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ABSTRACT

Data from a national survey of American economic literacy were used to investigate the relationship between economic knowledge and public opinion on economic issues. The telephone survey data were collected by the Gallup Organization from a sample of 1,005 members of the general public in March 1992. The instrument contained about 46 questions assessing economic knowledge, asking for opinions on economic issues, and seeking information on background characteristics. The American public showed significant deficiencies in their knowledge and awareness of basic economics, correctly answering only 39% of knowledge questions. Nevertheless, respondents had strong opinions about economic issues. Economic illiteracy has the potential to misshape public opinion on economic issues and lead to policies that have negative or perverse effects on the economy and economic institutions. When survey results give only overall responses to a question, the findings may mask the most likely significant differences between informed and uninformed opinions. Economic knowledge may be the most crucial factor determining public opinion. Eight tables present study findings. (Contains 7 references.) (SLD)

A National Assessment of Economic Knowledge and Public Opinion on Economic Issues

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A NATIONAL ASSESSMENT OF ECONOMIC KNOWLEDGE AND PUBLIC OPINION ON ECONOMIC ISSUES

The American public is confronted daily with economic issues related to such topics as unemployment, inflation, economic growth, Federal budget deficits, taxes, government spending, monetary policy, corporate profits, trade deficit, the value of the dollar, and many others. Unfortunately, most Americans know very little about economics. This lack of knowledge directly affects public opinion on economic issues. Perceptions of public opinion also often influence decisions that national leaders make on these economic issues.

In this study, data from a national survey of American economic literacy were used to investigate the relationship between economic knowledge and public opinion on economic issues. The telephone survey data were collected by The Gallup Organization from a sample of 1,005 members of the general public in March 1992. The survey instrument contained about 46 questions assessing economic knowledge, asking for opinions on economic issues, and seeking information on background characteristics. The instrument was developed by a national committee of 10 economists drawn from education, business, and labor. The margin of error for the responses to the survey questions was plus or minus (+/-) 3 percentage points at the 95 percent level of confidence (Walstad and Larsen, 1992).

This results of the study are divided into five sections. The first two sections present the percentage responses to the major knowledge questions and opinion questions in the survey. In the third section, selected responses to opinion questions are crosstabulated with economic knowledge to explore the effects of the relationship between the opinion and knowledge factors. A regression equation is specified and

estimated in the fourth section to assess whether economic knowledge is a variable that is distinct from the personal and socioeconomic variables that were used to explain it. In the fifth section, public opinion on selected economic issues is studied using logit analysis to evaluate the influence of economic knowledge and personal and socioeconomic factors on the probability of holding a particular opinion on an economic issue.

I. Economic Knowledge

The American public showed significant deficiencies in their knowledge and awareness of basic economics. Overall, the general public correctly answered only 39 percent of economic knowledge questions on the survey. A summary of the knowledge percentages is found in Table 1. The following discussion highlights the economic topics included in the survey along with the percentage of the general public that could correctly answer questions about a topic.

Insert Table 1 about here

Unemployment is an issue of continuing concern for the national economy and was an important topic in the past Presidential election; yet, only 22 percent of the general public knew the national rate of unemployment when the survey was taken. Thirty-nine percent thought the rate was much higher than it was, and 30 percent did not know the unemployment rate.

Inflation affects the level of prices in the economy and the purchasing power of people's incomes, but only 11 percent of the general public knew the national rate

of inflation when the survey was administered. Thirty-four percent thought it was greater than it was and almost half (46 percent) simply did not know. Furthermore, only 35 percent could identify the Consumer Price Index (CPI) as the most widely used measure of inflation. Forty-six percent believed inflation was measured by the prime rate, index of leading economic indicators, or the Federal funds rate.

Economic growth is vital for improving the standard of living in the United States. Just 40 percent of the public knew what was meant by economic growth. Sixty percent thought economic growth was assessed by a change in the producer price index, the money supply, the balance of payments or something else, rather than by a change in the gross domestic product.

The Federal budget deficit is a worry for many Americans; yet only half the public (51 percent) recognized a correct definition of the Federal budget deficit. Forty-two percent confused the Federal budget deficit with the money supply or with the trade deficit. The remainder did not know. Also, most people had no idea of the size of the budget deficit. Only about one-in-five (19 percent) were aware of the expected size of the deficit. Sixty-three percent of the public incorrectly thought the size was $700 billion and $1 trillion in March 1992.

The Federal Reserve is one of the nation's most important economic institutions because it is responsible for monetary policy. Just one-third knew that monetary policy was set by the Federal Reserve, not by the Congress, the President, or the U.S. Treasury. In further probing with another question, only 21 percent could identify as a correct example of monetary policy (a change in the discount rate)

despite the fact that changes in the discount rate made front-page news three times in late 1991, shortly before the survey was conducted. Seventy-nine percent incorrectly thought monetary policy was a change in corporate profits, Federal government spending, or did not know.

Fiscal policy receives the constant attention of the President and Congress. Only half of the American public knew that the President and Congress were responsible for fiscal policy. Moreover, in another question, only 23 percent could identify a change in Federal income tax rates as a correct example of fiscal policy from a list that also included a change in the prime rate or a change in the discount rate.

Corporate profits are critical to the economic health of business and the nation. Just 36 percent knew the basic purpose of profits in our economy. Half of the American public thought the purpose of profits was to transfer income to the wealthy or just to pay for the wages and salaries of workers. In addition, just 13 percent knew the percentage rate of profit as a return on investment earned by major American corporations. It has averaged about 13 percent for the past decade (range: 10 to 16 percent). The average response of the American public was a 32 percent profit rate -- about two and a half times what it actually was.

The value of the dollar affects our international trade, but only half the American public knew how: an increase in the value of the dollar is most likely to lead to a decrease in U.S. exports. The other half thought it would increase exports, have no influence, or did not know.

Trade barriers are commonly thought to create jobs, but from an economic perspective they are not effective in increasing domestic employment in the long-run because they diminish world trade. Only 49 percent of the American public recognized this fallacy of protectionism. Forty-nine percent incorrectly thought that import quotas would increase the number of American jobs in the long-run.

Higher Knowledge Areas. On three questions, the general public showed a somewhat higher level of economic knowledge. These questions tended to be on topics that had the most direct effect on people's lives: wages, purchasing power, and prices. About two-thirds (68 percent) of the public recognized that an increase in productivity was the factor most likely to increase the wages of American workers. Three-fifths (60 percent) understood that the inflation rate has the most effect on the purchasing power of people's incomes. Sixty-four percent understood that the prices of most products in competitive markets are determined by supply and demand and not by government, business monopolies, or the Consumer Price Index.

Self-Evaluations. People surveyed were also asked for a self-evaluation of their economic knowledge. There was clear awareness among the general public of personal deficiencies in economic knowledge. About half of the respondents rated their understanding of economics and economic issues as only fair and about one-third rated it as poor, on a scale that ranged from excellent to good to fair to poor. The self-evaluations showed that over 80 percent of the general public recognized their lack of economic understanding, and served to confirm the results from the knowledge scores that showed that most Americans possess only limited knowledge

about economics and the national economy.

II. Opinions on Economic Issues

All survey respondents had strong opinions about economic issues despite having limited economic knowledge. The discontinuity between economic knowledge and opinion can be illustrated with the following examples:

Unemployment. The dominant economic issue identified by the American public was the job market (unemployment) with 46 percent citing it as an important issue. The respondents recommended a number of actions that should be taken by the Federal government to reduce unemployment, such as a jobs training program or more public works projects. Nevertheless, only 22 percent of the American public knew the rate of unemployment and many (39 percent) were likely to overstate it or did not know (30 percent).

Federal deficit. The general public suggested actions to be taken by the Federal government to reduce the Federal deficit, such as increasing taxes on business (40 percent) or passing legislation to require a balanced budget amendment (78 percent). The American public may not fully understand the economic consequences of these actions because only 51 percent could define a budget deficit and only 19 percent knew the expected size of the budget deficit at the time of the survey.

Supply and demand. Although most people (64 percent) recognized that prices are determined by supply and demand in a competitive market, even that understanding is shaky when opinions are asked. Given a situation where the supply

of oil is reduced by a crisis in the Middle East, almost two-thirds (65 percent) wanted government to stop the price rise rather than let supply and demand determine the price.

Federal Reserve. Only a third of the general public knew that the Federal Reserve was responsible for monetary policy and even fewer could recognize an example of monetary policy, but two-thirds thought that some other organization such as Congress (38 percent) or the U.S. Treasury (13 percent) should be responsible for conducting monetary policy.

III. Knowledge and Opinion Relationships

This last example on the Federal Reserve can be used to demonstrate the effect of economic knowledge on public opinion. The knowledge question asked:

> What is an example of monetary policy? Would it be a change in: (a) the discount rate; (b) a change in Federal government spending; or (c) a change in corporate profits.

Only 21 percent of the general public correctly knew that a change in the discount rate was an example of a change in monetary policy. Despite this lack of knowledge, the general public answered the following opinion question:

> Who should set monetary policy? Should it be the:
>
> (a) President; (b) Congress; (c) Federal Reserve; or
>
> (d) United States Treasury.

When responses from the monetary policy knowledge and opinion questions were crosstabulated, they showed that there were significant differences in the

support for the current institution that controls monetary policy in the United States -- the Federal Reserve -- based on the respondent's correct or incorrect responses to the knowledge question about the Federal Reserve. These results are shown in Table 2. Overall, only 21 percent of adults thought that the Federal Reserve should control monetary policy, but among adults who could give a correct example of a change in monetary policy, 41 percent thought that monetary policy should be set by the Federal Reserve. For adults who gave incorrect answers, the percent supporting control of monetary policy by the Federal Reserve dropped to 16 percent.

Insert Table 2 about here

Shown in the lower half of Table 2 are the crosstabulations of the monetary policy opinion question with the overall economic knowledge scores, based on the 19 economic knowledge questions in the survey. The knowledge scores were divided at the mean (greater than 8 questions correct versus less than or equal to 8 questions correct). Thirty-eight percent of adults with scores above the mean on the knowledge questions, but only 13 percent who scored at or below the mean, thought that the Federal Reserve should set monetary policy. The differences in opinions between high and low knowledge scores mirrored the differences in opinions based on the correctness of response to a single knowledge question related to the issue. Both analyses demonstrate that there are significant effects of economic knowledge on economic opinion, whether the knowledge is measured by the response to a specific question or by a general economic knowledge score.

Similar crosstabulations of opinion and knowledge questions on the Federal budget deficit, economic growth, government controls on gasoline prices, or trade protectionism were performed to investigate whether there were any substantive differences in results based on whether knowledge was measured by a response to one knowledge question or by an overall knowledge score. No substantive differences were found in the pattern of breakdowns based on the knowledge measure used. For the sake of parsimony, only the overall knowledge scores are used for the subsequent analysis. For the same reason, the opinion response categories were reduced. Only the percentages not supporting a proposition are reported in Table 3.

Insert Table 3 about here

On the issue of the Federal budget deficit, 55 percent of the public was opposed to increasing taxes on business to reduce the deficit and 45 percent were either in favor of increasing taxes or had no opinion on the issue. For people with economic knowledge scores greater than the mean, however, the opposition to taxes was much stronger (69 percent) compared to people with scores below the mean (48 percent).

Large differences in percentage responses (18-28 points) were found between high and low knowledge respondents on other issues. Forty-one percent of the general public with scores above the mean were opposed to encouraging economic growth by increasing government spending to provide jobs, but only 23 percent with

scores below the mean were opposed to such an idea.

One proposition in the survey was included to assess the degree of support for competitive markets. The proposition posed the hypothetical situation of whether the U.S. government should prohibit increases in oil and gas prices if a crisis in the Middle East reduces the supply of oil, thus causing oil and gasoline prices to increase. Overall, only 32 percent of the general public were opposed to government intervention and price controls in the oil and gas market under the "crisis" circumstances. The percentage rose to 47 percent for those with above average knowledge of economics, but it was only 25 percent for those with average or below average scores.

Americans are also concerned about trade deficits. One question on the survey asked the general public whether the U.S. government should limit imports from other countries to correct the trade deficit. Only 29 percent of Americans opposed that idea; however, the proposition was opposed by 48 percent of the general public with knowledge scores above the mean, but by only 20 percent with scores below the mean.

For each issue, of course, there will still be differences of opinion even among those with higher levels of economic knowledge. For example, on the issue of the trade deficit, 48 percent of people with scores greater than the mean opposed import restrictions as a way to correct the trade deficit, but 48 percent favored the idea (4 percent did not offer an opinion or did not know). The informed public was clearly split on this issue. The overall data, however, would leave the impression that the

public favored import restriction because only 29 percent opposed them and 67 percent favored them (4 percent did not offer an opinion or did not know). Differences of opinion are likely to be smaller than what would be the case if only the overall percentages are reported for different propositions.

The differences in the percentage responses to these items and other opinion questions on the survey suggest that knowledge factors must be used in interpreting public opinion on economic issues. Most economic issues require a minimal amount of economic knowledge for people to understand, but too often survey results are presented only in the aggregate. Analysis of economic opinions on issues is perhaps best performed by sorting responses by a knowledge variable and by showing knowledgeable opinions about the economic issue rather than simply presenting the overall response. This type of analysis is especially important on public issues that require background information or knowledge of the subject.

IV. Factors Affecting Economic Knowledge

An argument could be made that economic knowledge is best explained by factors that are unique to the individual. The research literature in economic education at both the college and the precollege level suggests the basic factors are related to the level of economic knowledge (Siegfried and Fels, 1979; Becker, Greene, and Rosen, 1990). First, there is the influence of personal characteristics such as respondent's age, sex, or race. Other things equal, older adults possess more economic knowledge than younger adults because they have had more years to learn about how the economy works. Studies at both the high school and college

level have found that a person's sex can influence economic understanding (e.g., Siegfried, 1979). Males tend to score significantly higher than females on multiple choice exams in economics. Some studies have found that race or ethnic origin affects the level of economic knowledge, with whites outscoring blacks on tests of economic understanding in high school (see Becker, et al., 1990).

Second, the level of education or income of an individual will influence what they know about economics. Other things equal, people with more education are more likely to understand what affects the national economy, perhaps because they have taken a course in economics. The level of income will also affect economic understanding. Those with a higher level of income are more likely to have shown an direct interest in economic matters and are more likely to understand how the economy works than those with less income.

Third, the political affiliation of the individual may affect the economic knowledge, or at least a person's propensity to be aware of developments in the national economy. The direction of the potential effect, however, is difficult to specify with any degree of certainty. It would be plausible to argue that Republicans would be more knowledgeable about economics simply because the type of person that supports that party has historically been more business-oriented and more directly concerned with economic issues such as taxes, free trade, and the degree of government intervention into the economy. Democrats, by contrast, have traditionally focused on domestic issues such as civil rights, urban problems, and equity in the distribution of income.

A regression model was specified based on the working hypotheses for the above variables. The variables used for the estimation are described in Table 4 and are drawn from the Gallup data. The economic knowledge score from the survey was created by summing the correct responses to the 19 knowledge questions on the survey. This test score had an alpha reliability of .71. Included in the regression model were variables controlling for the effects of age, sex, and race. The education factor was entered as a set of dummy variables capturing different levels of education, with the effect of less than a high school education captured in the constant term. Income was also represented by a set of dummy variables, with the excluded category being low income ($25,000 or less). And, party orientation was entered in a set of dummy variables. Included in the regression equation were Republican, independent, and a no party variable indicating that the person gave no indication of political orientation. Democrat was the excluded category for the political affiliation variables.

Insert Table 4 about here

The results from the regression are reported in Table 5. The coefficient signs conformed to a priori expectations and were statistically significant in most cases. Ceteris paribus, being older, or being male, or being white, or being more educated, or having a higher income, or being classified as a Republican, were factors that made a positive and statistically significant contribution to the prediction of the economic knowledge scores. The set of dummy variables for different levels of

education was highly significant (F=43.74; p=.000). The size of the coefficient for each education variable was positive and statistically greater than the omitted category of less than a high school education. The size of the coefficient also increased as the level of education increased, indicating the increasingly positive effects of more education on economic knowledge.

The set of income dummy variables was significant overall (F=9.26; p=.000), but the significance varied by income level. Those individuals with upper incomes or upper-middle incomes showed significantly more knowledge about economics than those with low incomes. On the other hand, there was no statistically significant difference in economic knowledge between those individuals with only a middle income, or those who did not report their income, relative to the excluded category of low income.

The set of dummy variables representing different political orientations was a significant factor in explaining economic knowledge (F=2.59, p=.052). Other things equal, there was a small but significant difference in economic knowledge in favor of Republicans over Democrats. The coefficient for "independent" in political orientation was positive relative to Democrat, but the effect was not statistically significant. There was no statistically significant difference in economic knowledge between those with a no party affiliation relative to those who reported a Democratic affiliation.

Insert Table 5 about here

Although the regression results showed that there are many factors that

influenced economic knowledge, these factors did not fully explain this variable. The adjusted R-square was only .33, suggesting that only about one-third of the linear variation in economic knowledge is explained by the model. Perhaps there were other factors that should have been included in the regression or other functional forms that should have been specified and estimated. It is doubtful, however, that these changes or additions would have added more than 10 percent to the explanation of economic knowledge by a regression model. The unexplained dimension of economic knowledge made it worth considering as an independent factor when assessing factors that affect opinions on economic issues.

V. Logit Analysis of Economic Opinions

Logit models were specified to investigate the effect of economic knowledge on opinion after controlling for the influence of other variables. The dependent variable in each logit model was the log of the odds that a person would hold a particular view on an economic issue. The five issues that were studied were the ones previous examined in crosstabulations: (1) leaving the responsibility for monetary policy to the Federal Reserve System (FEDRES); (2) taxing business to reduce the Federal budget deficit (DEFICIT); (3) increasing government spending for jobs as a way to stimulate economic growth (GROWTH); (4) establishing government price controls on oil and gasoline price (OIL) during a crisis in the Middle East; and, (5) setting import restrictions as a means of reducing a trade deficit (IMPORTS). The means, standard deviations, and definitions of the dichotomous dependent variables are given in Table 6.

Insert Table 6 about here

The sign for the coefficient for economic knowledge in each logit equation was expected to be positive and statistically significant reflecting the strong contribution of economic knowledge to the prediction of the dichotomous choice in each equation. The expected direction of this effect was based on economists' views on these types of issues and the way the dependent variable was specified. In the case of the Federal Reserve, for example, most economists would support the notion that the Fed should be responsible for monetary policy, not the Congress, the President, or some other organization (1=Federal Reserve; 0=other group). Most economists would also be inclined to give a no response to the four other propositions because the proposed actions would reduce economic efficiency or might have harmful secondary effects (e.g., Blinder, 1990; Alston, Kearl, and Vaughn, 1992). Thus, a person who possessed more economic knowledge (a higher ESCORE) was thought to give responses to the propositions that would have been similar to the responses of economists to these issues.

The other predictor variables in the logit equations were personal characteristics (age, sex, and race), socioeconomic factors (income and education), and orientation to a political party. These background factors were included because they were thought to be significant factors that shaped people's opinion, even after controlling for knowledge effects. Their inclusion in the logit analysis permitted estimation of the direct effect of economic knowledge holding constant these other

influences. It was difficult, however, to specify the expected direction of the coefficient signs or to anticipate whether one of these background variables would be significant based on previous research (e.g., Blinder and Holtz-Eakin, 1984). The sign and significance was most likely to vary from proposition to proposition, unlike the hypothesized economic knowledge effect.

The results from the maximum-likelihood estimation of each of the five logit equations are given in Table 7. The chi-square statistic for each model was highly significant. The number of correct predictions of the choices by the logit model was relatively high, ranging from 81 percent in the case of the FEDRES equation to a low of 62 percent in the case of DEFICIT equation.

Insert Table 7 about here

The results showed a statistically significant influence in the expected direction from ESCORE variable for predicting the log odds of the choice in each equation. None of the other variables showed a similar consistency in coefficient sign and in the significance of the effect. The coefficient for AGE was positive and significant in two equations (DEFICIT and GROWTH), but negative and insignificant in three equations (FEDRES, OIL, and IMPORTS). The coefficient for SEX showed that males tended to support the propositions, but the effect was only significant in the case of the DEFICIT, GROWTH, and IMPORTS models. The RACE coefficient was negative for whites in the FEDRES decision and positive in the four other equations, but insignificant in all equations. Similar inconsistencies in sign or statistical

significance were found in the education, income, and political affiliation variables. Only economic knowledge provided a reliable indicator of public opinion on these issues.

To appreciate how economic knowledge affected each opinion, the estimated probabilities of support for each proposition were calculated for three different levels of economic knowledge -- at the mean, one standard deviation above the mean, and one standard deviation below the mean. These probabilities are reported in Table 8. In column (1) are the probabilities of supporting a position for each choice variable based on assumptions about the other characteristics -- that the person was of average age (44 years), was male, was white, had a four-year college education, earned a middle income, and was Republican. The other columns report the probabilities based on the same set of basic characteristics, but with a change in one or two of the variables: column (2) gives the probabilities for females; column (3) reports the probabilities for Democrats; and column (4) gives the probabilities for nonwhites and Democrats.

Insert Table 8 about here

Based on the probabilities for the basic set of characteristics in column (1), there was almost a doubling of the probability (from .23 to .44) of accepting the idea that the Federal Reserve should be responsible for monetary policy as the level of knowledge moved from the mean to one standard deviation above the mean. The probability of opposing taxation of business to reduce the Federal deficit, or the

probability of opposing an increase in government spending to provide jobs as a way to stimulate economic growth, increased by .07 for each question as the level of knowledge changed from the mean to one standard deviation above it. Opposition to government intervention and price controls for oil and gasoline was more likely by .14 with change from a mean level of knowledge to one standard deviation above it. There was a substantial increase of .19 in the probability that a person would not support import restrictions to reduce a trade deficit if they had an above average level of economic knowledge.

The probabilities in the other columns show the same basic pattern even as changes were made in one or two variables in the specified set of characteristics. Despite the changes, the probability of supporting a proposition consistently increased as the knowledge level increased from one standard deviation below the mean, to the mean, to one standard deviation above the mean. This pattern occurred irrespective of whether the person was male or female, Republican or Democrat, or white or nonwhite. Although it was not possible to present the knowledge probabilities for all the combinations of individual characteristics, if this were done, the effect of economic knowledge on probabilities would be the similar with other combinations reported in Table 8.

VI. Conclusion

The results from the survey suggest that the economic knowledge base of the American public is sadly deficient for understanding or making decisions about most economic issues. This economic illiteracy has the potential to misshape public

opinion on economic issues, and lead to policies that have negative or perverse effects on the economy and on our economic institutions.

Survey researchers need to be more attentive to the effects of economic knowledge on public opinion when they conduct and report survey findings on economic issues. People will state an opinion about an economic issue despite having little or no knowledge of the subject. When survey reports give only overall responses to a question, the findings mask the likely significant differences between informed and uniformed opinions, especially on economic issues. In fact, economic knowledge may be the most critical factor determining public opinion on economic issues -- perhaps more important than other factors such as age, sex, race, education, income, or political affiliation.

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Table 1: Percent of Correct Responses to Economic Knowledge Questions

Economics Item	%
1. Unemployment rate	22
2. Inflation rate	11
3. Inflation measure	35
4. Economic growth	40
5. Budget deficit	51
6. Deficit size	19
7. Federal Reserve	46
8. Monetary policy	33
9. Monetary policy ex.	21
10. Fiscal policy	50
11. Fiscal policy ex.	23
12. Economic policy	48
13. Productivity	68
14. Purchasing power	60
15. Profits	36
16. Profit rate	13
17. Supply & demand	64
18. Value of dollar	50
19. Quotas	49
Mean % correct	39%

Table 3: Opinions on Economic Issues by Economic Knowledge Scores
(Percent responding no to the proposition)

	Overall	By Knowledge Score	
		> Mean	≤ Mean
Reduce the Federal budget deficit by increasing taxes on business.	55.0%	68.8%	48.4%
Encourage economic growth by increasing government spending to provide jobs.	29.3%	41.2%	23.3%
U.S. government should prohibit an increase in oil and gas prices, if the supply of oil is reduced by a crisis in the Middle East.	31.8%	46.6%	24.6%
Limit imports from other countries to reduce a trade deficit.	29.3%	47.7%	20.3%
(N)	(1,006)	(330)	(676)

Table 4: Description of Variables for Regression Analysis

Variables	Description	Mean	S.D.
ESCORE	Score on 19 economic knowledge questions (alpha reliability: .71)	7.939	3.527
AGE	Age in years	44.192	16.726
SEX	Respondent Sex (1=Male; 0=Female)	.500	.500
RACE	Race/Ethnic Origin (1=White; 0=other)	.871	.336
	Education (1=yes; 0=no)		
POSTGRAD	Post Graduate Education	.121	.327
COLLEGE4	Four Years of College	.171	.377
COLLEGE2	Two Years of College	.247	.431
HIGHSCH	High School Education	.345	.476
LESSHS	Less Than High School Education	.108	.311
	Income (1=yes; 0=no)		
UPINCOME	Upper Income [+$75K]	.101	.302
UMINCOME	Upper Middle Income [$50-74.9K]	.162	.396
MDINCOME	Middle Income [$25-49.9K]	.357	.479
LINCOME	Lower Income [< $25K]	.319	.466
NRINCOME	Did Not Report Income	.060	.237
	Party identification (1=yes; 0=no)		
REPUBLICAN	Republican	.333	.472
DEMOCRAT	Democrat	.355	.479
INDEPENDENT	Independent	.230	.421
NOPARTY	Did Not Give Party Identification	.082	.274

Table 5: OLS Regression Results for Economic Knowledge Score
(N=1005; standard deviations in parentheses)

variables	b-coefficient
AGE	.0115[a] (.0057)
SEX	1.7279[b] (.1867)
RACE	.8177[b] (.2846)
POSTGRAD	4.6003[b] (.4048)
COLLEGE4	3.4762[b] (.3755)
COLLEGE2	2.2472[b] (.3396)
HIGHSCH	1.2337[b] (.3190)
UPINCOME	2.0605[b] (.3613)
UMINCOME	.7237[a] (.2986)
MDINCOME	.2016 (.2332)
NRINCOME	.7495 (.4178)
REPUBLICAN	.5604[b] (.2255)
INDEPENDENT	.3364 (.2493)
NOPARTY	-.1482 (.3657)
CONSTANT	3.0270
Adj. R^2	.329
SEE	2.889
F	36.166

a = significant at .01 level; two-tailed test

b = significant at .01 level; two-tailed test

Table 6: Description of Dependent Variables for Logit Analysis

Variables	Description	Mean	S.D.
FEDRES	Federal Reserve Should Set Monetary Policy (1=Yes; 0=No or other response)	.23	.42
DEFICIT	Reduce Federal budget deficit by increasing taxes on business (1=No; 0=Yes or other response)	.58	.49
GROWTH	Encourage economic growth by increasing government spending to provide jobs (1=No; 0=Yes or other response)	.32	.47
OIL	U.S. government should prohibit an increase in oil and gas prices, if the supply of oil is reduced by a crisis in Middle East. (1=No; 0=Yes or other response)	.35	.48
IMPORTS	Limit imports from other countries to reduce a trade deficit (1=No; 0=Yes or other response)	.32	.47

Table 7: Logit Analysis of Five Economic Issues
(N=1005; standard errors in parentheses)

	Dependent Variables (see Table 6)				
Variables	FEDRES	DEFICIT	GROWTH	OIL	IMPORTS
AGE	-.0001	.0119[a]	.0154[a]	-.0084	-.0054
	(.0054)	(.0042)	(.0045)	(.0045)	(.0047)
SEX	.0639	.2955[b]	.3900[a]	.0915	.2936[a]
	(.0054)	(.1405)	(.1510)	(.1506)	(.1556)
RACE	-.1284	.3123	.2463	.0887	.1358
	(.2723)	(.2041)	(.2438)	(.2297)	(.2418)
POSTGRAD	.4171	.1197	.1812	.9756[a]	.2764
	(.4098)	(.3154)	(.3375)	(.3457)	(.3429)
COLLEGE4	.2583	.0992	.2631	.3554	-.1822
	(.3905)	(.2844)	(.3078)	(.3219)	(.3193)
COLLEGE2	.0787	.1787	.2052	.3971	-.2375
	(.3720)	(.2516)	(.2799)	(.2960)	(.2919)
HIGHSCH	.1574	.3418	.0518	.2778	.2819
	(.3604)	(.2322)	(.2617)	(.2818)	(.2739)
UPINCOME	.6187[b]	-.3235	-.0025	.4904	.1956
	(.3143)	(.2700)	(.2798)	(.2737)	(.2829)
UMINCOME	.7875[a]	-.2245	.3241	.2240	-.1142
	(.2724)	(.2177)	(.2285)	(.2286)	(.2383)
MIDINCOME	.5685[b]	-.1706	.0802	.1552	-.0560
	(.2342)	(.1698)	(.1852)	(.1852)	(.1905)
NRINCOME	1.3064[a]	.0334	.2759	.6167	-.3983
	(.3650)	(.3065)	(.3286)	(.3210)	(.3684)
REPUBLICAN	.0008	.6948[a]	.8875[a]	.3602[a]	.2964
	(.2049)	(.1654)	(.1821)	(.1774)	(.1856)
INDEPENDENT	-.0380	.3947[b]	.7786[a]	.3677	.5683[a]
	(.2226)	(.1791)	(.1977)	(.1934)	(.1985)
NOPARTY	-.1348	.1175	1.1291[a]	.4747	.3777
	(.3606)	(.2608)	(.2812)	(.2875)	(.3047)
ESCORE	.2442[a]	.0960[a]	.0815[a]	.1445[a]	.1928[a]
	(.0291)	(.0237)	(.0244)	(.0248)	(.0262)
CONSTANT	-3.9135	-1.7679	-3.3676	-2.3895	-2.4984
Chi-square [df: 15]	221.37[a]	76.15[a]	96.80[a]	127.73[a]	148.49[a]
Correct Predictions	81.00%	61.49%	68.66	70.85%	74.03%

[a] significant at .01 level, two-tailed test

[b] significant at .05 level, two-tailed test

Table 8: Probabilities Based on Logit Analysis by Knowledge Score and Selected Characteristics

Knowledge Score	FEDRES				DEFICIT				GROWTH				OIL				IMPORTS			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
$\bar{x}$	.23	.22	.23	.25	.68	.61	.51	.44	.46	.36	.26	.21	.37	.34	.29	.27	.33	.27	.26	.24
$\bar{x}$ + 1s	.44	.42	.44	.47	.75	.69	.61	.53	.53	.44	.32	.27	.51	.48	.42	.40	.52	.44	.44	.40
$\bar{x}$ - 1s	.10	.10	.10	.11	59	.52	.42	.35	.38	.29	.20	.16	.24	.23	.18	.17	.19	.15	.15	.13

(1) Based on logit results for 44-year-old, white male, with 4 years of college education, middle income and Republican political orientation.

(2) Based on (1) but for females.

(3) Based on (1) but for Democrats.

(4) Based on (1) but for nonwhites and Democrats.