

# Is There Consensus Among International Economic Educators?

**Don R. Leet**  
**California State University, Fresno**  
**donle@csufresno.edu**

**Nancy A. Lang**  
**Northern Kentucky University**  
**lang@nku.edu**

Prepared for the 13<sup>th</sup> Annual Meeting of the American Society of Business and Behavioral Sciences, Las Vegas, Nevada, February 24-26, 2006.

## **ABSTRACT**

*This paper analyzes the economic opinions of teachers and economists from the former Soviet Union who participated in economic education programs sponsored by the U.S. Department of Education under the auspices of the National Council on Economic Education from 1995-2001. We sought to determine the level of consensus on economic topics among the participants, and then we analyzed their concordance with U.S. economists as well as U.S. high school teachers. We conclude that there is a significant level of consensus among the participants from the former Soviet Union, but this consensus is often at odds with the views of American economists.*

The National Council on Economic Education's Economics International Program promotes economic literacy in central and eastern Europe and the former Soviet Union by offering seminars for teachers in these nations. The participants in these programs learn modern, standards based economic concepts as well as activity based pedagogical techniques. Some of these participants are professors from universities in nations that were either part of the former Soviet Union, or dominated by it. Other participants were teachers at secondary schools in territory controlled by the USSR. All those who participate in these programs are expected to bring modern market-based economics concepts back to their classrooms. In addition, most participants are expected to hold workshops in their home countries to train other teachers in these concepts and teaching techniques. We have evidence that the pre- and post-test scores of these international participants show significant learning gain during the program. But do these participants process these concepts in the same way as their American professors? When confronted with a specific economic issue, would the international participants reach a consensus; that is, have strong agreement for or against a particular economic statement? And would this consensus replicate the general agreement among their American colleagues? This paper investigates these questions using data from an attitude survey called the

Attitudes on Economic Issues and Policies (AEIP) administered in the Cooperative Education Exchange Programs (CEEP) from 1995 through 2001.

## **REVIEW OF THE LITERATURE ON CONSENSUS**

The question of consensus among economists has proved to be a fertile area for research. Part of the explanation for this may lie in the oft-repeated notion that economists do not agree with one another. President Truman was reported to have said that he wanted a one-armed economist because when he asked an economics question the response was generally made by arguing in one direction followed by the disclaimer, “but on the other hand...” President Reagan was reputed to have said that he expected a special economics version of the popular game Trivial Pursuit to be created. In this version, there would be 3,000 answers for every 100 questions (Morton and Reinke, 1990).

The pioneer study of consensus toward economic issues was conducted by Kearn, Pope, Whiting and Wimmer and published in the *American Economic Review* (1979). The authors investigated the level and source of disagreement among a sample of 208 U.S. economists stratified by employment, graduate program, and academic rank. Each respondent answered a 30 statement survey on attitude toward economic issues. An

information measure called “relative entropy” was used to determine redundancy of opinion. They concluded that there was a general consensus among economists on 23 of the 30 propositions. Where disagreement existed, it generally involved propositions of a macroeconomic and normative nature; precisely the types of issues that economists were asked to comment about publicly.

Alston, Kearl, and Vaughan (1992) updated and enlarged the original survey. They retained 21 of the original questions and added nineteen new questions of contemporary interest. The consensus findings of the earlier study were essentially upheld. The strongest area of consensus remained on issues related to empirically verifiable microeconomics topics.

The U.S. research by Kearl et al. spawned some international studies. A survey of Canadian economists by Block and Walker (1988) generally supported the idea of a consensus. Frey, Pommerehne, Schneider and Gilbert (1984) replicated the Kearl study with a sample of economists from Austria, France, Germany and Switzerland. Contrary to the Kearl findings, the European study found a general lack of consensus for the sample. Consensus emerged only when the sample was divided into two sub-groups: the German and Swiss economists who tend to be market oriented, and the

Austrian and French economists who tend to be much more inclined to recommend government intervention.

The Kearn study has led many others to explore the ideas of consensus among alternative sub-groups including agricultural economists (Pope and Hallam), economic educators (Leet and Lang 1992), economic historians (Whaples 1995), labor economists (Whaples 1996), and a combination of groups including economic educators, economics teachers, other social studies teachers, and journalists (Becker, Walstad and Watts 1994). It was the Becker, Walstad and Watts survey instrument, developed from the 1992 Alston, Kearn and Vaughn research, that led to the 24 question AEIP survey that was translated and used in the Cooperative Education Exchange Program run by the National Council on Economic Education.

Fuller and Geide-Stevenson (2003) published the most recent article on consensus among American economists. Their study revisits this issue and supports the earlier conclusions that American economists have achieved a significant level of consensus. Out of 44 statements only 4 were found to reveal no consensus among U.S. economists. They continued to find considerable consensus among professional economists, although they note some shifts in consensus based on the recent counter intuitive results

from some empirical studies such as those on the minimum wage. They also added that consensus on international economics issues is especially high.

## **DESCRIPTION OF THE DATASET**

The sample of international economic educators was drawn from the National Council on Economic Education's Economics International Programs which fall into two categories: Teacher Workshops, with three levels, and Teacher-Trainer Programs, with a yearlong curriculum. Over a period of seven years, from 1995-2001, 1,087 educators participated in one or more teacher workshops and/or teacher-trainer cohort programs lasting one week each. Among the instruments administered in each program was the attitude survey entitled Attitudes on Economic Issues and Policies (AEIP) containing 24 statements. This survey was administered at the beginning of the program and on the last day of each program. For purposes of this study, we used only the post-test responses of the participants. If any teacher participated in more than one program, we looked at only the post-test of their first program so as not to double-count the attitude of one portion of the sample. The 1,087 surveys accounted for 71.2 percent of the total AEIP surveys administered in all NCEE international programs. Eliminating records with missing responses brought the total sample to 963 usable surveys.

The 24 statements in the survey come from the Becker, et al survey, which is a subset of the 40-item survey developed by Kearl, et al. survey. Only 10 of the AEIP statements overlap with those used by Fuller and Geide-Stevenson (2003). Kearl, et al. identified the statements as either macroeconomic or microeconomic in focus as well as either normative or positive. Fuller and Geide-Stevenson also determine if the statement is international in focus.

## **THE THEORY OF CONSENSUS AMONG INTERNATIONAL PARTICIPANTS**

The Fuller and Geide-Stevenson research did more than reinforce the idea that there is a significant degree of consensus among economists in the U.S. They altered the previous models of consensus by reporting on three distinct measures of consensus. Their study combines three alternative tests to create a summary of the level of consensus. The measures they use are: Entropy, Chi-square distribution, and the Agree/Disagree percentages. This gives us the following rubric: If all three measures indicate consensus, we conclude **strong** consensus; two affirmative measures indicate **substantial** consensus; one affirmation of consensus indicates **modest** consensus; if no measure shows consensus, then there is none. Before we combine these measures, we want to present some background on each of them.

Much of the published work on consensus is based on a measure known as *entropy*. Entropy is a bounded measure from 0 to 1, where 0 equals perfect consensus and 1 is absolutely no consensus. It is a non-linear measure and thus cannot be as easily interpreted as a linear scale. The recent work by Fuller and Guide-Stevenson uses this measure as one of their indices of consensus, but unlike earlier studies they used a three-response survey instrument rather than the four response alternatives. By deleting the “no response” category used in the earlier studies they were better able to interpret consensus. We follow their model and delete all non-responses in our data set.

Like Fuller and Guide-Stevenson, we also used a chi square test of a uniform distribution to measure consensus based on the three-response model (agree, agree with provisions, and disagree) where non-responses were deleted. This was equivalent to the null hypothesis that entropy = 1.0, i.e. there is no consensus. A statistically significant chi square statistic would allow us to reject this hypothesis indicating the presence of consensus.

We also followed the Fuller and Geide-Stevenson study of consensus by combining the two levels of agreement: agree, and agree with provisions.

We were then able to compare the percentage of respondents who either agreed or disagreed with each proposition. If 67 percent or more of the respondents agreed or disagreed, we concluded broad consensus (See Fuller and Geide-Stevenson, p.371).

### **A TEST OF CONSENSUS AMONG INTERNATIONAL ECONOMIC EDUCATORS**

Table 1 presents the 24 statements in the AEIP Survey as well as the results for the 3 consensus tests: entropy, chi square test and agree/disagree percentages. Remember that economists had reached at least modest consensus on 40 of 44 propositions reported in the Fuller Geide-Stevenson article. According to the results of the survey taken at the end of their first training workshop, international economics teachers have a very large degree of consensus. All 24 statements had at least a modest amount of consensus based on the Fuller and Geide-Stevenson paradigm. The breakdown was: 7 statements with strong consensus (all three measures show consensus); 13 with substantial (two of three measures indicate consensus); and 4 with modest consensus (only one measure shows consensus).

[TABLE 1 HERE ]

## **A COMPARISON OF INTERNATIONAL AND US CONSENSUS**

Table 2 presents the 7 statements with the highest degree of consensus among the international participants. Four of the seven statements are based in macroeconomics. This is quite different from the survey of U.S. economists where macroeconomics has traditionally been the area of least agreement (Kearl et al. 1979). None of the macro statements listed here achieves a strong consensus among American economists, although the first three do receive substantial support. In the case of a rationale for a supply side tax cut, results from the international survey participants seem distinctly different from mainstream American views. The international economic educators are strongly supportive of a tax policy that reduces rates on income from capital gains. Only 3 percent of the international participants disagree with the statement that such a tax policy would encourage investment and promote growth. This kind of agreement led to the “strong” consensus label. This strong affirmation of the benefits of tax cuts does not find favor with American economists. Between 35 and 40 percent of US economists disagree with this statement in both the 1990 and the 2000 surveys. In 2000 there was absolutely no consensus on the efficacy of tax cuts for promoting growth and investment, although the proportion of

American economists who expressed agreement with the supply-side view did rise from 1990 to 2000.

[Table 2 Here](#)

We find the international participant's strong consensus answers to two of the international trade questions to be a distinct blend of opinions. On the one hand they see flexible and floating exchange rates as an effective monetary arrangement just as the American economists do. Both the 1990 and the 2000 surveys of U.S. economists show strong consensus and support for flexible exchange rates. But unlike their American colleagues, the international economic educators see trade deficits as having an adverse effect on an economy. Perhaps the answer lies in their perspective as residents of developing nations. American economists have the luxury of seeing trade deficits in a balance of payments perspective from a First World vantage point. Trade deficits can be financed by surpluses in the export of services, or by surpluses in the capital account. Ultimately the value of our currency makes adjustments to help correct any imbalances. Whereas those in developing nations do not have same degree of safety in allowing movements in currency values and capital inflows to help trade balances adjust. The answers we are seeing here come from men and women living in Third World economies where the economic safety net is almost non-

existent. If trade deficits cause the value of the ruble to fall, for example, this can lead to significant short run economic problems like inflation or unemployment that may prove disastrous to many who are on the edge of economic stability. This may help explain the dichotomy of strong support for a market-based answer like flexible exchange rates, while they are very much afraid of the implications of a trade deficit.

The only microeconomics question with strong consensus focuses on anti-trust enforcement. The participants want to see antitrust laws vigorously enforced. In the U.S. surveys there has been some movement to this position between the 1990 and 2000 surveys where the profession went from only a modest favorable consensus to a substantial consensus. The reason for the strong consensus among the international respondents is probably related to their life experience in dealing with state monopolies under the old Soviet regime. This experience, combined with their study of the competitive model could lead to a strong preference for antitrust enforcement.

## **COMPARING INTERNATIONAL EDUCATORS OPINIONS TO OTHERS**

We have seen that in only one case, the belief in the efficacy of flexible exchange rates, did we find strong consensus among both American economists and international economic educators. In two cases we found

strong consensus among the international economists, but either modest or no consensus among US economists using the Fuller Geide-Stevenson model. How does the response pattern for all 24 questions compare to the responses of US economists? To investigate this question we used the 1990 pattern of responses from US economists as reported in Becker, Walstad and Watts (1994) and calculated a chi-square statistic for each question. Using this technique we found only three questions where the international response pattern matched that of the American economists:

1. Fiscal policy has a significant stimulative impact on less than fully-employed economy. (Question Proposition 6 - Strong)
2. Inflation is primarily a monetary phenomenon. (Question Proposition 8 Substantial)
3. Consumer protection laws generally reduce economic efficiency. (Question Proposition 18 - Modest).

Thus we can see that the pattern of responses from our international economic educators differed significantly from our US economists on 21 of the 24 propositions. Moreover, even in these three propositions where the chi square analysis indicated that the response patterns between the two groups were similar, the international economic educators did not show a consistent level of consensus among themselves. One statement had strong agreement, one had substantial agreement and one showed only modest consensus. We expected to find more similarity among the attitudes of the

international economic educators and the US economists. But the lack of consensus between these two groups is very much in keeping with research done on consensus between American teachers and American economists. Using a chi square analysis Becker, Walstad and Watts found that on a 28 item survey, US economics teachers' responses reached item agreement on only 8 questions with the 1990 US economists surveyed by Alston, Kearn and Vaughn (1992). Moreover, the social studies teachers agreed with the 1990 economist patterns on only 4 questions (p. 80). In their conclusion Becker, Walstad and Watts state:

“Although high school economics teachers showed somewhat more affinity for economists' ways of thinking than did other teachers or journalists, even among this key group there was greater concordance with the views of other teachers and journalists than there was with economists and economic educators.” (p. 86).

Table 3 presents our data from international economic educators along with the data from the Becker, Watts and Walstad study. For some questions we also have data from a survey of US economic educators that we did in 1990 (Leet and Lang, 1992). In tabulating the mean score for each group's response to each questions we let “agree” = 1, “agree with provisions” = 2, and “disagree” = 3. Thus the mean score varies from 1.00 if everyone in the group agreed with the question to 3.00 if everyone disagreed.

### Table 3 Here

Looking at the individual pattern of responses gives us a chance to make some comparisons that our overall data analysis may have missed. For example, it is interesting to get each group's opinion on issues related to the economic transition from a planned to a market economy. The first proposition in the AEIP survey asks for an opinion about favoring a rapid transition to a market economy. Almost 9 in 10 international economics teachers favor a rapid change, whereas less than 6 in 10 US economists favor such an approach. American economists were much more reticent to push rapid change. American teachers were even less likely to favor rapid change. A related question (Proposition 19) asks about the importance of privatization to the transition. It states: "In the movement from a non-market to a market economy it is important the ownership of productive resources be privatized." More than 50 percent of the international group is in full agreement with this statement while only 35 percent of US economists agree without reservations. It is interesting to note that in this case, economic educators are much closer to the opinions of the international participants (51.9 percent agree without reservations) while economics teachers are closer to the economists (only 33.9 percent agree without reservation).

On international issues we have already seen that the international teachers support flexible exchange rates (Proposition 5) just as economists do. But on other international issues like tariffs (Proposition 2), balance of trade deficits (Proposition 20) and (Proposition 22) and trade retaliation regarding subsidies or dumping (Proposition 25) the response patterns of international economics teachers are quite different from US economists and economic educators. The international program participants are much more likely to view trade as a zero sum game where trade barriers may play an important protective role. Economists and economic educators do not share these views.

In the area of microeconomics and particularly supply and demand, economists have generally found the highest level of consensus. And in some applied microeconomics areas the international participants mirror this. For example, those in the international sample share similar views on consumer protection (Proposition 18), but they seem much more eager to enforce antitrust laws (Proposition 7) with 72 percent agreeing without reservation on this topic versus approximately 35 percent of US economists and only 24 percent of economic educators who favor strict antitrust enforcement. But the survey question that seems most surprising is the

question on the effect of the ceiling on rents (Proposition 10). This proposition states: “A ceiling on rent reduces the quantity and quality of housing available.” Over 75 percent of US economists agree without reservation as do over 80 percent of economic educators, but not quite 57 percent of the international group is in the same category. Almost 23 percent disagree about the deleterious effects of rent controls. This probably has much to do with their personal experience in the former Soviet Union or in the economic aftermath of the breakup.

On the macroeconomic side of questions there is some agreement with the American consensus. As we demonstrated in our chi square analysis, participants in the Economics International Programs generally believe that fiscal policy works (Proposition 6) just as most economists stated in the 1990 survey. They also see inflation as essentially a monetary phenomenon (Proposition 8) just as most economists do. However they begin a parting of the ways with the US consensus when less than 30 percent of them disagree with the statement (Proposition 9) that “Wage-price controls are a useful policy option in the control of inflation.” Well over 70 percent of the US economists surveyed, and more than 90 percent of the American economic educators, do not agree that wage and price controls are a useful policy option while less than 30 percent of the international participants disagree

with using wage and price controls. As we mentioned earlier, international participants also have more faith in a supply side view of macroeconomics. For example, there was a “strong” consensus on question Proposition 23 about the efficacy of lower capital gains taxes promoting economic growth and investment. Almost 85 percent of the international participants agreed without reservation to this statement while almost 50 percent of the economists disagreed. It may be something of a consolation to learn that in the 2000 survey only 36.9 percent of economists disagreed with this statement so the larger profession was becoming somewhat more favorable to the supply side notion, but nowhere near as favorable as the international participants.

## **CONCLUSION**

What have we learned about the level of consensus among international participants in the Economics International Program? The responses of these participants display a high degree of consensus. They have at least modest consensus and are more likely to show substantial or strong consensus on the issues surveyed. This is especially interesting in view of the fact that these participants had only one week of training before they answered this survey. We also learned that the strongest level of

consensus appeared in the macroeconomics area, a finding that is quite different from the American sample where microeconomics has traditionally been the area of greatest agreement. As to their concordance with American economists, economic educators, and teachers, we learned that the views of our international participants differed most from American economists and economic educators. In some cases this difference probably reflects their different historical experiences. This may explain why the international participants are much more in favor of a rapid transition from a planned to a market economy. They see the difficulties experienced in any transition and they want to speed the process, not prolong it. But in other cases we see that the international respondents are more like American teachers than American economists. Rent controls as well as wage and price controls are not highly regarded among American economists, but our participants are not so ready to jettison them from the policy handbook. They also see more uses for protectionist trade measures than can be found in our economists' opinions.

We did not separate the opinions of those in the yearlong trainers program from those in the teacher workshops. In future research we plan to split these two groups to discover any differences. We also did not use the

results from any respondent more than once; that is, the attitude of anyone who participated in more than one program was only included for their first exposure to an Economics International Program. Thus these are largely the opinions of teachers at the conclusion of their introductory experience. Future analysis can be done on the Training of Trainers Program where participants have four weeks of training spread over an entire year. This group may illustrate more agreement with the views of American economists and economic educators. Given the current data analysis we can say that more intensive training is needed if we are to get international participants to move in step with our market based economic way of thinking.

*Support for this research project was provided by National Council on Economic Education through the Cooperative Education Exchange Program funded by U.S. Department of Education in coordination with the U.S. Department of State.*

## REFERENCES

- Alston, R.M., J.R. Kearl, and M.B. Vaughn (1992). Is there a Consensus Among Economists in the 1990's? *American Economic Review* 82 (May): 203-209.
- Alston, R.M. and M.B. Vaughn (1993). Institutionalists: A united front or divergent voices of dissent. *Journal of Economic Issues* 27 (2): 351-61.
- Becker, W.B., W.B. Walstad, and M. Watts (1994). A comparison of the views of economists, economic educators, teachers and journalists on economic issues. In W.B. Walstad, ed. *An international perspective on economic education*. Dordrecht and Boston: Kluwer.
- Bellico, R. (1974). Student attitudes and undergraduate achievement for economics majors. *Journal of Economic Education* 6 (Fall): 67-68.
- Blinder, A.S. (1987). *Soft hearts and hard heads: Tough-minded economics for a just society*. Addison-Wesley.
- Block, W. and M. Walker (1988). Entropy in the Canadian economics profession: sampling consensus on the major issues. *Canadian Public Policy* 14 (2): 137-150.
- Clark, J.R. and B.J. Phipps (1992). Do economics students agree with economists? Unpublished paper. Presented at the Empirical Studies on Economic Consensus Session, Western Economics Association, San Francisco, CA, July 1992.
- Frey, B.S., W.W. Pommerehne, F. Schneider and G. Guy (1984). Consensus and dissension among economists: an empirical inquiry. *American Economic Review* 74 (December): 986-94.
- Fuchs, V.R., A.B. Krueger, and J.M. Poterba (1998). Economists' views about parameters, values, and policies: Survey results in labor and public economics. *Journal of Economic Literature* 36 (3): 1387-425.
- Fuller, D. and D. Geide-Stevenson (2003). Consensus among economists: Revisited. *Journal of Economic Education* 34 (Fall): 369-87.
- Fuller, D.A., R.M. Alston, and M.B. Vaughn (1995). The split between political parties on economic issues: A survey of Republicans, Democrats and economists. *Far Eastern Economic Journal* 21 (2): 227-37.
- Jackstadt, S.L., J.M. Brennan (1983). Economic knowledge and high school student attitudes toward the American economic system, business and labor unions. *Journal of Economic Education* 11 (Fall): 1-15.

Jackstadt, S.L., L. Huskey, D.L. Marx, and P.J. Pershing (1990). Economics 101 and an economic way of thinking. *The American Economist* 34 (Fall): 79-84.

Kearl, J.R. C.L. Pope, G.C. Whiting, and L.T. Wimmer (1979). What economists think: A confusion of economists. *American Economic Review* 69 (May): 28-37.

Leet, D.R. and N.A. Lang (1992). Consensus among economists and economic educators: Are we telling the same story? Unpublished paper. Presented at the Empirical Studies on Economic Consensus Session, Western Economics Association, San Francisco, CA, July 1992.

Morton, J. and R.W. Reinke (1990). Why teach about the American economy? *Social Education* 54 (February): 84-86.

Pope, R. D. and Hallam, Arne (1986). A confusion of agricultural economists? *American Journal of Agricultural Economics* 68 (August): 572-94.

Ricketts M. and E. Shoesmith (1992). British economic opinion: Positive science or normative judgement? *American Economic Review* 82 (May): 210-15.

Whaples, R. (1995). Where is there consensus among American economic historians? *Journal of Economic History* 55 (1): 139-54.

\_\_\_\_\_, (1996). Is there consensus among American labor economists? *Journal of Labor Research* 17 (4): 725-34.

Table 1  
Consensus Among International Participants

Statement	Entropy	Chi-Sq	Agree %	Disagree %	Consensus Index
1 As a society moves toward a market economy, a rapid and total reform would be better than a slow transition.	0.86	251.221	89.1	10.9	Substantial
2 Tariffs and import quotas usually reduce general economic welfare.	0.96	57.542	76.7	23.3	Substantial
3 A large federal budget deficit has an adverse effect on an economy.	0.74	557.541	90.4	9.6	Strong
4 The money supply is a more important target than interest rates for monetary policy.	0.92	156.589	78.8	21.2	Substantial
5 Flexible and floating exchange rates offer an effective international monetary arrangement.	0.75	489.768	91.8	8.2	Strong
6 Fiscal policy has a significant stimulative impact on less than fully-employed economy.	0.73	520.492	92.9	7.1	Strong
7 Antitrust laws should be enforced vigorously to reduce monopoly power.	0.64	719.028	95.7	4.3	Strong
8 Inflation is primarily a monetary phenomenon.	0.95	78.764	70.4	29.6	Substantial
9 Wage-price controls are a useful policy option in the control of inflation.	0.99	12.044	70.4	29.6	Substantial
10 A ceiling on rent reduces the quantity and quality of housing available.	0.89	236.711	77.4	22.6	Substantial
11 The nation's central bank should increase the money supply at a fixed rate.	0.98	30.119	58.9	47.1	Modest
12 The level of government spending relative to GDP should be reduced.	0.98	27.824	74.7	25.3	Substantial
13 A nation's central bank has the capacity to achieve a constant rate of growth of the money supply.	0.92	153.342	81.2	18.8	Substantial
14 Economic evidence suggests there are too many resources devoted to agriculture.	0.91	146.847	56.6	43.4	Modest
15 If the federal budget of a nation is to be balanced, it should be done over the business cycle rather than yearly.	0.94	111.407	70.9	29.1	Substantial
16 In the short run, reduction in unemployment causes the inflation rate to increase.	0.96	68.829	68	32.0	Substantial
17 There is a natural rate of unemployment to which the economy tends in the long run.	0.49	1116.456	94.9	5.1	Strong
18 "Consumer protection" laws generally reduce economic efficiency.	0.93	138.195	48.7	51.3	Modest
19 In the movement from a non-market to a market economy it is important the ownership of productive resources be privatized.	0.88	207.581	86.6	13.4	Substantial
20 A large balance of trade deficit has an adverse effect on the economy.	0.63	774.422	93.5	6.5	Strong

<b>Statement</b>	<b>Entropy</b>	<b>Chi-Sq</b>	<b>Agree %</b>	<b>Disagree %</b>	<b>Consensus Index</b>
21 Lower marginal income tax rates reduce leisure and increase work effort.	0.92	129.146	64.1	35.9	Modest
22 A trade deficit is primarily a consequence of the inability of firms to compete in world markets.	0.83	347.388	86.7	13.3	Substantial
23 Reducing tax rate on income from capital gains would encourage investment and promote economic growth.	0.45	1152.843	97.0	3.0	Strong
24 Nations should retaliate when other countries engage in dumping and provide subsidies in international trade.	0.98	18.85	73.0	27.0	Substantial

Table 2  
Economic Issues with Strongest Consensus among International Participants Classified  
by Area and Compared to Survey Results of U.S. Economists in 1990 and 2000

Economic Statement with Strongest Consensus for International Participants Category		Degree of Consensus for US Economists in 1990 and 2000		
		1990*	2000*	
3	A large federal budget deficit has an adverse effect on an economy.	Macro	Substantial	Substantial
6	Fiscal policy has a significant stimulative impact on less than fully-employed economy.	Macro	Substantial	Substantial
17	There is a natural rate of unemployment to which the economy tends in the long run.	Macro	Substantial	Substantial
23	Reducing tax rate on income from capital gains would encourage investment and promote economic growth.	Macro	Modest	None
5	Flexible and floating exchange rates offer an effective international monetary arrangement.	International	Strong	Strong
20	A large balance of trade deficit has an adverse effect on the economy.	International	None	Modest
7	Antitrust laws should be enforced vigorously to reduce monopoly power.	Micro	Modest	Substantial

\*Source for Economist Results in 1990 and 2000 was Table I in: Fuller, D. and D. Geide-Stevenson. 2003. Consensus among economists: revisited. *Journal of Economic Education* 34 (Fall): 369-87.

Table 3: Responses of International Teachers with US Economists, Economic Educators, and High School Economics Teachers

Proposition	Group	Agree=1	Agree w/ Provisions=2	Disagree=3	Mean	n
1 Rapid Transition is best Ma	International Economics Teachers <sup>1</sup>	37.0	52.1	10.9	1.74	963
	Economists <sup>2</sup>	27.2	30.4	40.1	2.13	453
	Economic Educators <sup>2</sup>	34.8	38.5	25.2	1.90	133
	Economics Teachers <sup>2</sup>	19.8	28.3	50.9	2.31	175
	Other Teachers <sup>2</sup>	19.9	21.9	57.2	2.38	687
2 Tariffs are bad I	International Economics Teachers	33.4	43.3	23.3	1.90	961
	Economists	71.3	21.3	6.5	1.35	460
	Economic Educators	85.2	11.1	3.7	1.19	135
	Economics Teachers	65.5	18.6	14.1	1.48	174
	Other Teachers	40.1	36.5	22.6	1.82	688
	Economic Educators-Leet&Lang <sup>3</sup>	81.7	13.9	4.5	1.20	202
3 Govt Deficits are bad Ma	International Economics Teachers	68.5	21.9	9.6	1.41	962
	Economists	35.1	47.6	15.7	1.80	457
	Economic Educators	46.7	46.7	5.9	1.59	134
	Economics Teachers	61.0	31.6	7.3	1.46	177
	Other Teachers	70.5	22.8	6.6	1.36	693
	Economic Educators-Leet&Lang	40.6	40.1	19.3	1.79	197
4 Money supply is key Ma	International Economics Teachers	52.1	26.6	21.2	1.69	957
	Economists	34.3	22.4	40.1	2.06	449
	Economic Educators	37.8	37.8	22.2	1.84	132
	Economics Teachers	40.1	29.4	29.4	1.89	175
	Other Teachers	25.9	33.9	37.9	2.12	678
	Economic Educators-Leet&Lang	39.7	33.2	27.1	1.87	199
5 Float Exchange Rates I	International Economics Teachers	65.4	26.5	8.2	1.43	956
	Economists	56.0	33.6	8.4	1.51	455
	Economic Educators	65.9	31.9	1.5	1.35	134
	Economics Teachers	61.6	31.6	5.1	1.43	174
	Other Teachers	49.9	39.1	6.9	1.55	665
	Economic Educators-Leet&Lang	66.5	30.0	3.5	1.37	200
6 Fiscal Policy works Ma	International Economics Teachers	66.0	26.9	7.1	1.41	963
	Economists	59.3	30.6	9.1	1.49	459
	Economic Educators	40.7	51.1	7.4	1.66	134
	Economics Teachers	51.0	34.5	14.1	1.63	177
	Other Teachers	45.1	38.5	14.8	1.69	683
	Economic Educators-Leet&Lang	52.5	43.0	4.5	1.52	200
7 Antitrust is good Mi	International Economics Teachers	72.6	23.1	4.3	1.32	961
	Economists	34.9	36.9	27.6	1.93	461
	Economic Educators	24.4	50.4	23.7	1.99	133
	Economics Teachers	44.6	37.9	17.0	1.72	176
	Other Teachers	46.4	35.3	17.0	1.70	685
	Economic Educators-Leet&Lang	29.6	43.2	27.1	1.97	199

Proposition	Group	Agree=1	Agree w/ Provisions=2	Disagree=3	Mean	n
8 Inflation is primarily A monetary event Ma	International Economics Teachers	46.5	23.9	29.6	1.83	953
	Economists	39.7	30.4	28.5	1.89	457
	Economic Educators	47.4	34.1	17.0	1.69	133
	Economics Teachers	35.0	33.9	29.9	1.95	175
	Other Teachers	22.2	35.6	40.4	2.19	681
	Economic Educators-Leet&Lang	37.0	37.5	25.5	1.89	200
9 wage and price controls are good Ma	International Economics Teachers	38.4	32.0	29.6	1.91	963
	Economists	8.4	17.7	73.9	2.66	464
	Economic Educators	1.5	8.2	90.4	2.89	135
	Economics Teachers	5.7	9.6	84.8	2.79	177
	Other Teachers	10.8	21.3	67.3	2.57	690
	Economic Educators-Leet&Lang	3.0	8.4	88.7	2.86	203
10 Rent controls are bad Mi	International Economics Teachers	56.7	20.6	22.6	1.66	959
	Economists	76.3	16.6	6.5	1.30	461
	Economic Educators	82.2	13.3	4.4	1.22	135
	Economics Teachers	72.3	20.3	6.2	1.33	175
	Other Teachers	48.3	29.3	20.8	1.72	682
	Economic Educators-Leet&Lang	86.2	10.8	3.0	1.17	203
11 Monetarism Fixed rate money Supply growth Ma	International Economics Teachers	26.9	32.0	41.1	2.14	960
	Economists	13.4	30.6	54.1	2.42	455
	Economic Educators	11.1	37.8	50.4	2.40	134
	Economics Teachers	10.2	21.5	67.2	2.58	175
	Other Teachers	11.1	25.9	60.2	2.51	675
	Economic Educators-Leet&Lang	7.0	29.9	63.2	2.56	201
12 Reduce G/GDP Ma	International Economics Teachers	37.9	36.8	25.3	1.87	956
	Economists	35.6	19.0	44.6	2.09	460
	Economic Educators	43.7	27.4	28.2	1.84	134
	Economics Teachers	49.7	27.1	22.0	1.72	175
	Other Teachers	51.7	31.4	15.7	1.64	686
	Economic Educators-Leet&Lang	40.1	32.7	27.2	1.87	202
13 Central Bank can achieve constant money growth Ma	International Economics Teachers	51.0	30.2	18.8	1.68	961
	Economists	25.4	35.8	36.6	2.11	454
	Economic Educators	15.6	49.6	31.9	2.17	131
	Economics Teachers	38.4	35.0	26.0	1.88	176
	Other Teachers	34.9	35.9	26.7	1.92	676
	Economic Educators-Leet&Lang	23.0	47.0	30.0	2.07	200
14 Too much Ag Mi	International Economics Teachers	41.6	15.0	43.4	2.02	963
	Economists	48.7	23.9	21.3	1.71	436
	Economic Educators	44.4	24.4	26.7	1.81	129
	Economics Teachers	20.9	20.3	54.2	2.35	169
	Other Teachers	18.2	19.2	56.1	2.41	648

Proposition	Group	Agree=1	Agree w/ Provisions=2	Disagree=3	Mean	n
15 Bus Cycle Balance of Govt Budget Ma	International Economics Teachers	48.9	22.0	29.1	1.80	955
	Economists	60.1	24.8	13.4	1.52	456
	Economic Educators	54.8	31.1	11.1	1.55	131
	Economics Teachers	42.4	23.7	32.8	1.90	175
	Other Teachers	30.8	32.4	31.6	2.01	658
	Economic Educators-Leet&Lang	39.9	40.4	19.7	1.80	198
16 SR Phillips Curve Reduction in unemp leads to rise inflation Ma	International Economics Teachers	44.9	23.2	32.0	1.87	963
	Economists	17.7	41.0	39.4	2.22	455
	Economic Educators	11.9	50.4	35.6	2.24	132
	Economics Teachers	33.3	31.1	35.6	2.02	177
	Other Teachers	27.1	34.7	36.0	2.09	676
	Economic Educators-Leet&Lang	29.0	38.0	33.0	2.04	200
17 Natural rate of unemployment Ma	International Economics Teachers	84.1	10.8	5.1	1.21	960
	Economists	34.3	34.1	30.8	1.97	460
	Economic Educators	51.1	34.8	14.1	1.63	135
	Economics Teachers	66.1	22.6	10.7	1.44	176
	Other Teachers	62.1	28.2	7.8	1.45	681
18 Consumer Protection Laws are bad Mi	International Economics Teachers	23.7	25.1	51.3	2.28	954
	Economists	18.3	23.9	55.8	2.38	455
	Economic Educators	23.0	36.3	39.3	2.17	133
	Economics Teachers	14.1	24.9	61.0	2.47	177
	Other Teachers	13.7	23.9	61.2	2.48	686
	Economic Educators-Leet&Lang	25.6	43.8	30.5	2.05	203
19 Privatization is Important Ma	International Economics Teachers	51.3	35.3	13.4	1.62	960
	Economists	35.1	38.4	23.7	1.88	451
	Economic Educators	51.9	44.4	3.7	1.52	135
	Economics Teachers	33.9	50.9	14.1	1.80	175
	Other Teachers	30.6	47.0	19.7	1.89	675
20 Balance of Trade Deficit is bad I	International Economics Teachers	75.2	18.4	6.5	1.31	958
	Economists	26.3	37.3	33.8	2.08	452
	Economic Educators	19.3	41.5	37.0	2.18	132
	Economics Teachers	56.5	31.1	11.9	1.55	176
	Other Teachers	64.3	24.8	9.7	1.45	685
21 Lower income tax rates are good Ma	International Economics Teachers	46.9	17.2	35.9	1.89	958
	Economists	22.6	32.8	43.8	2.21	460
	Economic Educators	20.7	41.5	34.1	2.14	130
	Economics Teachers	21.5	23.7	50.9	2.31	170
	Other Teachers	13.0	24.1	54.3	2.45	634
22 Trade deficits mean Domestic firms cannot compete I	International Economics Teachers	60.8	26.0	13.3	1.53	958
	Economists	18.1	29.7	51.5	2.34	461
	Economic Educators	18.5	35.6	45.2	2.27	134
	Economics Teachers	35.6	35.0	29.4	1.94	177
	Other Teachers	35.5	39.6	23.5	1.88	684

Proposition	Group	Agree=1	Agree w/ Provisions=2	Disagree=3	Mean	n
23 Lower capital gains tax rates are good Ma	International Economics Teachers	84.8	12.1	3.0	1.18	956
	Economists	21.1	28.2	49.8	2.29	460
	Economic Educators	34.1	37.8	27.4	1.93	134
	Economics Teachers	44.1	33.3	22.0	1.78	176
	Other Teachers	35.3	34.2	28.1	1.93	677
24 Retaliate against dumping & subsidies I	International Economics Teachers	38.7	34.1	27.0	1.89	941
	Economists	15.1	35.1	47.6	2.33	454
	Economic Educators	7.4	35.6	56.3	2.49	134
	Economics Teachers	30.5	38.4	31.1	2.01	177
	Other Teachers	35.7	40.4	21.0	1.85	674

<sup>1</sup>Source: Attitude on Economic Issues and Policies, NCEE Cooperative Education Exchange Program, 1995-2001

<sup>2</sup>Source: Becker, Watts and Walstad (1994)

<sup>3</sup>Source: Leet and Lang (1992)