
HIGH SCHOOL ECONOMIC EDUCATION IN EASTERN EUROPE: FINDINGS FROM FIVE NATIONS

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ABSTRACT

This paper reports a snapshot of the current state of high school economic education in five Eastern European nations. The findings of this paper indicate that the 20-item TEL that was developed and translated for use in this project is a reliable instrument for use in high school classrooms in five different countries. The findings of this paper also indicate that the National Council on Economic Education's in-service teacher training workshops and its efforts to have workshop participants develop effective teaching materials and techniques are beginning to have a positive influence on student test performance in the countries where they have been used most extensively.

INTRODUCTION

The study reported in this paper was initiated during a weeklong "Developing Skills in Evaluation Workshop" held at Indiana University in July 2000. The workshop was organized by the National Council on Economic Education (NCEE), and funded by the U.S. Department of Education in cooperation with the U.S. Information Agency. The workshop staff and five International Economics Education Research Fellows worked with 15 participants from eight Eastern European countries to improve their knowledge of techniques for assessment and research in economics education and to develop joint research projects.¹

The workshop staff and the Research Fellows compiled a 20-item version of the third edition of the Test of Economic Literacy (TEL III, see Walstad &

Rebeck, 2001) for translation and field-testing in Eastern Europe. Participants in the 2000 workshop as well as international participants in two similar workshops held at Indiana University in 1998 and 1999 agreed to serve as coordinators in helping with the translation and administration of the 20-item TEL in their countries, and to send test results to Indiana University for coding into the data base used in this study. In addition to the test, a brief teacher questionnaire and a set of student background questions were also translated and administered as part of the 20-item TEL project.

This paper will describe the structure of the 20-item TEL and an overview of the sample of schools from which test results were obtained. This will be followed by a description of the types of high school economics courses offered in the participating countries and the participating teachers' background and training in economics. Student test performance across grade levels, by gender, and by item and content category in the participating nations will then be presented and compared with the performance of students participating in the U.S. norming of the TEL III.

STRUCTURE OF THE 20-ITEM TEL

The 20-item TEL is similar in structure to the 40-item TEL III in terms of content coverage, cognitive levels, and overall test reliability. The first five questions on the 20-item TEL involve fundamental economics concepts and examine the topics of scarcity, opportunity cost, specialization and productivity, incentives, and exchange. Questions 6-12 deal with microeconomics and examine the topics of competition, supply and demand (3 questions), monopoly, and market failures. Questions 13-16 deal with macroeconomics and examine the topics of Gross Domestic Product, potential output, aggregate demand, and inflation. Questions 17-20 deal with international economics and development and examine the topics of specialization and exchange, comparative advantage, exchange rates, and measuring a nation's standard of living.

With regard to the cognitive level of questions, two of the questions on the 20-item TEL (10%) are classified as "knowledge", five (25%) as "comprehension", and 13 (65%) as "application". These percentages compare with 15%, 30%, and 55% on TEL III Form A and 17.5%, 27.5% and 55% on TEL III Form B.

The 20-item TEL reliability coefficient of 0.81 obtained in this study is relatively high for such a short test. It compares with reliability coefficients of 0.89 for forms A and B of the 40-item TEL III.

All questions on the 20-item TEL have the four options arranged in a uniform short-to-long format, with each option being the correct choice an equal number of times. This format, which differs slightly from that in the TEL III, helps insure that choice of the correct option is based on economic knowledge and not on multiple choice test-taking "tips" such as the longest option is the correct choice a disproportionate number of times or that the correct option is most often hidden in one of the middle positions rather than placed in the first or last choice.

TYPES OF ECONOMICS COURSES TAUGHT IN THE PARTICIPATING COUNTRIES

Sixty different teachers administered the 20-item TEL in their courses. Table 1 presents the distribution of teachers by nation and by course grade level. Economics courses were taught at both the eleventh and twelfth grade levels in Albania. Four Albanian teachers taught at the eleventh grade level and 10 Albanian teachers taught at the twelfth grade level. Nine teachers taught economics courses only at the eleventh grade level in Croatia. Economics courses were taught at both the eleventh and twelfth grade levels in Latvia. Three Latvian teachers taught at both the eleventh and the twelfth grade level. One additional Latvian teacher taught at the eleventh grade level. Two additional Latvian teachers taught at the twelfth grade level. Sixteen Lithuanian teachers taught economics courses only at the twelfth grade level. Fifteen Romanian teachers taught economics courses only at the eleventh grade level.

In Albania a one-year course in "Applied Economics" is taught in either the eleventh grade in curricula emphasizing natural sciences or in the twelfth grade in curricula emphasizing social sciences. A Junior Achievement textbook translated and adapted by Albanians is the main material used in this course. Additionally, responses from teachers participating in the study who had attended the NCEE teacher-training workshop indicated frequent use of NCEE materials. Test results were obtained from 14 eleventh and twelfth grade teachers in 11 schools in seven different cities. Six of the teachers were from three schools in Tirana, and eight teachers were from eight schools in six cities outside the nation's capital. Three teachers sent in results from two classes, and one teacher sent in results from three classes.

The economics education curriculum in Croatia is currently undergoing changes. At present, the topics taught in secondary "schools of economics" include bookkeeping and accounting, business communications, marketing, financial

transactions, statistics, and commercial law in addition to what would be considered "economics" topics in the U.S. In addition, other secondary schools cover topics in "politics and economics". Included in this study are student test results from teachers whose questionnaires indicated they were teaching eleventh grade courses in what would be called "economics" courses in this country. Test results were obtained from nine eleventh grade economics teachers in six schools in four different cities. Four of the teachers were from three schools in Zagreb, and five teachers were from three schools in three cities outside the nation's capital.

In Latvia, a 105-hour "Fundamentals of Business Economy" course for eleventh or twelfth grade students became mandatory beginning in the 1999-2000 school year. Translated Junior Achievement and NCEE materials, along with texts and curriculum guides produced by Latvian economists are used to teach the course. NCEE programs have been very successful in training Latvian economists to develop their own materials. Test results were received from six eleventh and twelfth grade teachers in six schools in five different cities. Two of the teachers were from different schools in Riga, and four teachers were from four schools in four cities outside the nation's capital. Three teachers sent in test results for both eleventh and twelfth grade classes.

A yearlong, twelfth-grade economics course is taught in Lithuania. All of the participating teachers in Lithuania are graduates of NCEE workshops. The instructors use Junior Achievement and NCEE materials to teach the course. Test results were received from 16 twelfth grade teachers from 16 different schools in 13 different cities, all outside the nation's capital of Vilnius.

In Romania, the average school year is 36 weeks long, and high school economics is usually taught in a yearlong eleventh grade course. In regular (grammar) high schools, students learn economics two hours a week. In "economics" high schools students start learning economics at the tenth grade for one hour a week, and continue learning economics at the eleventh grade for two hours a week. With regard to the materials used in these courses, currently five alternative textbooks have been approved for use in high school classes. Among the co-authors there are five graduates of NCEE programs. Student test results were received from 15 eleventh grade teachers in 14 schools in 12 different cities. Only one teacher was from a school in Bucharest, all of the others were in schools in cities outside the nation's capital.

In summary, despite some differences within and between countries, the high school economics courses in this study are sufficiently comparable to those taught in the U.S. to make some preliminary comparisons of student performance

on the questions on the 20-item TEL meaningful. The translated teacher questionnaires used in our project asked participating teachers to examine the 20-item TEL, and instructed: "If any of the questions on this test deal with a concept NOT covered in the course you teach, please indicate the question number(s) in the space below." Twelve of the Albanian teachers indicated that question number 15 dealing with aggregate demand was not covered in their courses, and one Latvian teacher indicated that questions 17-20 dealing with international economics and development were not covered. Other than these responses, there were no a priori indications that questions on the 20-item TEL were not appropriate for assessing student performance in the high school economics courses tested in this project.

Table 1: Total Teachers by Nation and Grade Level

	Albania	Croatia	Latvia*	Lithuania	Romania
Total Teachers	14	9	6	16	15
Teachers in Grade 11	4	9	4	0	15
Teachers in Grade 12	10	0	5	16	0
* 3 teachers in Latvia taught at both the eleventh and twelfth grade levels					

TEACHER BACKGROUND.

Tables 2, 3, and 4 present the teaching experience and economics background of the sample of teachers participating in this study. Table 2 shows that the average number of years of general teaching experience of these high school teachers is about 17 years, with the lowest average (11.94 years) found for the 9 Croatian teachers and the highest average (21.13) found for the 15 Romanian teachers. The average number of years teaching economics ranged from 7.37 in Lithuania to 18.93 in Romania, with an overall mean of 10.65 years.

Table 2: Teaching Experience, General and Economics

Nation	Years Teaching Experience				Years Teaching Economics			
	Mean	S.D.	Min.	Max.	Mean	S.D.	Min.	Max.
Albania (n=14)	13.71	10.25	1	28	9.07	8.73	1	27
Croatia (n=9)	11.94	11.27	2.5	33	8.17	8.70	0	25
Latvia (n=6)	15.50	6.83	7	26	7.50	1.76	5	10
Lithuania (n=16)	19.44	8.45	6	35	7.37	2.63	4	15
Romania (n=15)*	21.13	7.60	3	35	18.93	6.24	3	25
Total (n=60)	17.01	9.42	1	35	10.65	7.77	0	27

* The number of years teaching economics response from one Romania teacher was missing.

Table 3 describes the varying backgrounds in economics of the sample of teachers in our study. Croatia and Latvia had the highest percentage of teachers reporting that they majored in economics in college, and Lithuania had the highest percentage reporting that they took no economics courses in college. All of the Lithuanian teachers, however, reported attending in-service workshops in economics, as did all Latvian teachers. Twenty of the 60 teachers reported teaching an in-service workshop, with the highest percentage being in Latvia and Romania. All of the Latvian teachers and three-fourths of the Lithuanian teachers possessed a graduate (masters or doctorate) degree.

With regard to attending in-service workshops in economics, several teachers reported attending more than one such workshop. Table 4 shows that 73% of the teachers in our sample attended a workshop taught directly by the NCEE, and 57% attended a workshop taught by Junior Achievement. Thirty-eight percent of the teachers attended a workshop taught by a teacher trained by the NCEE, with Romania having the most teachers attending this type of workshop. Only six teachers (17%) reported not attending any type of in-service workshop in economics.

Table 3: Teacher Background in Economics

Nation	College Course Work In Economics			Attended Workshop		Taught Workshop		Graduate Degree	
	Majored	Some Courses	No Courses	Yes	No	Yes	No	Yes	No
Albania (n=14)	2	9	3	10	4	0	14	0	13
Croatia (n=9)	8	0	1	8	1	2	7	1	8
Latvia (n=6)	3	3	0	6	0	5	1	6	0
Lithuania (n=16)	3	1	11	16	0	5	11	12	4
Romania (n=15)	3	12	0	14	1	8	7	1	14
Total (n=60)	19	25	15	54	6	20	40	20	39

Note: Sums might not equal sample size due to missing data.

Table 4: Type of Workshop Attended

Nation	NCEE	J.A.	NCEE Trainer	Non-government Organization	Post-Diploma Institute	None
Albania (n=14)	6	6	2	1	0	4
Croatia (n=9)	3	1	3	6	0	1
Latvia (n=6)	5	6	5	1	2	0
Lithuania (n=16)	16	16	4	2	0	0
Romania (n=15)	14	5	9	4	3	1
Total (n=60)	44	34	23	14	5	6
	(73%)	(57%)	(38%)	(23%)	(10%)	(17%)

STUDENT PLANS FOR THE FUTURE

Table 5 shows the responses to the survey question regarding students' plans after high school graduation. Overall, 90% of the students who responded to this question indicated that they planned to "pursue further education" after graduating from high school. This ranged from a low of 81.5% in Croatia to a high of 97.0% in Lithuania. All of these percentages are significantly higher than those of U.S. students in the TEL III norming sample who had plans to "attend college". Rebeck and Walstad (2001, p.16) reported that the percentage of U.S. students who planned to attend college was 71.3% in basic economics courses and 82.2% in AP/Honors U.S. economics courses.

Table 5: Student Plans After High School				
Nation	Percentage of Students			
	Further Education	No Plans	Get Job	Military
Albania (n=594)	82.2	12.5	3.2	2.2
Croatia (n=178)	81.5	11.8	4.5	2.2
Latvia (n=232)	94.0	4.3	1.7	0.0
Lithuania (n=397)	97.0	1.5	0.5	1.0
Romania (n=400)	96.8	1.3	1.8	0.3
Total (n=1,801)	90.1	6.4	2.2	1.2

STUDENT PERFORMANCE

Table 6 reports the average scores achieved on the 20-item TEL across the five nations by grade level and by student gender. The highest score after completing an eleventh grade economics course was found in Romania with an average score of 15.83 points. The lowest average score at the eleventh grade level was found in Albania, with a score of 11.07. At the twelfth grade level, the highest average score of 16.01 was found in Lithuania, and the lowest average score of 9.32 was found in Albania.

Table 6: Overall Scores Sorted by Grade and Gender for each Nation *

Nation	Grade		Gender**	
	11	12	Male	Female
Albania	11.07	9.32	9.63	10.07
	(3.09) N=208	(3.50) N=391	(3.79) N=211	(3.27) N=381
Croatia	11.11	---	10.94	11.39
	(3.03) N=178		(2.90) N=109	(3.23) N=69
Latvia	13.32	13.39	13.16	13.47
	(2.79) N=103	(2.49) N=135	(2.80) N=83	(2.52) N=155
Lithuania	---	16.01	15.64	16.41
		(3.51) N=400	(3.92) N=208	(2.93) N=186
Romania	15.83	---	16.32	15.56
	(3.47) N=400		(3.48) N=146	(3.45) N=250
Total	13.48	12.80	13.15	13.12
	(3.91)	(4.58)	(4.51)	(4.11)
N	889	926	757	1,041

* Standard deviations are in parentheses.** Gender data was missing for some observations.

At first glance, the fact that the average score for twelfth grade students (9.32) is significantly lower than the average for eleventh grade students (11.07) in Albania may be somewhat puzzling -- particularly since the average scores of the eleventh grade students (13.32) and the twelfth grade students (13.39) are virtually identical in Latvia. The Albanian result may be explained by the fact that different

types of students (those studying natural sciences) take economics in the eleventh grade than in the twelfth grade (those studying social sciences) in Albania. Another factor might be that all four of the eleventh grade courses were in schools located in the capital city of Tirana, whereas only two of the 10 twelfth grade courses were in schools located in the capital city.

Another point of interest in Table 6 is the fact that, unlike in the U.S., the average economics test score for females is higher than that of males in four of the five countries shown. Only in Romania is the average score for males higher than for females and, overall, the scores are virtually identical-13.15 for males and 13.12 for females. This result differs from several studies in the U.S. that reported higher scores for males than females on multiple-choice tests in economics (see, for example, Walstad and Robson, 1997). An interesting question to answer in future research would be why are there international differences in test performance between males and females?

Table 7 shows the distribution of item-percent-correct scores on each question and on four broad content categories. Included in this table are the scores achieved by the regular and AP/honors economics samples used in the norming of TEL III in the U.S. as well as the scores for each of the Eastern European nations and for all five Eastern European nations combined. The item-percent-correct data for each individual country broken down by teacher and grade level is available at <http://facultyweb.anderson.edu/~ktsaunders/byteacher.xls>.

Table 7: Item Percent Correct									
Item	TELII I	United States		Eastern Europe					
	Item	Regular	AP/Honors	Albania	Croatia	Latvia	Lithuania	Romania	Total
1	1A	0.60	0.77	0.46	0.67	0.93	0.78	0.82	0.69
2	4A	0.62	0.78	0.65	0.62	0.93	0.90	0.90	0.79
3	6A	0.60	0.73	0.63	0.72	0.66	0.92	0.84	0.75
4	12A	0.56	0.67	0.38	0.30	0.04	0.79	0.58	0.46
5	13A	0.66	0.75	0.61	0.67	0.92	0.87	0.74	0.74
6	15	0.70	0.77	0.70	0.74	0.79	0.91	0.83	0.79

Table 7: Item Percent Correct									
Item	TELII	United States		Eastern Europe					
	Item	Regular	AP/Honors	Albania	Croatia	Latvia	Lithuania	Romania	Total
7	16A	0.64	0.75	0.48	0.59	0.76	0.75	0.86	0.67
8	17A	0.71	0.81	0.45	0.70	0.68	0.48	0.67	0.63
9	19A	0.74	0.82	0.51	0.53	0.83	0.76	0.73	0.66
10	20	0.69	0.79	0.75	0.72	0.83	0.80	0.85	0.79
11	21A	0.62	0.68	0.31	0.30	0.66	0.73	0.90	0.58
12	22	0.51	0.71	0.16	0.18	0.38	0.63	0.79	0.43
13	25	0.55	0.70	0.65	0.69	0.95	0.96	0.91	0.82
14	26A	0.59	0.70	0.46	0.44	0.21	0.64	0.81	0.54
15*	27B	0.31	0.63	0.35	0.52	0.28	0.59	0.67	0.48
16	29A	0.63	0.74	0.72	0.79	0.89	0.90	0.92	0.83
17	35	0.68	0.81	0.51	0.56	0.56	0.81	0.81	0.65
18	36A	0.53	0.68	0.32	0.39	0.85	0.87	0.69	0.60
19	39A	0.40	0.48	0.33	0.38	0.35	0.80	0.73	0.53
20	40A	0.52	0.59	0.51	0.59	0.83	0.85	0.82	0.70
Fundamental: 1-5		0.61	0.74	0.54	0.60	0.70	0.85	0.77	0.69
Micro: 6-12		0.66	0.76	0.48	0.54	0.71	0.76	0.80	0.65
Macro: 13-16		0.52	0.69	0.55	0.61	0.58	0.77	0.83	0.67
International: 17-20		0.53	0.64	0.42	0.48	0.65	0.83	0.76	0.62
Overall Average		0.59	0.72	0.50	0.56	0.66	0.80	0.79	0.66
N		2,124	495	599	178	238	400	400	1,815
* Item 15 is from form B of the TEL, with sample sizes 2,718 and 293 for basic and advanced U.S. students, respectively.									

The overall average percent correct for Latvia (66%), Lithuania (80%), and Romania (79%) exceed the overall average for regular economics students in the U.S. (59%), and the averages for Lithuania and Romania also exceed the average for AP/Honors students in the U.S. (72%). This superior performance might be due to the higher percentage of students who plan to pursue further education in the Lithuanian and Romanian courses, the high percentage of teachers who have attended NCEE workshops in these two countries, or the greater length of the Eastern European courses compared to the U.S. courses, which are typically only one semester long. Whatever the reason, the data in Table 7 indicate that a lot of economics is being learned by the students tested in this study.

Totaled across all five nations, the overall average of 66% on all 20 questions for the Eastern European students completing either an eleventh grade or a twelfth grade economics course is 7% higher than the average for U.S. students completing a regular economics course and 6% lower than the average for U.S. students completing an AP/Honors course. The higher percentage correct for the Eastern European students compared to U.S. students in regular economics courses was greatest on the four macro questions (15%) and the four international questions (9%). It is interesting to note that both regular and AP/Honors students in the U.S. performed better on the micro questions relative to the macro questions; whereas, this is not the case in four of the five Eastern European countries (Albania, Croatia, Lithuania, and Romania). An interesting question for future research might try and answer why there are international differences in relative test performance on microeconomic questions compared to macroeconomic questions?

The data in Table 7 also indicate that in some cases the overall mean percent correct score for all 20 items may have been influenced by unusual performance on some individual questions. Question 4 dealing with the incentive effects of a decline in real interest rates, for example, was answered correctly by only 4% of the 238 Latvian students, and none of the students in one Romanian course got this question right. The Albanian teachers' concern with lack of coverage on aggregate demand in their curriculum was noted above. The data in Table 7 indicate that 35% of their students got question 15 right. This question, however, proved to be even more difficult for U.S. students (31%) and Latvian students (28%). Latvian students also had difficulty with question 14 dealing with an economy's potential output (21%). Question 12 dealing with the most efficient approach to controlling pollution proved to be particularly difficult for students in Albania (16%) and Croatia (18%) as did question 11 dealing with the cause of high wages in a market economy (31% in Albania and 30% in Croatia).

Questions on which the performance of students in all five Eastern European countries equaled or exceeded that of U.S. students in regular economics courses were number 2 (opportunity cost), 3 (specialization), 6 (competition), 10 (equilibrium adjustment), 13 (GDP), and 16 (inflation).

In addition to having the largest percentage of students who plan to pursue further education after high school, the three countries showing the highest 20-item TEL scores in Table 7 are the three with the largest percentage of teachers who have attended NCEE workshops, and whose coordinators reported the most activity in developing new materials for economics courses in their countries. This is encouraging evidence of the effectiveness of these programs.

FACTORS INFLUENCING STUDENT PERFORMANCE

We do not have a way to adequately deal with the fact that the five countries in our study have different curricula and use different materials in their courses. Nor do we assume that the courses and students tested are a completely random sample. Nevertheless, for purposes of exploratory investigation of the factors influencing student performance we have run an OLS regression with all of our data.

To control for the currently unknown national differences in curriculum and materials that may have influenced student scores, dummy variables were specified for Croatia, Latvia, Lithuania, and Romania with an omitted variable for Albania suppressed in the intercept. Then we included student and teacher variables that might be expected to influence student test performance. Missing data in some cases reduced the number of students included in our regression to 1,716. The variable descriptions, mean values, and regression results are reported in Table 8.

After controlling for other factors, the lack of a significant difference in scores between males and females found in Table 6 remained. As noted, this result differs from the common finding in the U.S. that males outperform females on multiple-choice tests in economics, and may be worth further exploration. Other than student gender, significant differences were found for other characteristics: students planning to further their education after high school scored 1.74 points higher than those without such plans, and the higher scores achieved by eleventh grade students found in Table 6 remained significant after controlling for other factors. The estimated coefficients were significantly different from zero at the 1% level.

Table 8: Multivariate Analysis with Overall Score as the Dependent Variable				
Independent Variables		Mean	Coef.	p-val.
	Constant		9.46	---
Student				
	MALE: Gender dummy variable (1=male)	13.17	-0.08	0.61
	COLLPLAN: Plans further education after high school (1=yes)	0.42	1.74	0.00**
	GRADE12: Grade 12 dummy variable (1=Grade 12)	0.52	-0.84	0.00**
Teacher				
	TCHEXPER: Years of teaching experience	17.27	-0.16	0.00**
	TCHEXPER^2: Years of teaching experience squared	378.78	0.004	0.00**
	NCEEWRKS: Attended a NCEE workshop (1=yes)	0.75	0.95	0.00**
	ECMAJOR: Majored in economics in college (1 = yes)	0.25	0.89	0.00**
	GRADDEG: Has earned a graduate degree (1=yes)	0.34	0.87	0.01**
Other				
	CAPITAL: Dummy variable for located in nation's capital (1=yes)	0.25	0.55	0.01*
	CROATIA: Nation dummy variable (1=Croatia)	0.10	-0.20	0.58
	LATVIA: Nation dummy variable (1=Latvia)	0.14	1.77	0.00**
	LITHUANIA: Nation dummy variable (1=Lithuania)	0.22	5.00	0.00**
	ROMANIA: Nation dummy variable (1=Romania)	0.23	4.80	0.00**
	N	1,716		
	Adj. R-squared	0.43		
* significant at the 5% level. ** significant at the 1% level.				

As might be expected, having a teacher who attended an NCEE workshop, majored in economics in college, or who had a graduate degree were positively and significantly associated with student test performance. After controlling for these factors, however, years of teaching experience was found to be negatively associated with student performance at a diminishing rate. A possible explanation for this

finding is that, rather than teaching experience being harmful, younger teachers in this sample are more likely to have studied the western economic concepts found on the 20-item TEL.

After controlling for student and teacher factors that varied across the national samples, significant differences in student test scores remained. Students in Latvia, Lithuania and Romania scored higher, on average, than did students in Croatia and Albania (the omitted country). Students attending schools in their nation's capital city outperformed students attending schools outside their nation's capital by about one-half point.

CONCLUSION

The findings of this paper indicate that the 20-item TEL that was developed and translated for use in this project is a reliable instrument for use in high school classrooms in five different countries. The findings of this paper also indicate that the NCEE's in-service teacher training workshops and its efforts to have workshop participants develop effective teaching materials and techniques are beginning to have a positive influence on student test performance in the countries where they have been used most extensively.

There are several interesting areas for future research. Why are there international differences in relative test performance on microeconomic questions compared to macroeconomic questions? Why are there international differences in test performance between males and females? Is it possible to employ more sophisticated analytical techniques to identify factors that affect student performance in a multivariate setting?

ENDNOTES

- ¹ Ilia Kristo (Albania), Efka Heder (Croatia), Veronika Bikse (Latvia), Danute Poskiene (Lithuania), Maria and Paul Lacatus (Romania) were instrumental in arranging for the translation and gathering the data in the five Eastern European countries participating in this study.

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ECONOMICS ARTICLES

