

## **The Macroeconomics Course and the College Student Vote A New Assessment of Economic Literacy**

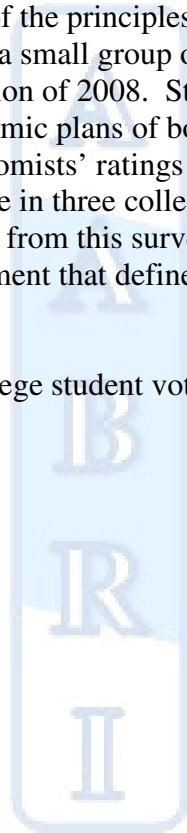
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### **Abstract**

This study examines the effects of the principles of macroeconomics course on the college student vote. This study surveys a small group of college students (n=40) enrolled in a macroeconomics course during the election of 2008. Students in this course were required to examine the economy and rate the economic plans of both McCain and Obama. College students' ratings were compared to economists' ratings in a new test of economic literacy. Findings from this study indicate that one in three college students changed their vote as a result of the course requirements. Other results from this survey are presented in addition to suggestions of future research on assessment that defines economic literacy as the ability to "think like economists."

Keywords: macroeconomics course, college student vote, presidential election, economic literacy, assessment



## 1 Introduction

### 1.1 Background

During the 2008 U.S. presidential campaign, the dramatic changes in financial events placed economic issues in the forefront of media debate and coverage. This emphasis on economics is not new to American politics. Over the past three decades, the economy has trumped moral issues as the major concern of individual voters (Ansolabehere, Rodden & Snyder, 2006). Consequently, U.S. voters went to the ballot box on November 4, 2008 with the economy on their minds.

Previous studies indicate deficiencies in the economic literacy of the U.S. voting public. According to the results of the 1996 Survey of Americans and Economists on the Economy (SAEE), biased beliefs and misconceptions about economics exist among the typical median voter in the U.S. (Caplan, 2008). In the 2005 National Council on Economic Education survey, the participants averaged 70 percent on a test of economics and finance. In addition, 28 percent of the respondents failed (Koshal, Gupta, Goyal, & Choudray, 2008).

Compared to their non-college bound peers, college students are more likely to vote in presidential elections (Farrell & Hoover, 2004). Similarly, the college voter is more likely to have taken a college level economics course. Economists and economic educators continue to discuss what the principles of economics course should achieve for the non economic major (Lucas, Krueger, & Blank, 2002). Some question the effectiveness of such courses to teach students to “think like economists.” In *The Myth of the Rational Voter: Why Democracies Choose Policies*, Caplan (2008) argues that economic education has only had a marginal effect on the economic literacy of the U.S. voter.

The 2008 U.S. presidential campaign highlighted the importance of economic literacy of the voting public. The election also provided a real-time experiment to measure the impact of an economic principles course on the college student vote.

Similarly, the presidential campaign offered an alternative means of assessment of the economic literacy of college students. Over the years, the traditional assessment tools included the Test of Economic Literacy (TEL) developed by the Joint Council of Economic Education and the Standards of Economics Survey developed by the National Council on Economic Education (Koshal, Gupta, Goyal & Choudhary, 2008).

In this paper, economic literacy is narrowly defined as the ability to “think like an economist” when evaluating the economic plans of the presidential candidates. In a 2008 survey by *The Economist*, economists were asked to evaluate the overall plans of both presidential candidates. Similarly, in this study, college students enrolled in the macroeconomics principles course were asked to analyze and rate the economic plans of both McCain and Obama. The college students’ results were then compared to the economists’ results.

### 1.2 Research Questions

This paper addresses the following key research questions: 1) Can a macroeconomics principles course taken at the time of a presidential election affect the college student vote? and 2) Can a macroeconomics principles course teach college students to “think like economists” when evaluating the economic plans of the presidential candidates?

To address these questions, two surveys were conducted on a small sample of college students (n= 40) enrolled in a principles of macroeconomics course during the U.S. presidential campaign of 2008. Key results of the college student survey were then compared to results of *The Economist* 2008 survey.

### 1.3 Purpose and Plan of Study

The purpose of this study is to provide new insight into the effect of a principles of macroeconomics course on the college student vote. In addition, it offers a new means of real-time assessment of the economic literacy of college students. The paper is organized into the following sections. Section 2 is the literature review. Section 3 is the methodology section which presents the primary data collection process including the survey instruments used and details of the economic analysis required by each student. Section 4 is the analysis of results. Section 5 is the conclusion which includes additional comments on the limitation of the data and suggestions for future research.

## 2 Literature Review

Economics has become a dominant theme in American politics. This pattern has developed despite a concurring trend by the major political parties to become increasingly oriented around religion and culture rather than economics (Glaeser & Ward, 2006). Studies have indicated that the role of the macro economy has a major effect on voter outcome. Smyth and Taylor (2003) find that the macro economy contributes more to the success or failure of political issues than did scandals in previous administrations. Studies have found that economic judgments motivate individuals to switch between parties and also lead to nonvoting by devoted partisans (Tillman, 2008).

Over the past three decades, economics has had more weight than moral issues among individual voters (Ansolabehere, Rodden & Snyder, 2006). The 2008 presidential election was no exception. The U.S. financial crisis made the economy the key issue on voters' minds. College-age voters shared similar concerns. According to a self-selected online poll, 90% of college-age respondents indicated that "the economic crisis" was a factor in their voting decision (Campus Compare.com, 2008).

Wood and Doyle (2002) found that greater economic literacy was associated with more overall education and more college economics coursework. College-age voters, however, are not guaranteed a full understanding of economics and the models that economists use to evaluate an economy. U.S. high school graduation requirements in economics are limited and typically fall under Citizenship Guidelines that vary by state. In New England, for example, New Hampshire<sup>1</sup> requires a minimum of one-half credit in economics. Contrarily, Massachusetts does not list any specific minimum credit requirement in economics to graduate.<sup>2</sup> In addition to differences created by state mandates, variations exist within classes that follow the state imposed guidelines (Lopus, 1997).

As a result, the undergraduate economics principles course may be a college student's first exposure to a semester long concentration in either the macro or micro economic models. Since college students are more likely to vote than their non-college bound peers, the college principles course may play an important role in college student voting patterns.

Discussions continue amongst economists and economic educators as to what the principles of economics course should achieve for the non economics major college student (Lucas, Krueger, & Blank, 2002). Caplan (2008) questions the effectiveness of economic education in the following:

Even the most talented teachers in economics have to admit that their reach exceeds their grasp. The amount of economics that students learn in an introductory course is disappointingly small. Even if you successfully teach your students how to think like economists, many perhaps most, of them reconcile with their misconceptions soon after the final exam. (p. 3)

Roos (2007) examined non-expert beliefs about the macro economy and asked whether economic education makes a difference. Roos found that students whether majors in economics or business administration interpret macro events differently than economists.

Roos' results also suggested that application of current events may be instrumental in learning economic concepts. Consequently, the presidential election and financial crisis offered a real time experiment to examine college student voting decisions as well as their economic literacy as measured by their evaluation of each presidential candidate's economic plan.

### **3 Methodology**

#### **3.1 Overview**

The participants of the study were taken from a convenience sample of students (n=40) enrolled in two principles of macroeconomics courses at a small college in New England in the fall 2008 semester. At the start of the course, students completed a preliminary survey on the presidential election. This preliminary data collection is labeled Pre-Project Survey. Students were assigned a research project that included the analysis of the current economy and the economic plans of each of the presidential candidates. The day before Election Day, students who completed the research project also completed a second and final survey. The final data collection is labeled Post-Project Survey. All survey responses were anonymous. Survey results were aggregated. Individual responses were not tracked between the pre-project survey and post-project survey.

#### **3.2 Pre-Project Survey**

In September 2008 at the start of the course, the following overview was read to college students in the principles of macroeconomic courses:

There are many issues which individuals go to the polls and make their decision to vote. These issues include moral reasons, international reasons, the war, etc. One issue could be the economy. Economic issues may or may not play a role in your voting decision in November. In this class, you will learn the macroeconomics model, Aggregate Demand- Aggregate Supply (AD-AS), and will use it to analyze the economic plans of McCain and Obama (listed in alphabetical order only). When you go to vote, you may choose to not consider economic issues in your decision. If you should choose to include economics in your decision, you will have the tools to analyze the economy. In this class there is an important distinction between positive and normative economics. Positive

economics is “what is” and normative economics is “what should be.” Economists agree on the measured unemployment rate of 6.0% (positive economics) but can disagree on where it should be and the best way to improve it (normative economics). Thus, this entire class using the same macroeconomic model should expect to have different voting choices based on your own individual preferences that are related to socioeconomic factors (income, gender, etc) and moral values (how you were raised, religion, etc.).

With this preface in mind, each student received one index card with the following instructions:

1) On one side of the index card, write which choice best describes your current preference in the presidential election: McCain, Obama, I don’t know, not voting.

2) On the other side of the index card, write the main issue that is directing your vote at this time.

The sample size (n=37) of the preliminary survey was reduced due to student absences.

### 3. 3 Research Project

During the course, students were introduced to material which included the definitions and interpretation of four key economic indicators (Gross Domestic Product (GDP), Consumer Price Index (CPI), unemployment rate, and interest rates). Also, students were given instruction on how to construct and apply the standard macroeconomic Aggregate Demand-Aggregate Supply model.<sup>3</sup> Prior to the completion of the research project, students were tested on their understanding of the above concepts.

In the research project, students were required to apply the concepts described in the previous paragraph. First, each student was required to evaluate the current conditions of the economy based on the most recent economic indicators. Second, each student was required to read the economic plans of each candidate and evaluate components of each plan using the AD-AS framework. The full instructions for the research project are presented in Exhibit 1. The research project counted as 15% of the students’ overall grade in the course.

#### Exhibit 1 Research Project

**Project 1 Objective**

Read the Economic Plan proposed by McCain and the Economic Plan proposed by Obama. These plans are available on Blackboard and are available on the related official presidential candidate’s website. Examine the details outlined in each candidates plan and show where each item fits in the Aggregate Demand -Aggregate Supply Model. Your final document should be no less than five typed pages with an additional sixth page of at least six references. References may include further examination of each candidate’s website as well as other journal articles on each candidate.

**Part 1. (1-2 paragraphs)**

Give an overall summary of the current conditions of the U.S. economy. Use the four key indicators (Real GDP, CPI, Unemployment rate, and short and long term interest rates) in your analysis.

**Part 2.**

Construct two separate Tables – one for McCain’s Plan and one for Obama’s Plan. In each row analyze the component of the candidate’s plan. The first column includes an explanation of the component. The second column includes how it affects the AD – AS Model. (Refer to the Macro Map and the Table of non-price determinants that shift AD and

AS.) Remember the items that shift AD include C, I, G and Xn and the components of AS are those items that affect production costs for businesses. In the third column list the benefits and costs of the plan. List the benefits and costs with respect to economic growth, stable prices and employment, pollution, and equity issues. (Use two separate Tables for each candidate – below is an example format.) Each Table should include six components of the respective candidate’s plan. You may choose any six.

Obama’s Plan Components	Component of AD or AS affected	Possible Benefits/ Costs
1.Example: Raise Social Security Cap	Example: This affects personal taxes. This will decrease/increase AD and/or AS.	Benefit: It makes a regressive tax more progressive which is more equitable. Cost: It could slow economic growth.
McCain’s Plan Components	Component of AD or AS affected	Possible Benefits/ Costs
1.		

Part 3:

A summary paragraph should include the effects each presidential candidate’s overall plan will have on the AD-AS model. Include a conclusion as to how each candidate’s overall plan will address the current economic U.S. problems listed in Part 1.

Part 4: Reference Sheet

(Six references excluding Wikipedia. )

### 3. 3 Post-Project Presidential Voting Survey

The Project in Exhibit 1 was due November 3, 2008 (the day before Election Day). On November 3, 2008, a survey was distributed and collected from students who completed the research project. The sample size (n=32) of the post-project survey results was smaller due to student withdrawals and incomplete projects. The survey results were anonymous.

Throughout the course and project instruction, three points were emphasized:

- 1) Although the class will concentrate on the economic plans of each candidate, it is plausible that the economy is not the number one issue why someone will choose their candidate.
- 2) The candidate choice is irrelevant to grade determination and candidate selection is expected to vary based on differences in individual subjective views. Economists can agree on application of the principles of the model but may argue on the policies and outcomes desired and thus the presidential candidate.
- 3) The instructor’s selection of presidential candidate was not indicated to the class before or after Election Day.

(See Exhibit 2 for the Post-Project Presidential Voting Survey.)

#### Exhibit 2: Post-Project Presidential Voting Survey

**Presidential Voting Survey**  
*After* completing your analysis of the proposed economic plans from both John McCain



**Exhibit 3 Pre-Project Survey Selected Raw Responses**

<p>How will you vote in the upcoming Presidential election? (n=37)                  McCain (11)                  Obama (11)                  I don't know (13)                  Not voting (2)</p>
<p>What is the most important issue on which you are making your decision? (n=22)                  International Issues (8):                  Comments included foreign policy, war, Iraq, military experience                  Economic Issues(5):                  Comments included economy, middle class, gas prices                  Moral Issues (4):                  Comments included human rights, pro-life, values, decent ideas                  Political Parties (3):                  Comments included conservative, Republican, bipartisan                  Candidate Ability(2)</p>

**4.2 Post-Project Presidential Voting Survey**

In the post-project presidential voting survey, 32 students completed the project and survey on the due date, November 3, 2009 (the day before Election Day). After completing their analysis of the proposed economic plans from both John McCain and Barack Obama, 53% of respondents selected McCain and 37.5% selected Obama with the remainder not choosing either. See Table 1 for comparison of pre-project and post-project voting results.

**Table 1 Comparison of College Student Pre-Project and Post-Project Voting Results**

	Pre-Project Survey (n=37)	Post-Project Survey (n=32)
McCain	11	17
Obama	11	12
I don't know	13	1* other/write in
Not voting	2	2
Absences/Withdrawals	3	8

In addition, after completing the project and survey analysis, 34% of respondents said that their voting selection for the next President changed based on their recent analysis of each candidate's economic plans. The respondents whose voting selection had changed were evenly divided between McCain (5) and Obama (6). In addition, the majority of students (87.5%) were "definitely voting" the next day. (See Exhibit 4 for raw responses to the Post-Project Presidential Voting Survey.)



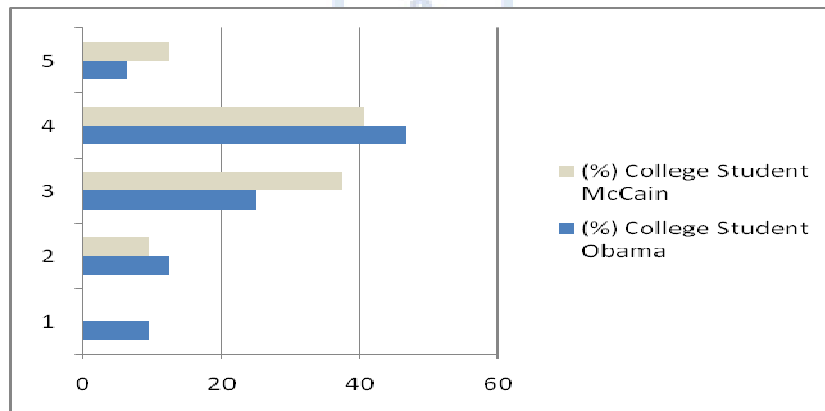
**Exhibit 4 Post-Project Presidential Survey Selected Raw Responses**

<p>Student Respondents (n=32)</p> <p>After completing your analysis of the proposed economic plans from both John McCain and Barack Obama, which candidate will you vote for?</p> <p>McCain (17)</p> <p>Obama (12)</p> <p>Other (1)</p> <p>Not Voting (2)</p>
<p>Has your voting selection for the next President changed based on your recent analysis of each candidate's economic plan?</p> <p>Yes (11)</p> <p>No (20)</p> <p>No response (1)</p>
<p>Using just a word or short phrase, how would you complete the following sentence...?</p> <p>McCain's proposed economic plan is _____</p> <p>lower taxes/ cut corporate taxes</p> <p>to use capital gain to better the economy in the long run</p> <p>geared more toward business</p> <p>manageable loans for home owners</p> <p>to spend money on military funding</p> <p>helping out the rich more than the middle/lower class</p> <p>republican</p> <p>find better resources for fuel and oil/ to increase the amount of energy that is made domestically and make it cost less</p> <p>based on economic growth and stability/ better for reviving the economy and helping decrease unemployment</p> <p>less government</p>
<p>Using just a word or short phrase, how would you complete the following sentence...?</p> <p>Obama's proposed economic plan is _____</p> <p>detailed</p> <p>lower taxes for middle/low class and not clear ways of how to pay for these tax cuts/ targeted to middle class/ tax breaks for working Americans</p> <p>has more reform/ give people tax credits in hopes of stimulating consumer spending</p> <p>to spend money on "green" technology and cut small business taxes</p> <p>more government</p> <p>healthy and economy safe</p> <p>democratic</p>
<p>How likely are you to vote in the upcoming Presidential election?</p> <p>Definitely not voting (4)</p> <p>Somewhat unlikely to vote (0)</p> <p>Somewhat likely to vote (0)</p> <p>Definitely voting (28)</p>

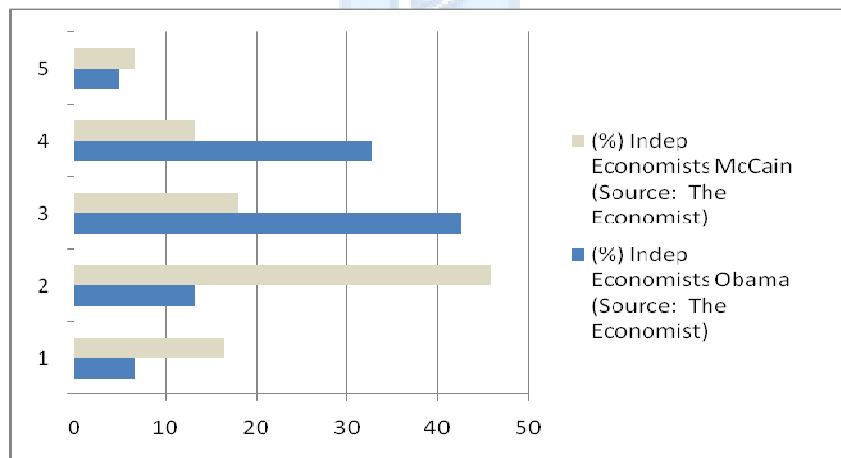
Similarly, the post-project survey also asked students to rate the economic plans of each of the presidential candidates. The results of the ratings were comparable to ratings of *The Economist* poll between September 18, 2008 and September 30, 2008. A total of 142 economists from the National Bureau of Economic Research (NBER) responded to the *Economist* survey. Among the economists surveyed, 46% self-identified as Democrats, 10% self-identified as Republicans and 44% self-identified as Independents (*The Economist*, 2008).

To assess whether the college students “think like economists” when evaluating the economic plans of the candidates, the ratings completed by the college students were compared to the ratings completed by the economists who self-identified as “Independent.” (See Figure 1 and Figure 2.)

**Figure 1 College Students’ Ratings of McCain and Obama Economic Plans**



**Figure 2 Economists’ Ratings of McCain and Obama Economic Plans**



Based on Chi-Square tests, the college students’ mean rating (3.28) of Obama’s economic plan was not significantly different from the economists’ mean rating (3.16) of the same plan. (See Table 1.)

**Table 1. Counts and Mean Ratings of Presidential Candidates' Economic Plans**

Rating of Presidential Candidate's Economic Plan	Very Weak 1	Weak 2	Neither Weak nor Strong 3	Strong 4	Very Strong 5	I don't know	Mean	Response Count
McCain Plan								
College Student	0	3	12	13	4	NA	3.56	32
Economists (Independent) <sup>a</sup>	10	28	11	8	4	1	2.48	62
Obama Plan								
College Student	3	4	8	15	2	NA	3.28	32
Economists (Independent) <sup>b</sup>	4	8	26	20	3	1	3.16	62

<sup>a</sup> *The Economist poll of academic economists (n.d.)* retrieved January 12, 2009, from <http://www.economist.com/ecsurvey/>.

<sup>b</sup> *The Economist poll of academic economists (n.d.)* retrieved January 12, 2009, from <http://www.economist.com/ecsurvey/>

According to Chi-Square tests, the college students' mean rating of the McCain economic plan (3.56) was higher than the economists' mean rating of the McCain plan (2.48).

Within-group comparisons indicate that there was no significant difference between the mean rating college students assigned to the McCain's plan (3.56) versus the mean rating college students assigned to the Obama plan (3.28). Similar mean ratings for both plans may reflect an inability of the respondents to distinguish between the two plans or it may be characteristic of the plans themselves.

The ratings given by independent economists evidence a higher mean rating for the Obama plan (3.56) than the McCain plan (2.48). In a different survey, Scott Adams (creator of Dilbert) polled economists who are members of the American Economic Association. Results from Adams (2008, Press Release, para. 7) indicated that "among independents ...54 percent [were] thinking that in the long run there would either be no difference between the candidates or McCain would do better."

## 5 Conclusion

### 5.1 Discussion

Several insights are evidenced in the survey of college students who were enrolled in a principles of macroeconomics course that required an analysis of the economic plans of both McCain and Obama. One key finding is that one in three college students indicated that the examination of the economic plans of both candidates changed their vote. The "changed" votes were evenly divided between the two candidates.

## 5.2 Limitations of Study

Although the mean ratings of the presidential candidates' economic plans were comparable to economists' ratings in *The Economist* survey, the results were limited in their use as stand-alone measures of the economic literacy of college students.

Future research should address some of the limitations of this study by increasing the sample size, matching student exam performance in the class with student variation in rating of economic plans, and track changes from the preliminary to post surveys. In addition, future research should include collection of data for control variables such as party affiliation and socioeconomic characteristics of the students.

## 5.3 Implications for Research

In conclusion, this study does address the initial question asked of whether a principles of macroeconomics course could have an effect on the college student vote. This study finds that one in three students changed their vote after analyzing the economic plans of each candidate. This research is inconclusive with respect to the second question as to whether a principles of macroeconomics course can teach students to "think like economists" when evaluating economic plans. This paper does, however, lay the ground work for initial discussions and future research which considers alternative assessment tools for economic literacy and economic education in general.

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<sup>1</sup> Courses totaling at least five credits in social studies comprised of offerings in each of the following areas: a. At least one credit in national and state history pursuant to RSA 189:11; b. At least one credit in world history or global studies; c. At least one credit in geography; d. At least ½ credit in United States and New Hampshire government/civics; e. At least ½ credit in economics; and f. At least one credit, which may be interdisciplinary or integrated, to be chosen from the areas of geography, economics, world history, civics/government, state or national history or both, or behavioral studies (N.H. Code Admin. R. Ann. Chapter Ed 306.46C)

<sup>2</sup> All public high school students required to complete courses in American history and civics although state law does not specify the actual number of required units/credits. (MGLA 71A§2) (See <http://mb2.ecs.org/reports/Report.aspx?id=115> for other state listed requirements.)

<sup>3</sup> The required textbook for the course was McConnell and Brue *Macroeconomics* 17<sup>th</sup> edition.