project for Anthony Nader

### Appendix D: Survey Results

Question #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Quiz	1	2	3	4	5	6
1	2	0	4	1	540	500	3.67	1	2	1	0	2	1.67	1	1		4	1	4	1	4	2
2	2	0	3	1	610	610	3.3	0	4	0	0	2.67	2.67	0	1		1	2	2	2	1	3
3	2	0	4	1	550	600	3.3	1	2	0	1	2.33	3	0	1		4	2	4	1	4	3
4	2	1	4	1	680	600	3.3	1	4	0	1	3.33	3.67	0	1		1	1	2	1	1	2
5	2	1	4	1	540	590	3.6	0	2	0	1	3	3	0	0		1	2	4	1	4	3
6	2	1	4	1	590	590	3.67	1	3	0	0	3	3	0	1		1	2	3	1	4	2
7	2	1	4	1	400	450	3.3	0	3	1	1	3	2	0	0		1	2	3	3	1	2
8	2	1	4	1	620	540	3.2	0	1	1	1	3.33	3.33	0	1		1	2	3	3	4	2
9	2	0	4	1	500	500	3.4	1	2	0	1	3.33	2.67	0	1		1	1	3	1	4	2
10	2	0	4	1	800	650	4	1	4	0	0	4	4	0	1		1	2	4	1	4	3
11	2	0	2	1	580	560	3.14	0	1	0	1	3.33	2.33	0	0		1	1	4	4	4	3
12	2	0	3	1	510	450	3.5	0	3	0	0	2	2	1	0		1	4	1	2	4	2
13	2	1		1	600	550	3.2	1	3	0	0	3.33	3.33	0	1		1	1	3	1	4	3
14	2	0	3	1	500	650	3.7	1	3	0	0	3	4	0	1		1	1	3	1	4	2
15	2	0	3	1	760	730	3.6	0	3	0	0	2	2.67	0	0		4	4	3	2	4	1
16	2	0	3	1	680	540	3.9	1	3	0	1	2	2.67	0	1		2	2	3	2	4	4
17	2	0	4	1	640	600	4.1	1	2	0	1	4	3.67	0	1		4	4	1	1	4	4
18	2	0	2	1	600	480	3.6	1	3	0	0	2.33	3	0	1		3	3	4	2	2	3
19	2	1	4	1	550	560	3.4	0	4	0	1	3	1.67	1	1		1	3	3	1	4	1
20	2	1	4	1	680	600	3.8	1	3	0	0	3.67	3.33	0	0		2	3	2	1	4	3
21	2	1	4	1	630	550	3.5	1	2	0	1		2.33	0	1		1	1	3	1	4	2
22	2	1	2	3	660	590	3	0	4	1	0	3.33	3.33	1	0		1	2	1	2	4	3
24	2	0	4	1	580	440	3.7	0	3	0	0	3.33	4	1	0		2	1	3	1	3	4
25	2	0		1	690	530	3.5	1	3	0	0	3	2.67	0	1		2	3	1	4	3	1
26	2	1	4	1	680	550	3.65	1	3	0	1	3.67	4	0	0		1	1	3	1	4	1
27	2	1	4	1	670	560	3.33	0	3	0	0	3.33	3.67	0	0		1	1	3	1	4	2
28	2	1	4	1	590	610	3.1	0	3	0	0	2.33	3	0	1		1	3	3	3	4	2
29	2	1	3	1	510	490	3.3	0	3	0	1	2	1	1	2		1	3	2	2	2	4
30	2	1	1	1	500	490	3.2	0	3	0	0	2.33	3.33	0	0		1	2	1	1	4	2
31	2	1	3	1	600	510	3.2	0	4	0	0	2.33	2.67	0	0		2	1	4	1	4	2
32	2	1	4	1	630	610	3.8	1	2	0	1	2.67	2.67	0	0		1	3	4	4	4	3
33	2	1	4	1	620	560	3.3	1	4	0	0	2.67	3	0	1		4	2	3	1	4	2
35	2	1	3	1	490	560	3	1	3	0	0	2.67	2.33	0	1		2	1	2	1	3	2
36	2	0	1	1	520	630	3.43	0	4	0	0	3	2.67	0	1		1	2	3	3	4	2
37	2	0	2	3	480	700	3.4	1	3	0	0	3	2.33	1	1		4	4	3	3	3	1

The Politics of Economics: A study on the effect of Political Affiliation on Economic Aptitude

38	2	0	4	1	640	710	4.23	0	3	0	0	3.33	3.33	0	1	4	3	3	3	4	1
39	2	1	4	1	570	500	3.14	0	3	1	0	3.67	3.33	0	0	1	1	2	3	4	3
40	2	1	4	1	550	450	3.3	0	2	0	1	4	3	0	0	1	2	4	3	4	2
41	2	0	3	1	500	500	2.97	1	3	0	0	2.67	3	1	1	2	2	1	3	4	3
42	2	0	4	1	560	590	2.8	0	3	1	0	3	4	0	1	4	1	3	3	4	4
43	2	0	2	1	550	570	4	0	4	0	0	4	4	1	1	1	2	4	3	4	1
44	2	1	4	1	660	610	3.3	0	4	0	0	2.67	2.33	0	1	4	4	3	4	4	2
45	2	0	3	1	650	580	3.4	1	4	0	0	4	3	0	1	1	2	3	2	4	2
46	2	0	4	1	500	500	2.9	0	3	0	0	4	2	1	1	3	3	3	3	4	2
47	2	0	3	1	500	500	3.7	0	3	0	0	3	3	1	1	4	2	3	2	2	2
48	2	1	4	1	640	620	3.4	1	3	0	0	3	3.33	0	1	4	3	2	3	4	1
49	2	1	4	1	620	590	3.3	0	2	0	0	4	4	0	1	4	3	2	1	4	2
50	2	0	3	1	670	670	4.21	0	2	0	1	3	4	0	0	1	2	3	3	4	4
51	2	0	3	1	600	620	4.14	1	4	0	0	3.33	3.67	1	1	1	1	1	3	4	2
52	2	0	2	3	610	540	4	1	5	0	0	2	2.57	0	1	3	4	3	1	4	1
53	2	0	4	1	570	750	4.3	0	4	0	1	3	4	0	0	1	1	2	1	4	4
55	2	1	4	1	530	530	3.5	1	3	0	0	4	2.67	1	1	4	2	1	3	4	1
56	2	0	4	1	680	610	4	1	3	0	0	4	3	0	1	1	1	3	1	4	3
57	2	1	4	1	740	760	3.7	1	4	0	0	2.67	3	0	1	1	2	4	3	4	4
58	2	1	4	1	680	550	3.5	1	2	0	1	3.33	3.33	0	0	1	4	3	1	4	3
59	2	1	4	5	680	650	3.3	1	5	1	1	4	4	0	1	1	1	3	1	4	4
60	2	1	4	1	540	580	2.4	0	3	0	0	3	2.67	0	0	1	1	3	3	4	3
61	2	0	2	1	520	540	4	1	4	0	0	3.67	3.67	1	1	1	1	3	3	4	2
63	2	1	4	3	620	450	3	0	4	0	0	3	3	0	1	1	2	1	3	2	3
64	2	1	4	1	610	700	2.7	0	3	0	0	3	3.33	0	1	1	1	3	1	4	4
65	2	1	4	3	580	620	3	1	4	0	0	3	2	0	0	4	3	4	3	4	4
66	2	1	1	1	680	780	3.2	1	3	0	0	4	1.67	0	1	1		1	2	4	3
67	2	1	4	2	680	620	3	1	5	0	0	2	2	0	1	2	2	2	1	2	1
68	2	1	4	1	520	510	2.9	0	3	0	0	3	2.33	0	1	2	2	3	1	4	2
69	2	1	2	1	610	530	3.4	0	3	0	0	3	2.33	1	0	1	2	3	1	2	1
71	2	0	4	1	620	570	3.4	1	3	1	0	2	2	0	1	4	1	2	3	4	3
73	2	0	4	1	610	680	3.4	0	1	0	1	3.33	4	0	0	1	4	3	3	4	3
74	2	1	3	1	570	690	3.4	1	4	1	0	3.67	3	1	0	4	2	2	3	4	1
75	2	0	4	1	450	600	2.99	0	3	1	0	3	2.33	0	0	1	2	2	1	4	1
76	2	0	4	1	400	610	3.1	0	3	1	0	2	0.67	0	1	1	1	3	4	4	2
78	2	0	3	1	550	500	3.43	0	2	0	1	2	2	0	0	4	2	3	4	4	3
79	2	0	3	1	560	540	3.36	0	3	0	0	3.33	2.76	0	1	1	4	2	1	4	2

The Politics of Economics: A study on the effect of Political Affiliation on Economic Aptitude

80	2	0	3	1	500	650	3.4	1	3	0	0	1.33	2	0	1	4	4	2	1	4	1
81	2	0	4	1	610	520	3.3	1	3	0	0	3	2.67	0	1	1	1	2	1	4	2
82	2	0	4	1	550	600	3.6	1	2	0	0	2	2	0	0	4	2	4	3	4	3
83	2	0	2	3	600	580	4.3	1	3	0	0	3.33	3	0	0	4	3	3	3	4	1
84	2	0	4	4	550	550	3.8	0	2	1	1	2	3.33	0	0	4	3	1	3	4	3
85	2	0	3	1	550	570	3.2	1	3	0	0	3.33	2.67	0	0	1	4	3	1	4	1
86	2	0	4	1	780	600	2.7	0	3	0	0	1	1	0	1	4	4	4	3	4	1
87	2	0	4	1	680	650	3.5	1	2	0	0	3.33	2.33	0	1	1	4	3	1	4	2
91	2	0	2	1	500	500	3.7	0	3	0	0	2	2	0	0	2	2	3	3	2	2
92	2	0	3	2	490	500	2.4	0	3	0	0	2	2	0	1	2	2	3	4	4	2
93	2	0	3	1	500	560	3.7	0	2	0	1	3	3	0	1	4	1	4	1	1	1
94	2	0	2	1	670	680	3.87	1	2	0	1	3	4	0	0	1	1	3	4	4	3
95	2	0	3	1	620	590	3.4	1	3	0	0	2	3	1	1	2	4	3	1	4	1
96	2	0	2	5	590	470	3.5	1	3	0	0	3.33	3.67	0	1	2	2	2	2	4	4
97	2	1	4	1	600	600	3	1	2	0	1	4	3	0	0	1	1	4	3	4	4
99	2	0	3	4	600	630	3.4	1	4	1	0	3.67	4	0	0	1	1	3	1	4	4
100	2	1	4	1	700	600	3.5	1	2	0	1	3.67	3.33	0	0	1	1	3	3	4	4

Senior Capstone Project for Anthony Nader

#### **Bibliography**

- Allgood, S., Bosshardt, W., van der Klaauw, W., & Watts, M. (2010). *Is Economics Coursework, or Majoring in Economics, Associated with Different Civic Behaviors?* New York: Federal Reserve Bank of New York.
- Anderson, G., Benjamin, D., & Fuss, M. A. (1994). The Determinants of Success in University Introductory Economics Courses. *Journal of Economic Education*, 99-119.
- Borman, G. D., & Rachuba, L. T. (2001). *Academic Success Among Poor and Minority Students*. Washington D.C.: CRESPAR.
- Boykin, e. a. (1997). Social context factors, context variability and school children's task performance: Further explorations in verve. *Journal of Psychology*, 427-437.
- Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: The New York Press.
- Dynan, K. E., & Rouse, C. E. (2007). The underrepresentation of women in economics: A study of undergraduate economics students. *Journal of Economic Education*, 350-368.
- Klein, D. B. (2010, June 8). *Are You Smarter Than A Fifth Grader*. Retrieved June 8, 2010, from Wall Street Journal Online: http://online.wsj.com/article/SB10001424052748703561604575282190930932412.html
- Kohut, A. (2005). The 2005 Political Typology. Washington D.C.: The Pewet Research Center.
- Pearl, J. (2000). Causality: Models, Reasoning and Inference. Econometric Theory, 675-685.
- Robbins, L. (1932). An Essay on the Nature & Significance of Economic Science. London: MacMillan and Co.
- Swope, K. J., & Schmitt, P. M. (2006). The Performance of Economics Graduates over the Entire Curriculum: The Determinants of Success. *Journal of Economic Education*, 387-394.
- Taylor, A. (1991). Social competence and the early school transition: Risk and protective factors for African-American children. *Education and Urban Society*, 15-26.