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PERCEPTIONS OF PERSONAL ECONOMIC STATUS AND ATTITUDES TOWARD ECONOMIC AND POLITICAL TRANSITION IN FOUR SLAVIC COUNTRIES: A STRUCTURAL EQUATIONS APPROACH

Popular support for economic and political reform in Eastern Europe will influence the future of transition. We assess the influence of personal economic status and key demographic variables unpopular support for transition policies. We use survey data from the New Democracies Barometer (1995 and 1998) to estimate structural equation models representing social attitudes in Belarus, Ukraine, Poland, and Slovakia. Comparisons across countries and over time are established by a nested model approach. The structural relations are relatively stable over time, and many are consistent across the study countries. In all four countries better personal economic conditions during transition enhance popular support for a market economy. Contrary to much political science literature, we find that superior economic status does not necessarily translate into a greater support for democracy.

1. Introduction

Popular attitudes about efforts of East European governments to reform political and economic systems towards democracy and capitalism can exert significant influence on the success of these efforts and on the political fortunes of particular individuals leading them.¹ As Gibson et al. noted for the Soviet Union, «The beliefs, values, and attitudes of ordinary citizens structure ... both the pace of and possibilities for change» [9, 330]. Thus it is interesting and important to understand the determinants of such attitudes. Our research contributes to this understanding by comparative analysis of relationships between personal economic conditions and stated support for transition policies that seek to replace Communist political and economic systems with democracy and capitalism. We focus on four countries comprising a natural grouping that is relatively understudied from this perspective: Belarus, Ukraine, Poland, and Slovakia.

These countries occupy the main part of the north-east corner of the European continent. Effectively, by population and land area, they constitute about one fifth of Europe (exclusive of Russia). Most research on social attitudes in transitional countries has focused on the former Soviet Uni-

on, with Russia given the largest weight. The population survey used in Duch [5,6], Gibson and Duch [8], and Gibson et al. [9] included respondents from Belarus and Ukraine, but was mixed with six other countries and with over sixty percent of the respondents from the Russian Federation. Although insightful, these analyses cannot be taken as valid studies for the countries we consider. Moreover, we couch our analysis in a comparative framework, which is particularly interesting in the case of these four. First, they share a common cultural outlook as Slavic countries, which provides a kind of experimental control. Second, the extent of their communist experience is different. Third, these countries differ regarding their timing and success of economic and political transition.

Debate over the relationship between economic development and political democracy is famous and has engaged many scholars. Early contributors include Lipset [15,16] and Neubauber [17]. Recent analyses of the development-democracy nexus include Bhagwati [1], Burkhart and Lewis-Beck [3], Inglehart [11], Landman [14] and Przeworski [18]. Despite these efforts, the interactions between economic development and democracy are not fully understood, particularly at the level of individual

¹ There are many different forms of economic system that might be called capitalist, and the reform efforts in these countries are not identical in the end result that is sought. Our paper is not intended to address these issues. Here we use capitalism and free market economy interchangeably to indicate an economic system in which the predominant part of economic activity is carried out by private firms and individual households interacting in free markets. This objective is common to all transitional economies. Likewise, this paper is not meant to clarify the meaning of democracy. We use this term to indicate a political system characterized by widespread popular participation in the affairs of government through elections, protection of individual rights, independent media, accountability of officials and rule of law.

citizens. Summarizing this literature, Duch et al. [7, 652] conclude that «[e]mpirical findings concerning the influence of the economy on political behavior differ depending on the level of analysis employed ... On the basis of the macro-level evidence alone one would have little reason to doubt that economy matters. In contrast, individual-level studies using survey data have produced only mixed evidence...» Yet there is little doubt that a connection between individuals' economic circumstances and their political viewpoints exists. Our research contributes to this debate through analysis of micro-level data on social attitudes and their relation to personal economic experience.

Our work is similar to that of Duch, who notes that «...analysis of citizen preferences helps us understand the resiliency of institutional reform...» [6,122]. Yet we approach this task differently. We examine, in a comparative context, constellations of social attitudes through systematic measurement and juxtaposition of the variables into a coherent structure. A key distinction is that we employ a simultaneous equations model, which we believe is a superior methodology to single equation analyses such as Duch [5, 6], Gibson & Duch [8] and Gibson et al. [9]. We approach comparisons across both time (1995 to 1998) and across the four countries at two levels. First, we compare the survey results. For example, is support for economic reform stronger in Poland or in Ukraine? Second, given that we find a coherent structure of social attitudes, is the structure evolving over time and is it different across the four countries? For example, is the influence of personal economic status on support for economic reform stronger in Belarus or Slovakia? Our main focus is on three latent variables that measure the state of the populations: personal economic status² (PES), support for a free market economy (SME) and support for democracy (SD). The latent variables are constructed from indicators, or manifest variables, in the survey data. We also consider the effects of age, gender and education.

Our paper, then, is concerned with six empirical research questions:

1. Do survey data reveal differences across the countries and over time in self-perceived economic status and attitudes toward reform?
2. Does enhanced economic status increase support for economic and political reform?

3. What is the relationship between attitudes toward economic reform and political reform?
4. How do demographic characteristics affect economic status and attitudes toward reforms?
5. Are relationships among these variables stable across time?
6. Are relationships among these variables the same across the four countries?

Three central features of our problem determine the methodology of our research:

1. Key constructs considered are not directly observable (our latent variables).
2. The system of relations in the analysis involves interdependent variables.
3. The analysis seeks to compare different countries and different periods of time.

Our modeling approach relies on linear structural equations estimated in a two-step procedure. Eight-group measurement models (four countries in two periods) are constructed to quantify the latent variables under study. On the basis of these constructed variables and three demographic variables we estimate a system of equations that serves as a model of social attitudes toward reform policies.

2. The Survey Data and Measurement Models

Data we use in our analysis come from the New Democracies Barometer IV (1995) and V (1998). The surveys were initiated by the Paul Lazarsfeld Society of Vienna to monitor mass response to transformation across Central and Eastern Europe. Using data from these years sheds light on social responses to the early results from economic transition. In each country a stratified representative sample of about 1000 respondents was established, and these individuals were engaged in face-to-face interviews (for further information see Haerpfer [10, 4-5]). Relevant details on the questionnaire are provided in the appendix.

Table 1 contains summary statistics from the survey. (For some indicators we have altered the scaling in the original survey to suit the purpose of our research project.) The first section presents the average scores of responses pertaining to personal economic status. Higher scores indicate a more favorable status. Consistent with macroeconomic data³, respondents in Ukraine reveal an inferior status in comparison to the other three countries,

² Because of the intimate connections between individuals and their households, we interpret the household economic situation as «personal economic status».

³ A brief survey of economic conditions under transition in these countries, including macroeconomic indicators, is available from the authors.

Table 1. Mean Values for Survey Data

	Belarus		Pol ind		Slovakia		Ukraine	
Index & Indicators (4 point scale)	1995	1998	1995	1998	1995	1998	1995	1998
Personal Economic Status [PES]								
1. Doing without food	2,4	2,7	3,4	3,5	3,6	3,7	3,5	2,1
2. Doing without heat & electricity	3,3	3,6	3,5	3,6	3,8	3,8	2,8	3,0
3. Doing without clothes	2,0	2,3	2,9	3,1	3,1	3,3	2,7	1,7
4. Family economic situation	1,8	2,3	2,2	2,4	2,2	2,3	1,6	1,6
5. Improvement in past 5 years (a)	1,7	2,0	2,6	2,7	2,4	2,4	1,9	1,5
Support for Market Economy [SME]								
1. Fair incomes	2,9	3,1	2,7	2,9	2,8	2,6	2,7	3,0
2. Economic responsibility	2,4	2,3	2,4	2,5	2,4	2,5	1,9	2,0
3. Enterprise ownership	2,1	2,3	2,7	2,8	2,3	2,5	2,4	2,3
4. Price controls	2,7	2,5	2,8	3,0	2,3	2,5	2,4	2,2
Support for Democracy [SD]								
1. Return to communist rule	2,7	3,0	3,5	3,4	3,3	3,2	2,7	2,6
2. Military should govern	3,6	3,6	3,7	3,6	3,9	3,8	3,5	3,5
3. Strong leader & no parliament	2,5	2,9	2,9	3,1	3,3	3,3	2,1	2,4
4. Approval of suspension of parliament	2,8	2,9	2,8	3,1	3,1	3,1	2,3	2,6
Sample Size	1000	1000	1057	1141	1117	1011	1000	1161

Source: New Democracies Barometer IV and V

and those in Poland and Slovakia are very similar and better off than respondents in Belarus. Across the two years there is an improvement in economic status in three countries with this trend stronger in Belarus. In Ukraine the data indicate deterioration.

The next two sections of table 1 show average scores for respondents' support for a free market economy and democracy. Higher scores indicate greater support. Summarizing the data, rankings by personal economic status from best to worst are: Slovakia, Poland, Belarus and Ukraine. Citizens in Belarus, Poland and Slovakia experienced improvement from 1995 to 1998, while in Ukraine deterioration is evident. Support for a free market economy is the strongest in Poland and the weakest in Ukraine. Support for democracy is relatively strong in Poland and Slovakia and weak in Belarus and Ukraine.

Taking into account that our key variables are complex and broad concepts, several indicators from the survey data are combined to measure them. This is achieved through measurement models using factor analysis and factor score regression for each latent variable and its associated in-

dicators. The factor scores from this analysis are used to combine survey indicators into the latent variables used in our structural model of social attitudes. This approach is referred to as two-step modeling, in contrast to hybrid modeling in which structural and measurement components are analyzed simultaneously in a single estimation procedure [13]. Results of the measurement models are presented in Tables 2A, 2B, and 2C. In each of the eight cases we find.

Low Root Mean Square Error of Approximation (RMSEA) and high values for t statistics in all instances but one (indicator 5 of PES in Slovakia for 1998). Thus we have discovered measurement models yielding coherent representations of the latent variables.

3. A Model of Social Attitudes: Structure and Estimation Results

To examine the influence of exogenous demographic variables on our latent endogenous variables as well as relations among the latter, we specify a structural equations model and apply a maximum likelihood estimator using LISREL [12]. In our model we presume a priori that the variable

Table 2A. Statistical Results for Measurement Model: Personal Economic Status

	Belarus		Pol and		Slovakia		Ukraine	
Indicators	1995	1998	1995	1998	1995	1998	1995	1998
1. Food	1,32	1,46	0,60	0,68	0,54	0,54	0,50	0,86
	21,4	23,8	20,7	27,0	22,8	21,3	12,2	26,6
	0,15	0,22	0,30	0,59	0,57	0,63	0,32	0,34
2. Heat & Electricity	0,42	0,27	0,60	0,53	0,35	0,39	0,33	0,49
	12,8	10,6	20,9	21	18,7	18,8	7,38	13,6
	0,13	0,13	0,32	0,27	0,43	0,51	0,12	0,09
3. Clothes	0,71	0,84	0,85	0,75	0,71	0,62	0,78	0,77
	21,7	23,4	24,1	23	20,5	18,2	13,7	26,4
	0,29	0,35	0,38	0,26	0,29	0,28	0,38	0,37
4. Family situation	0,59	0,49	0,38	0,32	0,35	23	0,28	0,51
	20,7	17,8	15,6	13,8	14,6	9,2	10,3	21,5
	0,31	0,23	0,23	0,16	0,23	0,14	0,33	0,28
5. Improvement in past 5 years	0,60	0,32	0,20	0,10	0,24	0,01	0,18	0,32
	18,8	9,30	5,15	2,29	6,47	0,12	3,41	11,8
	0,23	0,08	0,04	0,01	0,06	0,00	0,05	0,10
RMSEA = 0 ,039								

Notes for Tables 5A - 5C: For each indicator, the first number is the factor loading, the second is the associated t statistic, and the third is the factor score used to construct the latent variable from the indicators. RMSEA = root mean square error of approximation.

Table 2B. Statistical Results for Measurement Model: Support for Market Economy

	Belarus		Poland		Slovakia		Ukraine	
Indicators	1995	1998	1995	1998	1995	1998	1995	1998
1. Fair incomes	0,48	0,61	0,50	0,54	0,49	0,80	0,66	0,47
	10,6	14,2	11,1	10,3	9,81	7,76	13,7	11,0
	0,23	0,29	0,21	0,33	0,18	0,33	0,26	0,18
2. Economic responsibility	0,29	0,44	0,44	0,32	0,44	0,16	0,19	0,53
	7,26	10,4	10,7	7,22	9,99	3,53	4,33	12,5
	0,13	0,17	0,21	0,17	0,21	0,06	0,06	0,22
3. Property ownership	0,73	0,55	0,50	0,48	0,50	0,64	0,77	0,64
	13,1	13,5	12,9	10,3	12,0	7,81	14,8	14,3
	0,53	0,27	0,33	0,36	0,33	0,48	0,34	0,29
4. Price controls	0,44	0,63	0,47	0,30	0,56	0,17	0,64	0,65
	9,56	15,2	14,4	8,50	13,0	4,14	13,7	15,2
	0,18	0,37	0,55	0,28	0,41	0,08	0,27	0,36
RMSEA = 0,048								

Table 2C. Statistical Results for Measurement Model: Support for Democracy

Indicators	Belarus		Poland		Slovakia		Ukraine	
	1995	1998	1995	1998	1995	1998	1995	1998
1. Return to communist rule	0,63	0,50	0,42	0,52	0,52	0,55	0,46	0,33
	15,5	12,7	13,9	19,8	15,3	13,8	9,88	7,27
	0,21	0,24	0,47	0,44	0,42	0,26	0,14	0,10
2. Military government	0,33	0,29	0,39	0,36	0,11	0,28	0,26	0,31
	11,2	10,5	14,9	16,8	7,82	11,6	7,50	9,49
	0,17	0,25	0,72	0,38	0,32	0,32	0,13	0,20
3. Strong leader, no parliament	0,89	0,75	0,52	0,71	0,60	0,62	0,83	0,77
	20,1	16,1	12,8	20,3	16,3	15,8	14,9	13,8
	0,44	0,42	0,27	0,36	0,51	0,36	0,50	0,43
4. Approve suspension of parliament	0,53	0,44	0,19	0,40	0,38	0,52	0,55	0,54
	15,9	13,4	5,86	14,5	12,5	15,5	12,7	12,6
	0,27	0,31	0,12	0,23	0,27	0,40	0,27	0,33
RMSEA = 0,042								

Personal Economic Status will influence social attitudes toward reforms, but that reverse influences are absent⁴. We also assume, in the initial model that support for a market economy influences support for democracy, but not vice versa⁵. Thus we have a recursive model of three equations. Following the notation in Bollen [2] the basic model is expressed in matrix form as:

$$\eta = \Gamma\xi + B\eta + \zeta,$$

where η and ξ are vectors of endogenous and exogenous variables respectively, Γ and B are matrices of coefficients and ζ is a vector of error terms. The three equations of this system are listed below using the variable names we have chosen for the η and ξ vectors.

$$PES = \gamma_{11}AGE + \gamma_{12}GEN + \gamma_{13}EDU + \zeta_1; \quad (1)$$

$$SME = \gamma_{21}AGE + \gamma_{22}GEN + \gamma_{23}EDU + \beta_{21}PES + \zeta_2; \quad (2)$$

$$SD = \gamma_{31}AGE + \gamma_{32}GEN + \gamma_{33}EDU + \beta_{31}PES + \beta_{32}SME + \zeta_3. \quad (3)$$

Where: PES = personal economic status

SME = support for a free market economy

SD = support for democracy

AGE = age

GEN = gender (0 = male, 1 = female)

EDU = education level

We have a number of hypotheses concerning this representation of social attitudes.

Regarding demographic variables, anecdotal evidence suggests, and studies for other populations confirm, that younger generations show more support for political and economic reform. Thus we expect γ_{21} and γ_{31} , to be negative. Normally, personal economic status would be expected to improve with age, as workers gain experience, accumulate wealth and rise up income ladders. But in the transitional context much human capital acquired under Communist rule has been severely depreciated, younger people tend to take more advantage of the new market opportunities and pensioners' wealth has been eroded by inflation. Thus we remain agnostic as to the sign of γ_{11} . Regarding the effect of gender, evidence suggests that women in these countries are more pessimistic in evaluating their personal circumstances and more suspicious of reforms. Thus we expect negative coefficient values in all three equations for GEN. Education is expected to exert a positive influence on all three latent variables. Positive correlation between education and support of

⁴ Economic circumstances of individuals will partly determine their political outlook, but we find it difficult to see how political outlooks would have much direct impact on individuals' economic circumstances.

⁵ This reflects the view in political science literature that democracy requires the economic freedom of a market economy, but that market economies could (and historically have) functioned under non-democratic political regimes. See Dahl (1993) and Berger (1993).

democratic values is widely found in other countries, education has an obvious role in raising personal economic status, and citizens with more education will have a greater desire for economic freedom and superior capabilities to achieve success in a free-market economy.

Because these countries had been engaged in transition for roughly five and eight years at the time of the surveys, it is logical to expect that superior performance in terms of personal economic status will lead to greater support for a free market economy. It is not clear that the same should be expected for support of democracy. As Dahl [4] notes there is a tension between capitalism and democracy. People for whom capitalism is not

working well in a personal sense may seek access to the political system to improve their circumstances. Thus low incomes might result in increased support for democratic rule in an attempt to use politics for economic gain. Conversely, if individuals have enjoyed personal economic success under the authoritarian political system, they may not show support for democracy. With no a priori presumption, we remain open to what the data will reveal.

To refine the initial specification, we conduct chi-square difference tests using the hierarchical approach [2, 13] and comparing nested models to our baseline model. The results of this analysis are presented in table 3.

Table 3. Chi-square Difference Tests to Compare Baseline and Nested Models

Dep.	Expl.	Belarus		Poland		Slovakia		Ukraine	
Var.	Var.s	1995	1998	1995	1998	1995	1998	1995	1998
(1) PES	AGE	5,29*	11,6**	5,13*	21,9**	5,01*	3,85*	8,60**	52,0**
	GEN	27,5**	2,51	4,76*	10,7**	1,14	5,37*	0,79	5,92*
	EDU	25,7**	0,16	57,2**	41,0**	22,4**	8,08**	3,94*	7,49**
(2) SME	AGE	62,7**	76,1**	4,20*	33,9**	10,2**	9,02**	125,3**	44,5**
	GEN	2,26	5,09*	4,08*	6,06*	7,38**	6,24**	11,4**	6,20*
	EDU	26,0**	37,7**	51,4**	24,0**	63,8**	26,4**	20,3**	24,9**
	PES	59,9**	17,7**	58,9**	60,5**	30,8**	4,18*	16,6**	51,2**
	SD	1,19	2,69	2,47	0,6	2,82	0,18	0,64	0,36
(3) SD	AGE	0,033	2,85	2,84	0,41	7,08**	2,76	0,60	0,44
	GEN	1,33	0,00	0,42	0,20	0,92	5,85*	0,063	0,00
	EDU	19,9**	15,7**	10,4**	42,4**	12,7**	36,0**	50,6**	4,04*
	PES	0,090	19,8**	11,5**	0,84	9,47**	26,7**	0,12	7,35**
	SME	109,4**	94,7**	57,2**	79,7**	133,3**	69,7**	51,5**	92,6**

Note: Tests show improvements in model fit by including the variable

* = significant at 0,05; ** = significant at 0,01. All tests with 1 degree of freedom

We find that gender and age have no direct effect on support for democracy⁶. Thus excluding age and gender from this equation does not significantly reduce model performance. Similarly, including a reciprocal influence of support for democracy on support for a market economy does not significantly improve our model's performance. Consequently, we use the following equations as our final model specification:

$$PES = \gamma_{11}AGE + \gamma_{12}GEN + \gamma_{13}EDU + \zeta_1; \quad (1)$$

$$SME = \gamma_{21}AGE + \gamma_{22}GEN + \gamma_{23}EDU + \beta_{21}PES + \zeta_2; \quad (2)$$

$$SD = \gamma_{33}EDU + \beta_{31}PES + \beta_{32}SME + \zeta_3. \quad (3)$$

Discussion of final model estimates

Table 4 contains regression coefficients (maximum likelihood estimates), t-statistics, and RMSEA as a measure of model fit for this final specification. These coefficients represent the *direct* effects

⁶ There are two exceptions to this pattern of no influence on support for democracy, both in Slovakia. Age was a significant influence in 1995, and gender was significant in 1998.

Table 4. Statistical Results for Final Regression Model: Direct Effects

Dep.	Expl.	Belarus		Poland		Slovakia		Ukraine	
Var.	Var. s	1995	1998	1995	1998	1995	1998	1995	1998
(1) PES	AGE	-0,04*	-0,06**	-0,04*	-0,08**	-0,04*	-0,04*	-0,05**	-0,14**
		(2,30)	(3,41)	(2,27)	(4,71)	(2,24)	(1,96)	(2,94)	(7,30)
	GEN	-0,26**	-0,08	-0,13*	-0,18**	-0,06	-0,13*	-0,05	-0,13**
		(5,29)	(1,59)	(2,18)	(3,27)	(1,07)	(2,32)	(,89)	(2,44)
	EDU	0,13**	-0,01	0,24**	0,18**	0,15**	0,08**	0,05*	0,08**
		(5,11)	(,40)	(7,69)	(6,47)	(4,75)	(2,85)	(1,99)	(2,74)
(2) SME	AGE	-0,14**	-0,15**	-0,03*	-0,07**	-0,05**	-0,05**	-0,18**	-0,11**
		(8,05)	(8,89)	(2,05)	(5,87)	(3,19)	(3,01)	(11,6)	(6,75)
	GEN	-0,07	-0,10*	-0,10*	-0,10**	-0,12**	-0,12**	-0,15**	-0,11**
		(1,50)	(2,26)	(2,02)	(2,,46)	(2,72)	(2,50)	(3,38)	(2,49)
	EDU	0,12**	0,14**	0,19**	0,11**	0,21**	0,13**	0,10**	0,12**
		(5,13)	(6,20)	(7,27)	(4,92)	(8,11)	(5,17)	(4,53)	(5,02)
	PES	0,24**	0,13**	0,22*	0,19**	0,15**	0,06*	0,21**	0,19**
		(7,87)	(4,23)	(7,80)	(7,89)	(5,60)	(2,05)	(7,21)	(7,25)
(3) SD	EDU	0,12**	0,11**	0,09**	0,17**	0,09**	0,15**	0,11**	0,04
		(4,99)	(4,96)	(3,04)	(6,53)	(3,22)	(5,78)	(4,40)	(1,90)
	PES	0,00	-0,14**	0,10**	0,03	0,08**	0,15**	-0,01	0,07**
		(0,12)	(4,36)	(3,27)	(1,02)	(2,96)	(5,28)	(0,34)	(2,65)
	SME	0,41**	0,34**	0,26**	0,35**	0,38**	0,28**	0,28**	0,31**
		(11,3)	(10,9)	(7,55)	(9,43)	(11,8)	(8,58)	(8,14)	(9,96)

RMSEA = 0,0088

Notes: Absolute values of t statistics are in parentheses below coefficient estimates.

* = significant at 0,05; ** = significant at 0,01

of explanatory variables on the corresponding dependent variable.

In table 5 we present coefficients representing the total effects of explanatory variables on dependent variables for those cases in which an indirect effect is also present. (The following discussion of coefficient estimates pertains mainly to table 4, the direct effects.)

We report only cases in which there is an indirect influence of explanatory variables on a dependent variable. In other cases the total effect is simply the direct effect as reported in table 7.

Results in table 4 confirm that we have been successful in uncovering systematic and substantive relations among demographics and variables measuring social attitudes. Most explanatory variables have a statistically significant influence on the endogenous latent variables.

The influence of age on personal economic status is universally negative for all four countries in both time periods. Thus the effects of human capital depreciation, greater willingness of younger generations to take advantage of new economic opportunities, and loss of pensioners' wealth appear to outweigh any positive influence of greater work experience and family capital accumulation on personal economic status. The influence of age on support for a market economy is also consistently negative, in accordance with our prior expectations.

The impact of gender on the latent variables is also in accord with our expectations. Women reveal a more pessimistic assessment of their family's economic circumstances, and they are less supportive of transition to capitalism. Education exerts significant positive influences on all three

Table 5. Statistical Results for Final Regression Model: Total Effects

Dep.	Expl.	Belarus		Poland		Slovakia		Ukraine	
Var.	Var. s	1995	1998	1995	1998	1995	1998	1995	1998
(2) SME	AGE	-0,01*	-0,15**	-0,04**	-0,09**	-0,05**	-0,05**	-0,19**	-0,14**
		(2,21)	(9,07)	(2,52)	(4,99)	(3,21)	(3,17)	(11,1)	(7,95)
	GEN	-0,06**	-0,11**	-0,13**	-0,13**	-0,13**	-0,13**	-0,16**	-0,14**
		(4,39)	(2,47)	(2,70)	(2,91)	(2,84)	(2,91)	(3,51)	(2,96)
	EDU	0,03**	0,14**	0,25**	0,14**	0,24**	0,14**	0,11**	0,13**
		(4,28)	(6,06)	(10,3)	(5,93)	(10,1)	(5,99)	(4,53)	(5,62)
(3)SD	AGE	-0,06**	-0,04**	-0,02**	-0,03**	-0,02**	-0,02**	-0,05**	-0,05**
		(6,83)	(5,55)	(2,82)	(4,57)	(3,36)	(3,45)	(6,53)	(6,35)
	GEN	-0,05**	-0,03	-0,05**	-0,05**	-0,05**	-0,06**	-0,05**	-0,05**
		(2,50)	(1,69)	(2,99)	(2,93)	(2,84)	(3,51)	(3,21)	(3,14)
	EDU	0,06**	0,16**	0,17**	0,22**	0,19**	0,20*	0,14**	0,09**
		(5,34)	(6,64)	(7,35)	(9,24)	(7,99)	(8,32)	(5,67)	(3,70)
	PES	0,09**	-0,09**	0,16**	0,09**	0,14**	0,17**	0,05	0,13**
		(2,61)	(2,68)	(4,58)	(2,69)	(3,86)	(4,78)	(1,41)	(3,70)

RMSEA = 0,0088

Notes: Absolute values of t statistics are in parentheses below coefficient estimates.

* = significant at 0,05; ** = significant at 0,01

latent variables, confirming our hypotheses. Although our analysis led us to exclude age and gender from equation 4, the indirect effects of these variables on support for democracy (see table 5) are consistent with research by Gibson et al. [9], who found age and gender to be significant determinants of political attitudes in Russia.

Our prior expectation regarding the influence of personal economic status on support for economic reforms is also confirmed. Coefficients are positive and significant in all cases. The influence of personal economic status on support for democracy is a more complex matter. For three countries enhanced personal economic status engenders support for democracy, but in the case of Belarus a significant negative influence is found. Given unique authoritarian tendencies in Belarus, we are not surprised to see a result contrary to the other countries. Our finding suggests that those who have personally benefited under the regime are reluctant to support change, and those who have met with misfortune are in favor of political change toward democracy.

One of the most interesting results concerns the interaction of social attitudes toward economic reform on the one hand, and political reform on the other. The influence of support for a market eco-

nomy on support for democracy is significant and shows consistent magnitudes across all eight groups. Again we find consistency with results from the 1990 European USSR survey. While Duch [4] noted a positive link between democratic values and support for free market reforms, he also found that democratic values were more widespread than acceptance of a market economy. Our use of simultaneous equations facilitates a more sophisticated examination of causal relations than use of single equation models, as in Gibson et al. [9] and Duch [5].

Testing for consistency of coefficient estimates

To examine consistency of coefficient estimates in a systematic fashion, we use the nested model approach. The nested model approach is based on a difference between the chi-square for a model in which coefficients are restricted to be equal and the chi-square for an unrestricted model. Results are presented in table 6. In about one third of the comparisons there are significant differences in the apparent influence of explanatory variables.

The first part of table 6 compares the stability of structural coefficients across the time period,

Table 6. Chi-square Difference Tests for Coefficient Comparisons

Dep. Var.	(1) PES			(2) SME				(3) SD		
Expl. Vars.	AGE	GEN	EDU	AGE	GEN	EDU	PES	EDU	PES	SME
Comparing across years										
Belarus	0,37	7,42**	15,7**	0,21	0,29	0,56	6,22*	0,04	8,18**	1,81
Poland	1,49	0,42	1,82	3,44	0,01	6,50*	0,87	4,83*	2,73	2,76
Slovakia	0,02	0,87	2,39	0,01	0,00	4,77*	4,96*	2,29	3,11	5,20*
Ukraine	12,2**	1,34	0,63	9,04**	0,44	0,41	0,37	3,7	3,58	0,29
Comparing across countries: 1995										
Bel. v. Pol.	0,00	3,24	7,1**	18,7**	0,19	4,33*	0,17	0,89	5,02*	8,36**
Bel. v. Slov.	0,01	7,73**	0,25	14,6**	0,70	7,16**	5,29*	0,66	3,73	0,24
Bel. v. Ukr.	0,11	0,2**	5,41*	3,73	2,74	0,49	0,39	0,18	0,02	6,06*
Pol. v. Slov.	0,01	0,73	3,8	0,44	0,13	0,3	3,77	0,01	0,18	6,49*
Pol. v. Ukr.	0,07	1,08	23,0**	41,4**	0,71	7,87**	0,05	0,30	5,85*	0,29
Slov. v. Ukr.	0,16	0,13	6,57*	36,1**	0,25	11,7**	2,79	0,18	4,86*	4,39*
Comparing across countries: 1998										
Bel. v. Pol.	0,54	5,46*	26,3**	13,2**	0,00	1,47	2,09	2,70	15,3**	0,00
Bel. v. Slov.	0,61	0,57	5,99*	16,2**	0,10	0,10	2,83	1,06	45,3**	2,01
Bel. v. Ukr.	10,7**	0,61	5,48*	2,21	0,02	0,65	2,04	4,84*	25,3**	0,59
Pol. v. Slov.	2,2	0,34	5,7*	0,98	0,12	0,67	11,6**	0,35	8,87**	1,90
Pol. v. Ukr.	7,2**	0,34	6,63*	3,77	0,03	0,11	0,01	13,7**	1,07	0,61
Slov. v. Ukr.	14,5**	0,00	0,02	6,53*	0,03	0,20	10,9**	9,58**	4,31*	0,45

Notes: For all tests d.f. = 1;

* = difference significant at 0,05; ** = difference significant at 0,01

i.e. from 1995 to 1998. Belarus shows the greatest instability across the period, with significantly different estimation results for four of the ten coefficients. We find that the influence of personal economic status on support for a free market economy declined, although it remained positive (see table 4). We also see that gender and education played an important role in determining personal economic status in 1995, but not in 1998. Finally, the unique negative influence of economic status on support for democracy in Belarus in 1998 was not present in 1995. In Poland the significant changes pertain to the influence of education on support for reforms, both economic and political; the former was reduced in magnitude while the latter increased. In Slovakia the influence of education and personal economic status on support for a market economy diminished significantly, as did the impact of support for a market economy on support for democracy. In Ukraine the negative effect of age on personal economic status was enhanced

to the point where this relationship in 1998 fell outside the pattern for the other countries, and the negative influence of age on support for market reforms was diminished. Summing up, we find some changes across the time period, but the model shows remarkable consistency in the signs and magnitudes of influences.

Lower parts of table 6 assess the significance of coefficient differences across the countries for the two years separately. The influence of age on economic status is essentially the same in all countries for 1995, and in 1998 the only distinction is the larger negative influence in Ukraine. Impact of gender on economic status is also fairly consistent across the countries. Differences in the influence of education on economic status are more substantial. The data reveal that education has its strongest influence in Poland and weakest influence in Ukraine.

The influence of age on support for a free market economy is in keeping with the dual pairings

of the countries according to time under communism (two former Soviet republics and two non-Soviet transitional countries). The phenomenon of less support for economic reform among older generations is significantly stronger in Belarus and Ukraine, and within the two pairings there are no apparent distinctions. This relationship holds for both years. Gender affects social attitudes toward economic reform to the same extent in all countries in both years. These tests also reveal that the larger influence of education on support for economic reform in Poland and Slovakia compared to Belarus and Ukraine was statistically significant in 1995, but not in 1998. There has been a convergence among the countries regarding this relationship, with the influence increasing slightly in Belarus and Ukraine and diminishing significantly in Poland and Slovakia.

Turning finally to comparisons regarding support for democracy, we find that education had essentially the same impact across the region in 1995. In 1998 Ukraine stands out because education had ceased to be a significant determinant of support for democracy. The connection between economic status and support for democracy is the least consistent relationship. Eight of twelve comparisons show significant differences. Three of these relate to the unique result for Belarus in 1998, where a negative relationship was found. In 1998 the influence of personal economic status on support for democracy was significantly weaker in Ukraine than in Slovakia. Turning to the influence of support for economic reform on support for democracy, we again find a pattern of convergence. In 1998 there are no significant differences across the countries, but there were such differences in 1995, where the coefficients for Belarus and Slovakia are relatively large, and those for Ukraine and Poland are smaller.

4. Conclusions

Application of our model of social attitudes reveals systematic relationships among the constructed variables as well as distinct influences of demographic characteristics. It is useful to summarize briefly the main empirical results of our research and to link them to broader lessons. First, enhanced personal economic status increases support for economic transition in all countries and in both years. The magnitude of this influence is statistically indistinguishable in three of the countries, which is particularly interesting. Although support for a market economy is the strongest in Poland and the weakest in Ukraine, the impact of personal economic status on this social attitude is essen-

tially the same. Thus the structures of social attitudes toward economic reform in these countries may be more alike than are the prevailing attitudes themselves, owing to different experiences in the transitional period. Second, the data do not reveal a consistent influence of personal economic status on support for democracy. In Poland, Slovakia and Ukraine personal economic success engenders greater support for democracy, but this is not true in Belarus. Third, our analysis distinctly reveals that supporters of economic reform support democracy. Regarding demographic variables, our empirical findings largely support our prior expectations outlined above.

What lessons can we draw from these empirical results? One is the lack of a universal connection between economic status and political values. Although a large body of social science literature suggests that improved economic circumstances will lead to greater support for democracy, we find a contrary result in Belarus and agreement in Poland, Ukraine and Slovakia. Regarding policy lessons, a critical implication is that continued support for economic transition will depend on economic performance. If leaderships in these countries intend for the market reforms of the 1990s to endure, they should take steps to ensure that their economies deliver results to their citizens. Fragility of the new systems will become critical if economic improvement eludes large segments of the populations. From this perspective it makes sense to establish policies to reverse tendencies toward less even income distributions. Special attention to conditions of people in the lower range of the distribution would enhance support for economic reform even if robust economic growth is difficult to achieve. However, attention to economic performance is not necessarily the key to strengthening support for political reform. The most consistent positive influence on support for democracy is education. In the interests of establishing wider and deeper roots for popular support of democratic political systems, governments should find ways to lift the educational level of their publics.

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Appendix:

The New Democracies Questionnaire

Here we describe the specific questions presented to survey respondents and how responses were quantified. Responses used to construct latent variables were converted to a four point scale with higher numbers representing a better economic status and greater support for a free market economy and democracy. One exception is indicator number 5 for PES, where a five point scale was used. Scaling numerals are given in parentheses after the response choices.

Personal Economic Status (PES)

Sometimes people have to do without things that people usually have. In the past 12 months, has your household sometimes had to do without any of the following?

1. Food 2. Heating & electricity 3. Clothes you really need

Response options: Often (1) Sometimes (2) Rarely (3) Never (4)

4. As for your own family, how do you rate its economic situation today?

Response options: Very unsatisfactory (1) Fairly satisfactory (3)

Not very satisfactory (2) Very satisfactory (4)

5. How does your family's current situation compare with your situation five years ago?

Response options: Much worse (1) Somewhat better (4)

Somewhat worse (2) Much better (5)

No change (3)

Support for a Free Market Economy (SME)

On these cards you will find a pair of alternative statements (A and B). Please tell me for each pair whether you:

Definitely agree with the first statement (1) Somewhat agree with the second statement (3)

Somewhat agree with the first statement (2) Definitely agree with the second statement (4)

1. A. Incomes should be made more equal so there is no big difference in income.

B. Individual achievement should determine how much people are paid; more successful people should be paid more.

2. A. The State should be responsible for everyone's economic security.

B. Individuals should be responsible for their own welfare.

3. A. State ownership is the best way to run an enterprise.

B. An enterprise is best run by private entrepreneurs.

4. A. It is better when the State keeps prices low, even if there are few goods in the shops.
 B. It is better to have lots of goods in the shops even if the prices are high.

Support for Democracy (SD)

Our present system of government is not the only one that this country has had, and some people say we would be better off if the country were governed differently. What do you think? Please tell me for each of the following three statements whether you:

Agree strongly (1) Disagree somewhat (3)

Agree somewhat (2) Disagree strongly (4)

1. We should return to Communist rule.

2. The Military should govern the country.

3. We should get rid of parliament and elections and have a strong leader decide everything.

4. If parliament were suspended and political parties abolished, would you:

Definitely approve (1) Somewhat approve (2)

Somewhat disapprove (3) Definitely disapprove (4)

Demographic Variables

Education (EDU) was scored as highest level attained in the following categories:

Elementary (1) Vocational (2) Secondary (3) Higher (4)

Gender (GEN) was scored as 0 for male and 1 for female.

Age (AGE) was scored in accordance with six groups:

18 to 19 years (1) 40 to 49 years (4)

20 to 29 years (2) 50 to 59 years (5)

30 to 39 years (3) 60 years and more (6)

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СПРИЙНЯТТЯ ВЛАСНОГО ЕКОНОМІЧНОГО СТАНОВИЩА ТА СТАВЛЕННЯ ДО ЕКОНОМІЧНИХ І ПОЛІТИЧНИХ ПЕРЕТВОРЕНЬ У ЧОТИРЬОХ СЛОВ'ЯНСЬКИХ КРАЇНАХ: ПІДХІД СТРУКТУРНИХ РІВНЯНЬ

Підтримка населенням економічних та політичних реформ є важливою передумовою успіху трансформацій у Східній Європі. Автори оцінюють вплив демографічних змінних та сприйняття власного економічного стану на підтримку трансформацій. Дані проекту «Барометр нових демократій» (1995 та 1998 рр.) застосовані для оцінки моделей структурних рівнянь соціальних установок населення Білорусі, Польщі, Словаччини та України. Порівняння між: країнами, з одного боку, та за роками, з іншого, здійснюється за допомогою ієрархічного підходу. Коефіцієнти моделі є переважно стабільними для досліджуваних країн та років. Позитивне сприйняття власної економічної ситуації корелює з підтримкою ринкової економіки. Однак, всупереч багатьом політологічним дослідженням, власний економічний добробут не завжди корелює з підтримкою демократії.