ATTITUDES OF ECONOMIC EDUCATORS TOWARD MARKETS IN EASTERN EUROPE & THE FORMER SOVIET UNION BY REFORM STATUS OF THE EDUCATOR'S COUNTRY

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ABSTRACT

This article assesses attitudes toward the market economy among educators of the Former Soviet Union and Eastern Europe before and after a one-week intensive seminar in economic education. Specifically, it looks at how attitudes differ, at the start of the seminar, by the reform status of the educators' countries and how those attitudes change after a week of market-based economics instruction. Analysis shows that attitudes do indeed vary by reform status, with educators from the more reformed countries showing much more positive attitudes at the start of the seminar than those from the less reformed countries. Additional influences on attitude include gender, education level, economics knowledge, years in education, and prior western-style economics education. After an intensive seminar in economic education, all educators show improved attitudes toward markets, with greater gains among those from the less reformed countries.

INTRODUCTION

From 1995 through 2006, the Council for Economic Education (CEE) in New York, through its Cooperative Education Exchange Program (CEEP), conducted a series of economics seminars for educators from Eastern Europe and the Former Soviet Union (EEFSU). The Cooperative Education Exchange Program (CEEP) is a program is funded by the U.S. Department of Education and is conducted in coordination with the U.S. Department of State. CEEP economics, a program of the National Council on Economic Education, brings together U.S. economic educators with their counterparts from central and eastern Europe, the former Soviet Union, and other transition and developing countries in Africa, Asia, Latin America, and the Middle East, and provides technical assistance and training to help educators and their students to better understand the global market economy. In-country teacher training conducted by U.S. faculty in Eastern Europe and the Former Soviet Union provided the dataset for this paper. "The in-country teacher training program emphasizes an active learning approach and introduces basic economic concepts to teachers with limited background in economics." (CEE,

2008). One CEEP component, a six-day introductory-level seminar for secondary teachers, was conducted in thirteen countries (Albania, Azerbaijan, Bulgaria, Croatia, Estonia, Georgia, Kazakhstan, Kyrgystan, Latvia, Lithuania, Poland, Ukraine, and Uzbekistan) by American university economics faculty. The introductory seminar covered basic and market economic theory and methods and material for teaching economics at the secondary or introductory post-secondary levels. A key underlying assumption of CEEP training and of this study is that, as the youth of EEFSU enter the newly reformed market economies they must understand and embrace the economic concepts that underlie the transformed economic order and that educators have a key role in this process. Both Watts and Walstad (2002) and Pleskovic, *et. al*. (2002), highlight the need for well-trained teachers who see the importance of teaching solid market-based economics in the primary and secondary grades, as well as at higher education levels, to assure a flow of citizens who can make informed decisions as voters and as policymakers.

Previous research has shown that formal economic education significantly increases knowledge of economics and yields a more positive attitude toward markets (Watts, Walstad, and Skiba, 2002; Walstad, 2002) or toward market economics as a subject (Walstad and Soper, 1989; Soper and Walstad, 1983). As experience is also a powerful teacher, one might speculate that attitudes of educators toward free markets and economic issues and policies might depend on, in addition to formal training, their own economic status and experiences. Over the years since the collapse of the Soviet Union, the status of reform has varied widely among the transforming countries (Åslund, 2002).

The purpose of this study is twofold: One, it is to look at attitudes of economic educators in the countries of EEFSU to determine if, before a one-week seminar in market economics and economic teaching methods, these attitudes vary by the reform progress of the educators' own nations and, if so, in just what ways. Second, it is to investigate if and how these attitudes change over the course of the one-week seminar.

Data from the CEEP introductory seminars contains pre- and post-seminar measures of cognitive economic knowledge, attitudes toward markets, and a variety of demographic variables, making this study possible.

SAMPLE AND DATA

The primary data for this study were collected by the Education Development Center (EDC), the US-based organization that evaluated the CEEP from 1995 to 2001. The entire data set consists of information on participant background, their knowledge of economic concepts, and their attitudes toward markets and market concepts.

The sample for this study consists of 425 educators who enrolled in one of ten introductory economic education workshops conducted in nine countries by the CEEP in 1995-2001. The majority of educators were female (71.4%) and under age 40 (58.1%). The mean years they had worked in education was 11.8, and the highest level of education reported by the

majority of teachers was the bachelor's degree (78.1%). Twenty-six percent reported that their undergraduate major was economics. Seventy-four percent teach in primary or secondary school, 12% teach in academies or universities, and 18% teach at technical schools. Some teachers teach at more than one school, hence the cumulative percentages are greater than 100%.

The "Market Economy Attitude Survey" (MEAS) is the dependent measure in this study. It consists of 16 items addressing aspects of people's economic behavior and views related to free markets. The survey was compiled from surveys developed by Schiller, *et al*. (1991) and Boeva and Shironin (1992). MEAS was administered at the beginning and end of each seminar. The MEAS items are listed in the Appendix. In the present analysis, MEAS items 7, 8, and 11 were omitted from the summed scale and reliability estimates. Item 11 reflects cognitive knowledge more than affective factors. Items 7 and 8, questions about attitudes toward *nouveau riche* and conspicuous consumption, had large variances and were only weakly correlated to the remainder of the MEAS items. While the least correlated items in the 16-item survey were omitted from the calculation, these items were analyzed individually to gain additional insight into teacher attitudes. The Cronbach's alpha for the pre-seminar MEAS is .48 for the 13 remaining items (1-6, 9, 10, 12-16.) The relatively low value of alpha likely indicates that the scale is not uni-dimensional, rather it quite likely measures different dimensions of attitudes toward markets. In addition, this instrument was administered to a diverse population of educators from nine countries and was translated into the language of each country. The instrument is also short in length, so the reliability coefficient would typically be lower than for longer instruments.

The 46-item "Test of Economic Literacy, 2nd Edition" (Soper & Walstad, 1986) (TEL), measures the participants' pre- and post-seminar knowledge of economics. The mean score on the TEL (Form B) Pretest was 27.8 out of 46 items (60.4%), with a median of 28 and a range from three to 42. The mean post-test score (adjusted Form A) was 32.95 (71.6%), with a median of 33 and a range of 16 to 45.

Level of structural reform of the countries where the workshops were held is measured by the Structural Reform Index (SRI). The SRI, developed by The World Bank and the European Bank for Reconstruction and Development (EBRD) indexes structural reform yearly, specifically in EEFSU, and data are currently available from 1990-2001. The SRI is a weighted index of the EBRD's measures of liberalization of prices, trade, and foreign exchange, privatization, and banking reform normalized to a 0 to 1 scale and provides a theoretically justifiable measure of progress for all countries of EEFSU relative to one another (Åslund, 2002). The level of reform in the nine countries for the years of the training ranged from .54 to .82, with a mean of .67.

ATTITUDES TOWARD MARKETS BEFORE CEEP TRAINING

At the start of the CEE seminar, educator attitudes tended toward pro-market. The mean MEAS index score was 10.41 (sd=2.03) of a possible score of 14. Respondents were most

positive on matters related to productivity-based pay, market-based prices, and private ownership of business. On the other hand, they were much less positive about the impact on their own households of the state's efforts to privatize state-owned enterprises.

The model tested in this study assumes that, at the start of the CEE seminar, educator attitudes toward market issues are a function of the actual economic systems in which individuals live, their knowledge of and experience teaching economics, and a series of demographic characteristics. In the empirical model, the attitude measure was regressed on the Structural Reform Index for the year of the training in the educators' country of residence (SRI), together with the educators' scores on the TEL pre-test (TELPR), their gender (GEN), highest level of education (EDLEV), years of teaching experience (TYR), previous western-style training in market economics (JA), and whether they were teaching economics at the time of the seminar (TECON).

Two variables in the model require further explanation. Years of teaching experience, a continuous variable, was strongly correlated to the age variable which was categorical (Pearson correlation coefficient = .784). Therefore, years of teaching experience (TYR), the "better" of the two variables also likely encompasses other age-related factors that may not be accounted for elsewhere. Previous market-economics training was operationalized as the educator having participated in Junior Achievement (JA) training programs. Of the previous training items on the Personal Information Form, JA is the only option that is fairly standard across countries. In fact, when others of the venue variables were included in the empirical model, they were not significant and did not improve the regression properties.

I expected educators' attitudes to be more positive toward markets when their countries' levels of structural reform were greater, due to more positive experiences with markets; when their knowledge of market economics was greater (Walstad, 2002; Phipps & Clark, 1992; Walstad & Soper, 1989); if they currently taught economics; if they had previous market economics training; and if they had been in education fewer years, an indication that the Marxist indoctrination might have been weaker (Watts & Walstad, 2002). I expected that women were likely to have less positive attitudes toward markets than men. Although there is limited prior information on this relationship, Blinder and Krueger (2004), in their study of policy opinions of the American public, found that women were more likely to see federal budget deficits as a problem, to favor an increase in the minimum wage, to favor universal health insurance, and to favor a tax increase to reduce a future Social Security deficit. On the other hand, they were less likely than men to favor partial privatization of Social Security. Although Blinder and Krueger (2004) found education levels to be a significant predictor of political opinions, education level did not seem to clearly predict if attitudes would be more or less pro-market, thus education level is included in the model, although without *apriori* expectations as to the direction of influence.

Two separate levels of analysis were undertaken in assessing educators' market attitudes at the start of the seminars. First, the pre-seminar MEAS responses were summed across the set of 13 items indicated above, yielding an overall market attitude score. A linear regression of

overall attitude toward markets on the set of predictors (TEL pre-test, SRI for the year of training, years in teaching, whether subject teaches economics currently, gender, education level, and prior training in market economics and methods) was estimated. The results are shown in Table 1.

Table 1: Pre-Seminar Linear Regression Coefficients

Independent Variable	B	Std. Error	t	Sig.
(Constant)	5.662	1.064	5.321	.000
SRI	3.697	1.264	2.926	.004
TELPR	.074	.019	3.916	.000
GEN	-.854	.240	-3.563	.000
JA	.770	.258	2.988	.003
EDLEV	-.009	.004	-2.245	.025
TYR	.026	.012	2.072	.039
TECON	277	.233	1.188	.236
Dependent Variable = MEAS Pre- Test Items 1-6, 9, 10, 12-16				

The R^2 for this model was .21 and the regression is significant ($F=11.46$; $p\leq.000$). In addition, the SRI, the TEL pretest score, gender, and previous Junior Achievement training are significant at $p\leq.01$, and years of education and education level are significant at $p\leq.05$. Whether the educator is currently teaching economics is not a significant predictor of overall attitude. Of particular interest is that the home country's level of reform is a strong predictor of positive market attitudes, that is, those from more reformed countries have a more positive attitude toward markets than those from less reformed countries. As expected, the TEL pretest score is also a significant positive predictor. On the other hand, the longer educators had been teaching, the more positive their attitude toward markets. The range of 'years in education' was from less than one to 43, with a mean of 11.86 years, indicating that, on average, a teacher had begun his or her career within five years before the collapse of communism. Interpretation of this finding is difficult, with virtually no prior study of the phenomenon. A plausible explanation might be that more experienced teachers, having a longer exposure to the Soviet style of communism, had more practical experience with its failings, even though they had been teaching the prescribed doctrine for longer. That females had an overall less positive view of markets was consistent with expectations based on the Blinder and Krueger (2004) survey research. Previous participation by the educator in a Junior Achievement seminar, that is, fairly standard type of prior market economics training, might indicate that such training has already influenced the educator's attitude or may also reflect a selection bias. Educators who are already pro-market may tend toward participating in both JA and CEE seminars. The lack of significance of the educator currently teaching economics is unexpected and would require further investigation. It may reflect a lack of standardization of economics courses or the ways that teachers are selected to teach these courses among the countries. It may also be related to the economics training that these teachers had in the past.

Table 2: Model Fit for Multinomial Logistic Regression Equations					
Model	-2 Log Likelihood	Chi-Square	df	Sig.	Nagelkerke Pseudo R^2
MEAS1	329.53	38.30	7	.000	.160
MEAS2	212.32	54.86	7	.000	.273
MEAS3	395.05	69.26	7	.000	.245
MEAS4	217.73	40.90	7	.000	.211
MEAS5	121.60	12.92	7	.074	.113
MEAS6	453.79	14.40	7	.044	.055
MEAS 7	255.83	22.81	7	.002	.115
MEAS8	424.13	38.33	7	.000	.143
MEAS9	437.02	36.44	7	.000	.134
MEAS10	275.93	12.16	7	.096	.061
MEAS11	Not estimated				
MEAS12	133.19	25.69	7	.001	.194
MEAS13	459.52	17.33	7	.015	.065
MEAS14	455.46	10.96	7	.140	.042
MEAS15	308.81	34.47	7	.000	.150
MEAS16	591.61	51.63	14	.000	.166

In attempt to gain further insight into the nature of educator attitudes toward markets at the start of the seminar, fifteen of the separate pre-seminar MEAS items were analyzed using multinomial logistic regression (MLR). Each of these MEAS items was regressed on the same set of independent variables as the overall MEAS index. The chi-square goodness of fit and Negelkerke pseudo r-square statistics are presented in Table 2.

The MLR model fits well (X^2 significant at $p \leq .01$) in twelve of the 15 estimated equations, with Negelkerke pseudo r-square ranging from .055 to .273. Table 3 presents the MLR parameter estimates and significance levels for 11 of the 15 equations. Because the Wald test, an approximation of Z, tends to be conservative, I have used a $p \leq .10$ as the cutoff for significance of the individual predictors.

The Structural Reform Index is a significant predictor of a market-oriented response in eight of the equations. Of special note, it is highly significant ($p \leq .01$) in regard to issues of price flexibility in the face of changing supply and demand factors (MEAS2 & 3), and the perception that profit is not a negative phenomenon (MEAS9). In addition, the SRI is related negatively ($p \leq .01$) to educators' likelihood of conspicuous consumption and of being admired and congratulated for being newly rich (MEAS7 & 8). That is, the more reformed the country, the less likely individuals are to say that they would like to consume conspicuously in the face of sudden riches or would be congratulated by family for newly gained riches. Interestingly, this may reflect a prevalent suspicious attitude in the transitional countries that the newly rich are culturally and educationally inferior. In the MEAS13 & 15 equations, SRI is a significant predictor, however it is of the unexpected sign. That is, individuals from less reformed countries are more likely to think that they would be better off if the government privatizes state enterprises or if farms are privately owned or operated than are those from more reformed countries. Perhaps the experiences in the more reformed countries where privatization is

complete, or nearly so, show that results of privatization can be mixed, while those from less reformed countries still see the inefficiencies of some of the government-owned enterprises.

Table 3: Multinomial Logistic Regression Coefficients (significant NOMREG equations)

	Independent Variables (Likelihood of a Market-Oriented Response)											
Dependent	SRI		TYR		TELPR		GEN (female)		TECON		JA	
	B (s.e.)	Wald (sig.)	B (s.e.)	Wald (sig.)	B (s.e.)	Wald (sig.)	B (s.e.)	Wald (sig.)	B (s.e.)	Wald (sig.)	B (s.e.)	Wald (sig.)
MEAS1	1.16 (1.55)	.56 (.46)	-.028 (.017)	2.65* (.10)	-.03 (.023)	1.90 (.17)	-.64 (.335)	3.61* (.06)	.80 (.291)	7.62*** (.01)	.72 (.392)	3.31* (.07)
MEAS2	11.68 (2.27)	26.50*** (.00)	.03 (.023)	1.85 (.17)	.11 (.030)	13.35*** (.00)	.53 (.389)	1.85 (.174)	.91 (.419)	5.00** (.03)	-.640 (.48)	1.77 (.18)
MEAS3	6.97 (1.46)	22.70*** (.00)	.03 (.015)	3.00* (.08)	.08 (.021)	14.31*** (.00)	.05 (.27)	.03 (.86)	.58** (.26)	4.92** (.03)	.69 (.31)	4.81** (.03)
MEAS4	.59 (2.06)	.08 (.78)	-.02 (.020)	1.14 (.27)	.15 (.03)	23.68*** (.00)	-.39 (.38)	1.09 (.30)	.00 (.37)	.00 (.99)	-.51 (.50)	1.05 (.31)
MEAS 7[a]												
Congratulatory	7.70 (2.51)	9.30*** (.00)	-.00 (.02)	.00 (.97)	.04 (.00)	1.46 (.23)	.12 (.42)	.08 (.77)	.03 (.41)	.01 (.94)	.53 (.43)	1.52 (.22)
Contemptuous	-.47 (4.81)	.01 (.92)	.07 (.04)	4.1** (.04)	-.11 (.06)	3.50* (.06)	.71 (.72)	.99 (.32)	-.88 (.78)	1.27 (.26)	.66 (.84)	.61 (.43)
MEAS8[b]	3.69 (1.35)	7.41*** (.01)	-.07 (1.02)	19.16*** (.00)	.03 (.02)	1.89 (.17)	.40 (.27)	2.19 (.14)	.39 (.26)	2.25 (.13)	-.03 (.28)	.01 (.91)
MEAS9	4.98 (1.36)	13.42*** (.00)	.01 (.01)	.15 (.70)	-.02 (.02)	1.30 (.25)	-.25 (.26)	.97 (.33)	-.33 (.25)	1.69 (.19)	1.08 (.28)	14.53*** (.00)
MEAS 12[c]	.81 (2.67)	.09 (.76)	-.03 (.03)	1.11** (.29)	-.07 (.04)	3.15* (.10)	.37 (.54)	.47 (.49)	1.93 (.66)	8.52*** (.00)	1.13 (1.07)	1.13 (.29)
MEAS13	-3.69 (1.32)	7.75*** (.01)	.01 (.01)	.83 (.36)	.01 (.02)	.12 (.73)	-.64 (.26)	6.21*** (.01)	-.33 (.243)	1.83 (.18)	.052 (.27)	.037 (.85)
MEAS15	-4.31 (1.72)	6.28*** (.01)	.03 (.018)	3.51* (.06)	.03 (.025)	1.08 (.29)	-1.30 (.41)	9.83*** (.00)	.92 (.32)	8.41*** (.00)	-.24 (.36)	.44 (.51)
MEAS16[d]												
50% or greater	-4.24 (181)	5.47** (.02)	-.00 (.018)	.03 (.857)	-.07 (.03)	.72*** (.01)	.02 (.34)	.01 (.94)	-.27 (.34)	.65 (.42)	.15 (.41)	.13 (.72)
25%	-7.15 (1.67)	18.43*** (.00)	-.02 (.018)	1.1 (.29)	.04 (.03)	.2.57 (.11)	-.342 (.33)	1.08 (.30)	.54 (.31)	3.00* (.08)	-.85 (.34)	6.42*** (.01)

***Significant at $p \leq .01$; **Significant at $p \leq .05$; *Significant at $p \leq .10$

[a]Reference response is quiet & indifferent.

[b]Reference response is respondent would be likely to engage in conspicuous consumption if she became rich.

[c]Reference response is entrepreneurs should run enterprises.

[d]Reference response is 0%

Among the results of several of the individual logistic regressions for the MEAS survey items and of the aggregated MEAS scale, the association between attitude and prior Junior Achievement merits discussion. Junior Achievement is one of the few other sources of western, market-based economic education available consistently across most of the transitional countries, and may be serving as a proxy for self-selection, as well as prior training. That is, those teachers most interested in teaching market economic concepts are more likely to enroll in the CEEP seminars. It is also possible, as shown in the individual MEAS regressions, that JA training

instills a positive attitude regarding certain market phenomena. In particular, items involving simple supply and demand analysis in the product market and items related to acceptability of profit and views about property rights and tax rates on wealth. On more complex topics such as price controls and impacts of market reforms and internationalization on individual well-being, the Junior Achievement effect does not show up.

ATTITUDES TOWARD MARKETS AFTER CEEP TRAINING

Mean posttest score for the MEAS was 11.40 (sd=1.78; n=279). There was a highly significant gain pre- to post-seminar in the mean 14-point MEAS Index (mean difference=.989; t=9.272; p≤.000). Multiple linear regression, with the TEL change score pre- to post-seminar (TELCHG) substituted for the TEL pretest score as an explanatory variable and the Post MEAS Index as the dependent measure, indicated that reform status of the educators' countries still influenced their attitude but to a lesser extent than before the one-week seminar (B=2.03; sd=1.11; t=1.826; p< .10). Being female was still a highly significant negative predictor of attitude at p≤ .000, and having had JA training was positively significant at the level of p< .01. The remaining predictors, including change in cognitive knowledge, were not significant. The regression results are reported in Table 4.

Table 4: Post-Seminar Linear Regression Coefficients

Independent Variable	B	Std. Error	t	Sig.
(Constant)	10.368	.800	12.961	.000
SRI	2.029	1.112	1.826	.064
TELCHG	.007	.019	.338	.736
GEN	-1.033	.229	-4.517	.000
JA	.621	.235	2.988	.003
EDLEV	-.001	.004	-.229	.819
TYR	.006	.012	.522	.302
TECON	.145	.217	.670	.504
Dependent Variable = MEAS Post-Test Items 1-6, 9, 10, 12-16				

Tests of pre- to post-seminar mean difference for paired samples were calculated for each of the MEAS items and for the MEAS Index and are reported in Table 5. Overall, attitudes toward markets were significantly more positive after the seminar than before. Among the individual items, attitudes became significantly more pro-market on nine of the 15 items. Specifically, there were significant gains in views on price flexibility, profit, willingness to charge a friend interest on a loan, and issues of privatization.

Table 5: Paired Sample T-Tests Pre to Post Seminar

	All Countries						Less Reformed Countries (SRI ≤ .67)				More Reformed Countries (SRI > .67)			
ITEM	Pre Mean	Post Mean	Mean Diff. (Post Pre)	t	Sig. 2-tailed	N	Mean Diff.	t	Sig. 2-tailed	N	Mean Diff.	t	Sig. 2-tailed	N
MEAS1	.78 (.41)	.89 (.31)	.11 (.40)	5.17	.00**	353	.14 (.42)	4.39	.00**	160	.08 (.34)	2.98	.00**	19
MEAS2	.88 (.32)	.92 (.28)	.03 (.38)	1.70	.09	350	.06 (.50)	1.59	.11	159	.01 (.23)	.63	.53	19
MEAS3	.61 (.49)	.78 (.41)	.17 (.47)	6.79	.00**	353	.18 (.50)	4.59	.00**	160	.161 (.45)	5.01	.00**	193
MEAS4	.89 (.32)	.93 (.26)	.04 (.37)	2.03	.04*	350	.08 (.31)	3.08	.00**	159	.01 (.41)	.35	.73	191
MEAS5	.95 (.22)	.99 (.12)	.04 (.22)	3.19	.00**	353	.03 (.24)	1.68	.10	159	.04 (.20)	2.88	.00**	194
MEAS6	.44 (.50)	.57 (.50)	.13 (.466)	5.18	.00**	347	.12 (.46)	3.44	.00**	161	.13 (.47)	3.86	.00**	186
MEAS7	1.83 (.46)	1.84 (.44)	.02 (.37)	.87	.39	350	.00 (.36)	.00	1.00	161	.03 (.40)	1.10	.27	189
MEAS8	.41 (.49)	.44 (.50)	.03 (.41)	1.17	.24	344	.02 (.46)	.52	.60	157	.03 (.37)	1.18	.24	187
MEAS9	.53 (.50)	.66 (.47)	.13 (.55)	4.30	.00**	345	.17 (.67)	3.21	.00**	157	.09 (.42)	2.93	.00**	188
MEAS10	.86 .35)	.90 (.31)	.03 (.36)	1.78	.08	349	.10 (.32)	3.94	.00**	157	.02 (.38)	.76	.45	192
MEAS12	.95 (.22)	.97 (.17)	.02 (.30)	-1.64	.10	357	.04 (.22)	2.15	.03**	161	.01 (.29)	.50	.62	196
MEAS13	.57 (.50)	.70 (.46)	.12 (.51)	4.62	.00**	355	.16 (.46)	4.46	.00**	159	.09 (.54)	2.39	.02*	195
MEAS14	.62 (.49)	.69 (.47)	.07 (.53)	2.39	.02*	354	.16 (.53)	3.92	.00**	159	-.01 (.53)	-.27	.79	196
MEAS15	.79 (.41)	.84 (.36)	.05 (.43)	2.20	.03*	357	.08 (.43)	2.22	.03*	161	.03 (.44)	.97	.33	196
MEAS16	1.49 (.70)	1.50 (.69)	.01 (.57)	.20	.84	349	.03 (.61)	.524	.60	157	.04 (.52)	.95	.34	151
MEAS INDEX	10.41 (2.03)	11.40 (1.78)	.99 (1.78)	9.27	.00**	279	1.3 (1.70)	9.27	.00**	144	.64 (1.81)	4.14	.00**	135

*significant at p ≤ .05; **significant at p ≤ .01

On three of the remaining items (MEAS2, 10, & 12), attitudes were strongly pro-market at the start of the seminar, with 89 percent opposing government price controls, 86 percent believing that market forces cause price changes, and 95 percent believing that entrepreneurs should run businesses. The mean differences were all positive pre- to post-seminar. In the case of MEAS7, regarding new riches, there was a nearly significant drop in the percentage who believed their relatives' responses would be congratulatory ($p \leq .10$).

Mean differences were also calculated for two subgroups, educators from the more and less reformed countries, separated at the mean SRI (.67). Table 5 shows that educators from less reformed countries showed greater gains in attitude toward markets (mean MEAS gain = 1.18; $p < .000$; $n = 158$) than those from more reformed countries (mean MEAS gain = .54; $p < .002$; $n = 191$). It is of note that the educators from the less reformed countries showed significant movement toward a more pro-market attitude on issues of privatization (MEAS items 13-15). For the less reformed countries, the average of these three items moved from .67 at the start to .80 at the end of the seminar. On the other hand, the average of these items for educators from more reformed countries was .65 at the start and .69 at the end of the seminar. In other words, those from the more reformed countries had a slightly less positive opinion that privatization was beneficial to them at the start of the seminar than those from the less reformed countries, and their opinions did not change significantly during the seminar. Conversely, those from less reformed countries changed their opinions about the benefits of privatization very significantly in a positive direction.

DISCUSSION & CONCLUSIONS

This data set is unique in that it was collected from educators in a broad range of transitional countries and covers an extended period of time during the transition process. The findings verify that, even among a sample that could be considered self-selected and relatively pro-market, the environment in which one lives is an important factor in attitude toward the economic system. The relationship between reform progress and citizens' attitudes toward free markets is a topic of limited prior study, yet it may be reasonable to expect that positive attitudes of these citizens is important in a country's ability to progress with restructuring.

It may also be reasonable to expect that the attitudes of those who teach a nation's youth may be especially important in developing a citizenry willing and able to participate fully in a market economy. Both Watts and Walstad (2002) and Pleskovic, *et. al*. (2002), highlight the need for well-trained teachers who see the importance of teaching solid market-based economics in the primary and secondary grades, as well as at higher education levels, to assure a flow of citizens who can make informed decisions as voters and as policymakers. Walstad (2002) has given tentative credence to the assumption that teachers' attitudes and knowledge affect the learning and attitudes of their students, although this topic is a fertile area for further study.

As this study was limited to the data collected in the CEEP teacher training programs, it should be acknowledged that there is much we do not know about the educators in this sample that might also influence their attitudes, With additional information, we might uncover factors that would further explain the differences in market attitudes among economic educators. Moreover, an attitude index with stronger psychometric properties would further verify the findings and conclusions in the present study.

Further research would also permit delving into two anomalies of the present study. First, Watts and Walstad (2002), summarizing the progress of economic education at primary, secondary, and higher education levels in several countries of EEFSU, indicate that while some younger teaching staff at universities have learned modern economic theories and teaching, many older faculty members still adhere to the Marxist-Leninist ideology and continue to teach it. In contrast, this study found that teachers with more years of experience had more positive attitudes toward markets. Given the self-selected nature of this sample and the fact that these educators were more often teaching at the secondary level, Watts and Walstad's hypothesis may not apply to this group. The educational background of and type of courses taught by the teachers in this sample, both before and after the collapse of communism, likely differ from that of university-level teachers.

Second, the lack of a significant relationship between teaching economics and attitudes toward markets suggests that further investigation into cross-country curricula might be fruitful. What constitutes teaching economics may be different among the countries studied. According to Watts & Walstad (2002), secondary-level economic education in the transitional countries has tended to follow one of three paths: New courses in market economics were quickly mandated following the start of the transition; short, formal courses on Marxism were replaced by short, formal courses in market economics; or mandates for market economics courses were not yet implemented. In addition, mandated courses do not necessarily contain standard content across all countries.

The present study offers an exploration into changes in educators' attitudes toward markets as a result of specific training in market concepts. Research based on this dataset of educators has the potential to help to us better understand the target groups of educators and the impact of programs aimed at improving economic education in transitional economies. The results of this study suggest that educators from less reformed countries change their attitudes toward markets more as they learn market economics than do those from more reformed countries. This finding indicates that training of educators in market economic principles impacts attitudes among those who may benefit most.

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APPENDIX
Market Economy Attitude Survey (MEAS)

MEAS1	On a holiday, when there is a great demand for flowers, their prices usually go up. Is it fair for flower sellers to raise their prices like this?
MEAS2	Regarding the prices for flowers, should the government introduce limits on the increase in prices of flowers, even if it might produce a shortage of flowers?
MEAS3	A small factory produces kitchen tables and sells them at $250 each. There is so much demand for the tables that it cannot meet it fully. The factory decides to raise the price of its tables by $20, when there was no change in the costs of producing them. Is this fair?
MEAS4	Regarding the production of tables, apart from fairness, should the factory have the right to raise the price in this situation?
MEAS5	Do you think that people work better if their pay is directly tied to the quantity and quality of their work?
MEAS6	Suppose you have agreed to lend a friend some money for 6 months, so that he will not miss a good opportunity to buy a summer home. Suppose banks are offering interest rates of 3% per year. Would you charge him interest on the loan?
MEAS7	Suppose that as a result of successful business dealings, you unexpectedly became rich. How do you imagine it would be received by your relatives at a holiday family gathering? Would they congratulate you and show great interest, or would they be judgmental and contemptuous?
MEAS8	If you ever became rich, would you really like to spend some of the money by purchasing really fashionable clothes, expensive cars, or other extravagant items that make an impression on people?
MEAS9	Do you think that those who try to make a lot of money will often turn out to be not very honest people?
MEAS10	If the price of coffee on the world market suddenly increased by 30%, what do you think is likely to be the blame?
MEAS11	Suppose the price of electricity rises fourfold, from 10¢ per kilowatt hour to 40¢. No other prices change. Suppose also that at the same time your monthly income increases by exactly enough to pay for the extra cost of electricity without cutting back on any of your other expenditures. Please evaluate how your overall material well-being has changed.
MEAS12	Who should run businesses, the state or entrepreneurs?
MEAS13	What effect will it have on your own family situation if/when the government sells state enterprises to private owners?
MEAS14	What effect will it have on your own family situation if/when the government allows foreigners to buy shares in state enterprises?
MEAS15	What effect will it have on your own family situation if/when most farming is done by private owners or on private land?
MEAS16	What inheritance tax rate for really wealthy people do you think we should have? A tax rate of 0% means that they can pass all of their wealth to the children, making them as rich as their parents. A rate of 50% means that they can pass half to their children. A rate of 100% means that they can pass none at all onto their children.