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THE UNIVERSAL LINK BETWEEN HIGHER EDUCATION AND PRO-MARKET VALUES

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Does education promote support for liberal economic views? We show in a large cross-section of countries that in almost all cases those with higher educational attainment are more pro-market and less sympathetic to economic regulation than those who have less formal education. This is true in countries with high support for markets and in those with high distrust of markets and strong support for government regulation. Fixed-effect models show that respondents' education is negatively related to support for state economic activities. When considering Russian micro data, we observe that whether we confine ourselves to older people educated in the Soviet period or compare the results to a sample from the post-Soviet generation, we consistently find that those with more education are relatively less supportive of market regulation. Different models also show that parental education is a positive predictor of pro-market values.

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1. Introduction

Although there have been normative arguments for the contributions of education to the preference for liberal values in promoting democracy (Glaeser, Ponzetto, & Shleifer, 2007), none seem to have noticed the persistent and nearly universal link between education and liberal attitudes towards economic policy. This article shows the universality of the link between higher education and liberal values based on respondents' individual attitudes towards government price regulation. We use data sets from the European Values Survey (EVS), the Life in Transition Survey (LITS), and the Russian Longitudinal Monitoring Survey (RLMS-HSE) to highlight the remarkable finding that, almost universally, more educated people have more liberal attitudes. We document that obtaining higher education in Russia positively correlates with the pro-market values of the holders of Soviet and post-Soviet university degrees.

Pro-market attitudes are important indicators for (at least) two reasons. First, they create the necessary conditions for economic reforms (Hayo, 2004) in many nations, such as post-communist Europe. Second, an increase in government regulation demanded by citizens may be positively correlated with corruption and the unofficial economy (Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2002).

Existing studies have extensively described attitudes to various forms of government regulation cross-nationally, covering developed, developing and transitional economies. Different correlates of these views on regulation have been discussed and investigated: trust (Aghion, Algan, Cahuc, & Shleifer, 2010a), relative trust (Pitlik & Kouba, 2014), the mutual relationship between trust and corruption (Denisova, Eller, & Zhuravskaya, 2010; Dimitrova-Grajzl, Grajzl, & Guse, 2012), employment and ownership peculiarities (Jakobsen & Listhaug, 2012), basic knowledge of international trade (Baron & Kemp, 2004), the perception of the

consequences of the absence of regulation (Malchow-Møller, Munch, Schroll, & Skaksen, 2009), economic expectations (Ravallion & Lokshin, 2000; Robinson & Bell, 1978) , factor endowments and occupational characteristics (Mayda, 2006; Mayda & Rodrik, 2005; Scheve & Slaughter, 2001), wealth and various other socio-economic correlates (H.-J. Andreß & Heien, 2001). This topic has been covered in both economics (Aghion, Algan, Cahuc, & Shleifer, 2010b; Denisova et al., 2010; Mayda, 2006) and the political science literature (Garand, Xu, & Davis, 2017; Kolbe & Crepaz, 2016; McCarthy, Davis, Garand, & Olson, 2016; Naumann, F. STOETZER, & Pietrantuono, 2018; Wehl, 2019). However, to the best of our knowledge we are the first who have found a generalized, universal effect of education.

By the universal effect of education we mean that education predicts pro-market attitudes regardless of country fixed effects (such as the nature of the educational system or economy), choice of measures or surveys used, or the type of education within a particular country (e.g. Soviet schooling versus modern Russian education).

Using EVS and other social surveys, we show that in almost all countries, education positively and significantly correlates with a pro-liberal orientation of individual values and greater disapproval of price controls. The rest of the paper is organized as follows. Section 2 contains the literature review. Section 3 provides data details. Section 4 describes the results and Section 5 concludes.

2. Literature review

Duch (1993) is among the pioneering works on the empirical analysis of attitudes toward government price control in the European part of the former USSR. He wanted to study the genesis of pro-market support in the USSR and used interview data collected from respondents 16 years and older in 1990 by Institute of Sociology of Academy of Science of the USSR.

Among the statistically significant and positive predictors of favoring attitudes to price liberalizations were preferences for competitive elections, the level of education, retrospective perception of the economic success of “perestroika”, having the free-market mindset that inequality is related to economic efficiency. Age and price growth expectations were negative predictors of favorable attitudes to price liberalization. Duch (1993) pointed out that the correlation between democracy and free markets was well studied in the philosophical literature. Although there is a historical correlation between democratic preferences and support for market reforms, the literature shows that market reforms often preceded democratic reform. Nonetheless, in the USSR, the initiation by the Soviet government of primitive competition in the election process started in the early 1960s, long before serious market reforms. This served as evidence of the importance and antecedence of democratic preferences.

A free-market mindset also seems important for reform movements. Duch (1993) emphasized the historical roots of collectivism going back to Tsarist Russia and noted that collectivist institutions were established during the Soviet collectivization as a counter to individual or market principles. Duch based his hypothesis on the correlation between economic factors (such as self-interest, the personal perception of economic reforms, and economic expectations) as important determinants of who supported or opposed market reforms. However, retrospective views of which system was to blame for the current economic crises also served as a generator of support for prospective market reforms.

Table 1 provides a brief summary of the findings with respect to the links between education and different measures of pro-market values. In many cases, the associations were limited to specific regions or countries.

There are several possible channels for the educational impact on liberal values. Stubager (2008) considered possible mechanisms, suggesting several models, which we shall

henceforth refer to as channels of impact (in order to avoid confusion with the classifications of models defined in other studies).

A **psychodynamic channel** implies a positive effect of education on psychological resistance to changes and freedom. Individuals that are more educated are more able to control their lives and are less concerned about market pricing. Thus, a negative association between education and attitudes towards government price control may be expected. This may be partially due to the income effect, which is discussed in the underdog hypothesis (H.-J. Andreß & Heien, 2001). The view that education makes people more capable and more pro-market/less redistributive is consistent with the research findings about relative capacities and redistributive preferences in the face of automation (Thewissen & Rueda, 2019).

The socialization channel suggests that during the process of education individuals acquire the values of the surrounding social environment – liberal ideas of teachers, friends and the content of academic disciplines. For example, studying history (which is obligatory in most Russian post-secondary educational institutions) students learn of the consequences of central planning, therefore, a negative association between education and attitudes towards government regulation might be expected.

The **ideological refinement channel** was discussed and tested by Phelan and colleagues (Phelan, Link, Stueve, & Moore, 1995), who also made reference to the origins of this model (developed by Jackman and Muha (1984)). Using US data, they indicated that education transmits an ideology of individualism, so a positive association between education and individual rights may be present. However, it is not clear what major ideology is present in Russian universities, therefore, it is hard to make any prior associations between education and liberal attitudes towards pricing.

The cognitive channel suggests that acquiring special knowledge and a rational way of thinking during education favors liberal attitudes. For attitudes toward government price control, more educated individuals may understand the consequences of state price controls – deficits for instance – with more certainty. Thus, a negative association between attitudes towards government regulation and education may be assumed.

Another possible channel is the **enlightened path of education**, which may lead to an appreciation of the humanitarian values of civilization which positively correlate with views on equality (H.-J. Andreß & Heien, 2001). Not all people can afford goods and services at market prices, therefore, after an individual receives educational treatment, this mechanism may make attitudes more pro-government.

These channels can be subsumed into two more general sets of mechanisms. Rather than try to sort out all the various possible mechanisms, we believe more progress can be made by first treating the class of possible channels as a dichotomy.

The first is **Education as Treatment**: Whether due to the material learned, the training process, or due to assorted sociological or other socio-cultural influences, those who are more educated find themselves more accepting of or favorable towards the use of market prices in the economy.

The second is the **Human Capital or Capabilities Effect**. Whether due to the enhanced learning, status, or qualifications, the educated, as a result of more schooling, (and even in the extreme case that education merely serves as a signal of underlying ability and capacity with no learning involved at all) have more of an ability to cope with the uncertainties of the competition of the free market. This latter effect is less about the content of education or the socialization process involved, as it is about the mere fact that those more educated feel able to function better in a market environment and hence, feel more positively towards government

policy that leans in the direction of increased economic liberalization. They expect to do well and so favor these reforms.

Our study does not try to sort the specific mechanisms involved. However, we believe the unexpected universality of our findings – with the effect being present within almost all of the individual countries studied -- and their seeming consistency in spite of changes to the content of that education (cf. our discussion on Russia below) point to a variant of the Human Capital/Capabilities Effect as being most likely.

3. Data description

Four social surveys are utilized in this paper. They are: 1) The European Value Survey (EVS, 2008, 2009); 2) The Life in Transition Survey (LITS, 2006, 2010, 2016); 3) The Russian Longitudinal Monitoring Survey (RLMS-HSE, 2013)⁶ 4) The World Value Survey (WVS, 1994-2014).

EVS, WVS and LITS are well-known social surveys containing international data. The RLMS-HSE is a non-government longitudinal survey of households. According to the official website of RLMS-HSE, it is a series of annual nationally representative surveys based on representative samples of the Russian population. The data is collected during face-to-face interviews of each member of the household.

Pro-market values are represented by the following set of variables and indices.

⁶ <https://www.hse.ru/rlms/question>

1. **EVS Index of pro-market attitudes.** We have constructed this index by computing the mean of EVS components described below.

i. The EVS respondents were shown cards and given the following instructions:

On this card you see a number of opposing views on various issues. How would you place your views on this scale? The scale was between 1 and 10.

We transformed some variables so that all questions have 10 as the most liberal view. Dependent variables reflect the answers to the following statements:

i. **Personal responsibility.** *Individuals should take more responsibility for providing for themselves.*

ii. **Competition is good.** *Competition is good, it stimulates people to work hard and develop new ideas.*

iii. **Freedom to firms.** *State should give more freedom to firms.*

iv. **The right to refuse a job.** *People who are unemployed should have the right to refuse a job they do not want.*

v. **Individual effort.** *There should be greater incentive for individual effort.*

2. **WVS Index of pro-market attitudes.** This index is also computed as the mean value of respondents' answers. It contains statements i, ii, iv and v of the EVS index, plus the statements below. Some variables were transformed so that all questions have 10 as the most liberal view. *Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the*

right; and if your views fall somewhere in between, you can choose any number in between.

- i. **Income inequality.** *Incomes should be made more equal⁷.*
- ii. **Private ownership.** *Private ownership of business and industry should be increased.*

3. **LITS Market economy preference.** LITS respondents were asked the following question: “With which one of the following statements do you agree most?” The statements included:

- A market economy is preferable to any other form of economic system.
- Under some circumstances, a planned economy may be preferable to a market economy.
- For people like me, it does not matter whether the economic system is organized as a market economy or as a planned economy.

A binary variable “Market economy preference” is created. It equals 1 if respondents choose “A market economy is preferable to any other form of economic system” and zero otherwise.

4. **RLMS-HSE Pro-market index.** RLMS-HSE asked the following: “*How much do you agree with the following statements? Use scale from 1 to 10, in which 1 means “fully disagree” and 10 means “fully agree”?*” We transformed some variables so that all questions have 10 as the most liberal view. The following RLMS-HSE statements are utilized:

⁷ This question is transformed. The value of the answer is subtracted from 11.

- Prices on food must be determined by the government.
 - Prices on gas and petrol must be determined by the government.
 - Prices on housing and communal services must be determined by the government.
 - The interest rate on mortgages must be determined by the government.
 - A duty should be imposed on all goods imported into Russia to save Russian manufacturers from business competition.
- The government must allow people of a different nationality than yours to come to Russia to work for a while.
 - The government must allow people of a different nationality than yours to move to Russia to work and live.
 - The government must allow people of your nationality to come to Russia to work for a while.
 - The government must allow people of your nationality to move to Russia to work and live.

Next, the pro-market index is computed (N = 30445) as the mean value of the components described above.

For robustness, we also computed the index “Attitudes towards free pricing” (ATFP). It is the average of attitudes towards the regulation of price system (including the price of capital – interest rates). Unfortunately, due to the low response rate, the index of “Attitudes towards free pricing” consists of only 17230⁸ observations.

⁸ This fact can be considered as an evidence for endogeneity in dependent variables (Wooldridge, 2012). Moreover, we have regressed an indicator of missing values (= 1 if ATFP is missing, and zero otherwise) on education, gender and age. The coefficient on University diploma is negative (-0.1410) and significant (p<0.01), implying the lower propensity of educated people to deny preference reporting. Nonetheless, this selection issue is beyond the scope of this paper. Probably, Berinsky and Tucker (2006) is a good reference for this issue.

Several controls are used (Appendix, Table 2). First, a number of level indicators for education are included. In particular, the international surveys (LITS, WVS, and EVS) contain information about the highest level of education completed. “No degree/No education” stands for the lowest level and “Master’s degree or PhD” represents the highest level in the LITS survey. However, some variations in the range are present. For example, the LITS survey uses different ranges of education in different rounds. Table 2 shows that “1” corresponds to “No degree/No education”, and “8” corresponds to “Master’s degree or PhD” (round 2016). The highest level of education (post-graduate degree) is represented by “6” in the earliest LITS round (round 2006, Table 2). The World Values Survey incorporates a slightly different scale. More specifically, “1” represents “Inadequately completed elementary education” and “8” corresponds to “University with degree/ Higher education”. Table 2 also shows that “13” represents the highest level of education (“Higher tertiary education”) in the EVS survey. All these values are used as indicator variables in the regression analysis.

In order to compare the effects of university education in the USSR and university education in contemporary Russia, the following variables were created. In the USSR some courses were obligatory in tertiary educational institutions (Levykin, 2017). They included the fundamentals of Marxism-Leninism, political economy, dialectical and historical materialism (Levykin, 2017). Notably, the course “political economy” emphasized the importance of government price planning and price control. Specifically, it was documented that the prevalence of nationwide property in the sphere of production and in the sphere of goods circulation provided an opportunity to plan and to control prices everywhere. According to the course-book (Ostrovityanov et al., 1954), this opportunity for price control prevents the socialist economy from a range of capitalism problems such as the formation of excess inventories and overproduction (Ostrovityanov et al., 1954). We created a dummy variable “**Soviet university**

degree”, if an individual obtained her degree in the USSR. We also created a dummy variable **“Russian university degree”** if an individual obtained her degree in contemporary Russia. A dummy variable **“University degree”** was also utilized for the purpose of robustness checks.

To account for gender effects a dummy variable **“Male”** (= 1, for males) is incorporated. We also control for age (Table 2). Age and gender are considered as **“basic controls”**.

4. Results

First, basic regressions (without any controls) between the indicators of pro-market attitudes and education are estimated using ordinary least square (OLS) regressions on the international data (WVS, European Value Survey, LITS).

The OLS regression on the WVS data set show a positive and significant association between education and values. The regression coefficient on education is 0.0844 ($p < 0.01$). A positive relationship between education and attitudes towards markets is confirmed on the EVS survey data set. The OLS coefficient on education = 0.0599 ($p < 0.01$).

Logistic regressions estimated on the LITS data sets also show positive and significant associations between education and pro-market attitudes. Interestingly enough we find an international, universal effect of education even when controlling for education only.

Second, we control for age, gender, country and year fixed effects. Re-estimated results are summarized in Table 3 (Appendix). Positive statistical correlations between education and attitudes are obtained. Male respondents are more pro-market. This tendency is confirmed using all international surveys. This fact is also observed in the literature (H. J. Andreß & Heien, 2001). Age is negatively related to attitudes. One mechanism of this fact can be attributed to the negative market experience of older people. Presumably, Soviet stereotypes and other cohort-specific effects may be captured by age (Horvat & Evans, 2010). The interpretation and discussion of this effect is beyond the scope of this study.

Next, we estimated regressions using Russian data (RLMS-HSE), taking into account the time period when a university degree was obtained.

The RLMS-HSE regressions (Table 4, Appendix) are estimated using several models and subsamples. The first model (Table 4, Column 1,2) is estimated controlling for university education. The difference between Soviet and Russian education is not accounted for in this model. If the education variable is 1 it means that an individual has at least a university degree. The second model (Table 4, Column 3,4) is estimated using two dummy variables for the timing of education. Respondents who have lower educational attainment are in the reference group. A positive and significant relationship between University education and pro-market attitudes is found.

Finally, detailed regressions were also estimated for each country separately using age and gender as control variables. Notably, within-country regressions confirm the positive associations between education and liberal market preferences (Table 5, Appendix). Only a small number of cases significantly contradict our hypothesis. In particular, a negative significant association are only detected in Azerbaijan (beta = -0.1517, LITS 2010) and in Cyprus (beta = -0.0640, LITS 2016). Positive associations are revealed in the overwhelming majority of countries (Table 5, Appendix). Positive and significant correlations are found in developed and transition economies. More specifically, the positive correlation (beta) between education and “Market economy preference” is 0.1619 in Germany (LITS 2010), and 0.1747 in Great Britain (LITS 2010). The coefficient on education is also positive and significant in Ukraine (LITS 2010, LITS 2016) and in Russia (LITS 2010, LITS 2016). The positive association holds in countries with high (such as Uzbekistan) and low market support (such as Russia)⁹. Different

⁹ According to LITS 2016 country profiles (<http://litsonline-ebrd.com/>) 25% of respondents supported the market economy in Russia, while in Uzbekistan this share was equal to 69%.

indicators of values support our hypothesis on different data sets. For example, a positive and significant relationship between education and the “WVS Index of pro-market attitudes” are found in the majority of countries represented in the WVS (Table 5, Appendix). Crucially, this positive tendency is present in developed, developing, and transition countries. For instance, positive correlations are detected in Zambia (2007), the United States (1995, 1999, 2006, 2011), and Armenia (1997, 2011). The same trend is documented using the indicators of European Values Survey (Table 5, Appendix). To sum up, the regression results indicate the positive relation between education and pro-market values throughout the world.

Also note that these universal results seem to hold across different surveys with slightly different questions making it unlikely that the specific questions asked were very important for our overall findings.

5. Conclusion and Discussion

Given the indisputable rise in the health and well-being of those living in market driven economies in the 20th century, it is not surprising that Western European nations tended to exhibit pro-market attitudes. In contrast, given the hostility of official attitudes to the market derived from Marxist economic theory, we would expect countries that were predominantly centrally planned to exhibit less favorable attitudes towards the free market. But what role did education play in affecting these attitudes? And how differently should education have influenced present-day attitudes throughout Europe given the differing backgrounds of those nations in the east and west?

Our striking finding is that there is a universally positive relationship between education and pro-market values within almost all countries and that the sign of this relationship on average does not seem greatly affected by country or time specifics.

Education obviously plays an essential role in the formation of individual preferences and values although it also has an important function in signaling the qualities of its most successful graduates, especially in the areas of cognitive ability and conscientiousness, and research is still divided on the issue of how much to attribute to training and how much to signaling.

Nonetheless, most European states have long used educational systems as tools of state indoctrination with the goal of teaching individuals to be good citizens who are also productive workers in the economy. They are also meant to transmit and promote modern values and norms as understood by the leaders of the establishment. The European survey covers nations that have primarily been market driven or mixed market economies and those which were based on centrally planned economies, the latter often actively hostile to markets for at least a half century.

Nonetheless, we cannot infer from our data whether the education itself is causative or whether the types of individuals who obtain more education (richer, healthier, and with higher human capital) are inherently more critical of price regulation because they expect to thrive in a market environment. However, our results from comparing Soviet educated and post-Soviet educated Russians are consistent with the view that the content of education is a less important driver than education itself, especially given the anti-market tenor of Soviet education, suggesting that high individual capacity may be driving the results.

Our study has several limitations. First, endogeneity in the dependent variable could potentially bias our results. Second, educational choice and attitudes are interrelated, thus, all regressions may suffer from reverse causality. Moreover, regressions may suffer from an omitted

variable bias. Obviously, parental education is a part of the unobserved family human capital, which is a very complex phenomenon (Black, Devereux, & Salvanes, 2005; Dunn & Holtz-Eakin, 2000). Arguably, unobserved household traits may correlate with values and parental education.

However, it would be beneficial to find a suitable rigorous identification technique, and to apply it to a broader set of pro-market individual values with a more homogeneous set of controls. This task is the subject of future research by the authors.

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Table 1. Findings about education and economic values in the literature.

Economic attitudes	The sign of the correlation with education	Citation	Are international data sets analyzed?
Attitudes towards market reform	Positive	(Duch, 1993)	European USSR
Support for government interventionism	Negative	(Frentzel-Zagorska & Zagorski, 1993)	NO
Tolerance for homeless people	Positive	(Phelan et al., 1995)	NO
Support for economic aid to homeless people	Negative	(Phelan et al., 1995)	NO
Support for market-based institutions and process	Positive	(Gibson, 1996)	Russia and Ukraine
Attitudes towards government actions	Negative	(H. J. Andreß & Heien, 2001).	YES
Support for the market economy	Positive	(Hayo, 2004)	YES
Trade limitation	Negative	(Baron & Kemp, 2004)	NO
Protectionism	Negative	(Hainmueller & Hiscox, 2006)	YES
Economic views of Russian people	Positive	(Berinsky & Tucker, 2006)	NO
Economic liberalism	Positive	(Stubager, 2008b)	NO

Table 1 Continued. Findings about education and economic values in the literature.

Economic attitudes	The sign of the correlation with education	Citation	Are international data sets analyzed?
Support for government activity: creating new jobs, supporting declining industries, paying unemployment benefits	Negative	(Jakobsen & Listhaug, 2012)	NO
Enterprises have no rights for raising prices on their products, when they face high demand pressure from consumers	Negative	(Boycko & Shiller, 2016).	Russia and US
Attitudes towards migrants	Liberalizing effect of education is absent	(Lancee & Sarrasin, 2015)	NO
Attitudes towards basic economic principles	Positive	(Runst, 2014)	YES
Attitudes towards reform	Positive	(Rovelli & Zaiceva, 2013)	YES

Table 2. Descriptive statistics.

	Mean	Standard Deviation	Minimum	Maximum
Life in Transition survey, 2016				
Market economy preference	0.4180	0.4932	0	1
Educational attainment	4.4804	1.6138	1	8
Age	48.0268	17.1887	18	95
Male	0.4477	0.4973	0	1
Life in Transition survey, 2010				
Market economy preference	0.4132	0.4924	0	1
Educational attainment	4.2331	1.4489	1	7
Age	45.5985	17.0915	18	99
Male	0.4101	0.4919	0	1
Life in Transition survey, 2006				
Market economy preference	0.4265	0.4946	0	1
Educational attainment	3.3917	1.1583	1	6
Age	46.4954	17.7160	17	97
Male	0.4156	0.4928	0	1
World Values Survey, 2014				
Index of pro-market attitudes	5.9216	1.5795	1	10
Educational attainment	4.7532	2.2225	1	8
Age	40.3960	16.0072	15	99
Male	0.4899	0.4999	0	1
European Value Survey, 2008				
Index of pro-market attitudes	5.7320	1.2328	1	10
Educational attainment	6.7409	3.2643	1	13
Age	46.1527	17.5119	15	108
Male	0.4554	0.4980	0	1
RLMS-HSE, 2013				
Pro-market index	3.8729	1.9334	1	10
Attitudes towards free pricing	2.4506	1.8685	1	10
Soviet university diploma	0.0946	0.2926	0	1
Russian university diploma	0.1350	0.3417	0	1
University diploma	0.2322	0.4222	0	1
Age	37.9240	22.2028	0	102
Gender (male ==1)	0.4391	0.4963	0	1

Table 3. Regression analysis of pooled data sets.

	<u>LITS 2006</u>	<u>LITS 2010</u>	<u>LITS 2016</u>	<u>WVS, 1990-2014</u>	<u>EVS 2008</u>
Educational attainment	0.2161***	0.1307***	0.0998***	0.0909***	0.0513***
	(0.0116)	(0.0089)	(0.0067)	(0.00)	(0.00)
Age	-0.0138***	-0.0085***	-0.0068***	0.0010***	-0.0051***
	(0.0007)	(0.0007)	(0.0006)	(0.00)	(0.00)
Male	0.2213***	0.1531***	0.1141***	0.1769***	0.1834***
	(0.0251)	(0.0238)	(0.0203)	(0.01)	(0.01)
Log-likelihood	-18720	-21060	-28365	---	---
Log-likelihood, constant term only	-19737	-22199	-30403	---	---
Wald chi2	1836	2110	3395	---	---
Prob. > chi2	0.0000	0.0000	0.0000	---	---
Pseudo R2	0.0515	0.0513	0.0670	---	---
R-squared	---	---	---	0.1221	0.0885
F-statistic	---	---	---	306	121
Model p-value	---	---	---	0.0000	0.0000
Number of observations	28927	32741	44733	287363	61277

Note: robust standard errors in parentheses. LITS regressions are estimated using logistic regressions, WVS and EVS regressions are estimated using ordinary least squares regressions. Specifications include country and year dummies, * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 4. Ordinary least squares regressions. Dependent variable: Pro-market index (columns 1,3) and Attitudes towards free pricing (columns 2,4), RLMS-HSE.

	(1)	(2)	(3)	(4)
University diploma	0.1317*** (0.03)	0.1562*** (0.03)		
Gender (male ==1)	0.0556** (0.02)	0.0323 (0.03)	0.0507** (0.03)	0.0346 (0.03)
Age	-0.0092*** (0.00)	-0.0173*** (0.00)	-0.0080*** (0.00)	-0.0168*** (0.00)
Soviet university diploma			0.0701* (0.04)	0.0848* (0.05)
Russian university diploma			0.1599*** (0.04)	0.1947*** (0.04)
Constant	4.6225*** (0.07)	4.6377*** (0.12)	4.6158*** (0.08)	4.6185*** (0.12)
R-squared	0.0575	0.1041	0.0580	0.1042
F	50	53	36	52
p-val.	0.0000	0.0000	0.0000	0.0000
Number of observations	30378	17193	22354	17193

Note: robust standard errors in parentheses. Each specification includes PSU dummies

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 5. Summary of country-specific regressions.

Survey	Number of cases			
	Positive significant effect	Positive insignificant effect	<u>Negative significant effect</u>	<u>Negative insignificant effect</u>
LITS 2006	25	4	0	0
LITS 2010	25	7	1	2
LITS 2016	23	6	1	4
WVS, 1990-2014	181	29	0	6
EVS, 2008	38	5	0	4

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