Economic Literacy or Economic Ideology?

Julie A. Nelson and Steven M. Sheffrin

On December 28, 1988, the Joint Council on Economic Education (JCEE) sponsored a press conference featuring former Federal Reserve Chairman Paul Volcker, who discussed evidence on economic literacy of high school students throughout the country. He stressed that “the news is not good.” Another participant at the press conference put it more strongly; in his words (JCEE, Spring 1989, pp. 1–2), “The level of economic knowledge among most high school students is shocking.”

The claims at the press conference were based on the Test of Economic Literacy, a standardized multiple choice test developed under the auspices of the JCEE with esteemed economists in an advisory role. This test and the associated data bank have led to the development of a major research project on the determinants of economic education, reported on at the American Economic Association meetings of 1988 and 1989 (Siegfried, 1989; Becker, Greene and Rosen, 1990) and in a special issue of the Journal of Economic Education (Summer 1990).

At the same time, moreover, a number of states have begun to require economics courses of high school students. This has spawned a large effort in course development, textbooks, and teaching material, much of which is also provided by the JCEE. The Test of Economic Literacy (TEL) is administered in many of these courses both to measure economic understanding and to moni-

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tor the effectiveness of teaching. Therefore, the TEL is likely to reflect, to a reasonable degree, the content of these high school courses.

On the occasion of an oral exam for a doctoral student who was using the TEL data base in her research, the authors found that some of the questions in the test have a pronounced ideological slant. To put it baldly, the test promotes a Panglossian microeconomics of laissez-faire and, at the same time, an interventionist macroeconomics dating back to Alvin Hansen and Abba Lerner. We view the biases in the TEL as characteristic vices of economists. In their weaker moments, economists can slip into a thought pattern which glorifies laissez-faire microeconomics while at the same time favoring Keynesian interventionist macroeconomics. Much of the interesting work in economics in the last 20 years has been to explore the varieties of market imperfections and the limitations of stabilization policy. Mainstream thinking today in both microeconomics and macroeconomics recognizes the conditions under which markets may fail as well as the difficulties with macro stabilization policy. But in simplified presentations, there can be a tendency to ignore these issues. This is precisely the bias of the TEL.

Before discussing the test in greater detail, it is worth outlining the influence of the TEL. Since 1987, over 64,000 copies of the TEL itself, and over 2100 copies of the test manual, have been distributed. These tests are distributed by the JCEE and the affiliated state councils and over 250 Centers for Economics Education affiliated with the JCEE.

Some states have granted official status to the Test of Economic Literacy. For example, students in New York are required to take an economics course before graduation from high school. However, New York students can elect to take the TEL instead and can waive the class requirement if their score passes a certain threshold. The TEL has also been used to measure the understanding of teachers of high school economics in a recent program of instruction at UCLA.

While other standardized tests for economic achievement at the college level have been developed, the TEL is the only major test for economics taught at the high school level. Testing at the high school level is particularly interesting since high school classes reach a far larger number of students than college classes. Currently, 28 states have mandates for economic education in the high school curriculum and over 16 require this mandate to be met through separate economics classes (JCEE, 1989). Our own calculations suggest that there may be twice as much exposure to economics at the high school level as at the college level. If "economic literacy" is thought to be a problem of citizenry as a whole, the high school classroom is an important context for testing.

The next two sections examine the ideological components of the microeconomics and macroeconomics respectively. For each part, we present a few of the questions and discuss their ideological content. For the micro part, we use the TEL data bank to analyze a matched sample of students who took the test before and after a course in economics. This empirical exercise allows us to
address the questions in the title of the paper: what is taught and measured, literacy or ideology?

Panglossian Microeconomics

What is the social purpose of profits? A Marxist might say the social purpose of profits is to redistribute the wealth to the capitalist class. Debreu might mention that profits only arise with strictly convex technologies but then refer you to *The Theory of Value* (1959, p. x) where he admonishes, “The theory, in the strict sense, is logically entirely disconnected from its interpretation.” A Schumpeterian economist would argue that the social purpose of profits is to tempt firms to innovate and monopolize. Probably, most economists would not view this as a legitimate economics question. Nonetheless, appearing on the TEL is:

In a market economy, the social purpose of profits is to
a. get businesses to follow government regulations.
b. get businesses to provide what consumers demand.
c. provide funds to pay workers better wages.
d. transfer income from the poor to the rich.

While there may indeed be a bias among neoclassical economists towards favoring answer *b*, the teleological form of the question and its obvious ideological slant put this question and a few others in a category apart from many other questions in the exam. One could imagine that a knowledgeable scholar in economics might still prefer the answer *d*—yet a student who chooses *d* will be marked as less “literate.”

A second question appearing on the test which also had a highly normative flavor was:

Which of the following is the most essential for a market economy?
a. Effective labor unions.
b. Good government regulation.
c. Active competition in the marketplace.
d. Responsible action by business leaders.

While the test writers (and perhaps most economists) prefer answer *c*, it is certainly arguable that a minimal level of social responsibility and cooperation and a regulatory infrastructure are necessary to create the “playing field” on which competition takes place, and are hence even more basic than competition. An example of competition without responsibility might be the unscrupulous dumping of toxic wastes; of competition with insufficient or misguided regulation, the fiasco in the savings and loan industry. It also could be argued
that the historical rise of labor unions was essential for the survival of the
market economy in the United States in that it placated the working classes and
averted revolutionary activities. According to the TEL, however, simply parrot-
ing “competition, competition!” brings higher marks.

Finally, a third question which struck us as quite normative was:

In a market economy, the public interest is likely to be served even
when individuals pursue their own private economic goals because of
a. the operation of competitive markets.
b. the social responsibility of business leaders.
c. careful planning and coordination of market activity.
d. individuals who understand what is in the public interest.

A more pseudo-Adam-Smithian ideological question could hardly be imagined.
The student is allowed no opportunity to question the premise implicit in the
statement of the question, that unfettered individualism is socially desirable.
Answers b through d give the student only a chance to modify, not challenge,
this basic supposition.

We identified a few other questions—regarding the scarcity definition of
economics, the causes of low incomes, and the promotion of economic growth
—as also having significant ideological components. But for the purpose of the
analysis which follows, we chose to concentrate on the three most blatantly
ideological questions. Most analyses of student performance on the TEL use
aggregate test scores, lumping together the scores on the three ideological
questions with scores on the more definitional and/or analytical questions that
make up most of the rest of the exam. A natural question to ask is how student
performance varies between these sets of questions.

We did a preliminary investigation of these questions using data from the
1986 Matched Pre/Post Senior High School TEL database, distributed by the
JCEE. Two forms of the TEL are distributed, each containing 25 questions on
basic concepts and microeconomics. Eight of these questions, including the one
about what is “most essential for a market economy,” appear on both Form A
and Form B. The “social purpose of profits” question appears only on Form B,
and the “public interest” question only on Form A. For the greatest contrast,
we chose to compare student scores on the three identified ideological ques-
tions (expressed as a percentage of the total score possible on questions
attempted) with their aggregate scores on a subset of questions with purely
definitional content. These questions simply required students to match the
terms “GNP,” “profits,” “collective bargaining,” “budget deficit,” “balance of
trade” and “corporation” with their correct definitions (or vice versa, the
definition to the term). While “economic literacy” certainly entails more than
learning definitions, there can be no doubt that familiarity with the terms is a
basic skill, analogous to the learning of letters for reading literacy. We exam-
ined the relative gains in the two types of scores attributable to a high school
course in economics, for the subset of 1620 students who took a course specifically in economics. In terms of correct answers, a comparison of the pre- and post-test scores (before and after the course in economics), for the two types of questions yielded the following:

<table>
<thead>
<tr>
<th>Questions Type</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideological questions</td>
<td>56.4%</td>
<td>66.5%</td>
</tr>
<tr>
<td>Definitional questions</td>
<td>49.7%</td>
<td>58.4%</td>
</tr>
</tbody>
</table>

While the difference in the mean gains (10.1 percentage points for the ideological questions vs. 8.7 percentage points for the definitional questions) is not statistically significant, the relative gains suggest that high school classes are at least as efficient in communicating the ideology favored by the test designer as in promoting economic literacy.

**Interventionist Macroeconomics**

In his delightful essay “A. P. Lerner at Sixty,” Paul Samuelson (1972) succinctly captured the essence of postwar Keynesian economics. Samuelson first noted (p. 650) that “along with Kalecki, Robinson, Kaldor and other stalwarts, Lerner helped spread the new Gospels.” Samuelson then turned to Lerner’s major book in macroeconomics (p. 651), “And certainly no economist can be the same after reading Lerner’s Functional Finance. ... How revealing (even if overly simple) is the notion that we tax only to prevent inflation.”

“Tax only to prevent inflation” is the heart of postwar Keynesian economics. It was “overly simple” even in 1964 when Samuelson wrote this tribute to Lerner and simple Keynesian philosophy ruled the land. In 1990, it is an archaic doctrine implicit in only the first few chapters of any middle-of-the-road intermediate macro text. In these texts, students are taught that the effects of demand stimulus are relatively short-lived and lower taxes mean either higher taxes or a reduced capital stock in the future, or both.

To be sure, demand stimulus may have some role in buffering the economy from shocks. But in an era of deficits and Gramm-Rudman, only a rare professor trumpets the virtues of activist Keynesian fiscal policy, except when an economy faces the most dire of circumstances. Reports from the Council of Economic Advisors no longer agonize over fiscal drag or preach demand stimulus as they did 25 years ago. Today’s reports stress the virtues of a stable monetary and fiscal framework. In fact, the 1990 Economic Report of the President explicitly contrasted its views along these lines with its 1962 predecessor (CEA, 1990, pp. 63–64). The widely shared economic philosophy is much closer to Milton Friedman’s writings of the early 1960s than any version of Keynesian economics at that time.
### Table 1

**Macroeconomic Theory Questions from the TEL**

29. If from time to time total spending declines relative to productive capacity, the growth rate of the economy over a long period will be
   a. higher because production will be concentrated on necessary goods rather than luxuries.
   b. higher because inefficient plants, equipment, and labor no longer need be employed.
   c. lower because of a heavier reliance on the raw materials of foreign countries.
   d. lower because some productive resources will not be fully employed.

30. Which of the following usually would reduce consumer spending?
   a. a decline in consumer incomes.
   b. a reduction in personal income tax rates.
   c. an expectation that prices will soon rise.
   d. increased government payments to individuals.

36. An increase in aggregate demand would tend to result from a government reduction in
   a. tax rates.
   b. transfer payments.
   c. federal budget deficits.
   d. purchases of goods and services.

37. One reason the federal government might reduce taxes is to
   a. slow down the rate of inflation.
   b. slow down a rapid rise in interest rates.
   c. decrease business spending on plant and equipment.
   d. increase consumer spending and stimulate the economy.

38. The economy has stable prices but high unemployment. Which combination of government policies is most likely to reduce unemployment?
   a. increase government spending and buy government bonds in the open market.
   b. decrease government spending and sell government bonds in the open market.
   c. decrease taxes and sell government bonds in the open market.
   d. increase taxes and buy government bonds in the open market.

39. If there is full employment and the federal government increases its spending without increasing its tax revenues, there will be
   a. a decrease in the national debt.
   b. an increase in interest rates.
   c. an increase in unemployment.
   d. a serious depression.

35. Which of the following monetary policies would be most effective in fighting high inflation?
   a. selling government bonds.
   b. reducing the discount rate.
   c. lowering margin requirements on stock.
   d. reducing the required reserves of banks.

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Note: Numbers correspond to Version B of the TEL.
Answers are 29(d), 30(a), 36(a), 37(d), 38(a), 39(b), 35(a).

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Form B of the TEL includes 14 questions (#26–39) designed to measure understanding of macroeconomics. Seven of the questions are largely definitional or about the mechanics of policy. The other seven questions, which relate to theory, are presented in Table 1.

The first five questions are vintage Lerner. Aggregate demand fluctuates and fiscal policy can manipulate aggregate demand. Four of these questions (thus over 50 percent of the macro theory questions) highlight activist fiscal demand management.
The remaining two questions were probably intended to put "balance" into the macro presentation. But what is the great evil when, in #39, there is full employment and the government increases spending without increasing its tax revenue? Not inflation, but a rise in interest rates. Do the authors mean to suggest that interest rates would not rise away from full employment? The last question on inflation does associate money with inflation but focuses on the proper levers for the Fed, not the theoretical connection.

Readers might consider the job of developing seven macro theory questions that portray modern macro thinking. At least one would probably be devoted to short run demand management (although not necessarily fiscal policy). The others would most likely be drawn from natural rate theory and the transitional gains from inflation policy, the effects of persistent deficits on the capital stock or the current account, rules for governing monetary policy and ensuring price stability, supply disturbances, and perhaps even growth or, heaven forbid, the incentive effects from taxation. Surely these are the topics that both concern economists today and, not coincidentally, are at the focus of popular concern.

Sadly, the economic theory portrayed in these questions does probably reflect the content of many high school economics macro curricula. But these questions reflect the exciting and lively discussions of Lerner's days, not the debates of today.

**Conclusion**

Additional evidence that the designers of the TEL have tended to promote a distinct ideological program can be found in the Survey of Economic Attitudes (SEA). While the SEA is not part of the TEL, it was developed by the same authors and was administered along with the TEL when the test was administered to a nationwide sample of students for the purpose of gathering data. The SEA asks two sets of additional questions, one concerning the student's interest in economics as a discipline and another inquiring into their underlying attitudes toward the economy. In the latter set, students were asked to respond on a five-point scale (strongly agree to strongly disagree) to 14 statements, including the following (question numbers refer to Form A of the exam):

64. People should not have to pay taxes.
65. Free medical care should be provided for all Americans.
68. When a business gets big, it should be controlled by the government.
70. People should not be told how to spend their money.
73. Most unemployed people are lazy.
74. When a strike occurs, the government should step in and settle the dispute.
These are clearly normative questions, where economically literate individuals could differ on the proper response. Clearly, the Congress in authorizing food stamps does feel that some people should be told how to spend their money. Free and universal medical care is a hotly debated subject.

Yet the designers of these questions refer to them as measuring “Economic Attitude Sophistication” (Walstad and Soper, 1989). The economically sophisticated student, according to the test designers, will tend to favor a hands-off government (disagreeing with statements 65, 68, and 74 and agreeing with statement 70) but will also view unemployment with concern (disagreeing with statement 73) and believe in citizens’ obligation to pay taxes (disagreeing with statement 64) (Walstad and Robson, 1988). Of course, these are just the views that justify laissez-faire for micro issues and an interventionist macroeconomics. By referring to the SEA as a measure of “economic attitude sophistication,” the designers of the test clearly reveal their own ideological predispositions.

Some might argue that any standardized test is bound to be ideological, and that the TEL just exemplifies this principle. We believe that this criticism can apply with varying degrees of severity—and that the TEL clearly oversteps the line. We have examined other standardized tests that purport to measure achievement in understanding economics—like the Advanced Placement Exam in Economics and the Achievement Tests in Economics developed by the Educational Testing Service (developers of the SAT)—and found those tests to be largely free from the blatant types of biases we found in the TEL. The macro sections are more balanced, and statements of laissez-faire ideology are either omitted or phrased as questions in the history of economic thought.

However, all standardized tests share a tendency to rely on the results of simple “toy models.” In microeconomics, the model is supply and demand, which has a wide range of applications. At the introductory macro level, the toy model is frequently the Keynesian cross, which does give a simplistic picture of the economy. The use of the aggregate demand and supply apparatus as the basic macroeconomic model could reduce the extent of this bias.

One reason for being concerned about the TEL is that it probably reflects what is actually taught in high schools today. If this is the case, we are afraid that, at the very least, our students are being given too large a dose of laissez-faire micro and Keynesian macro. While the Joint Council on Economic Education has itself invited a certain amount of criticism of its design for high school education (the Spring 1987 issue of the Journal of Economic Education reports on a conference for this purpose), it is still asserted that the TEL is reflective of “the consensus of mainstream economists” (Highsmith and Kasper, 1987). We question this assertion, and suspect that lack of attention to educational issues by most “mainstream economists” probably explains the divergence between test and practice. We suggest that it is time for all economists who are concerned about the level of economics knowledge of the general public, and about attracting the brightest students into the profession, to take
more of an interest in the details of what is being tested, and what is being taught.

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References


