



# MACROECONOMIC PERFORMANCE, INDIVIDUAL CHARACTERISTICS AND PREFERENCE FOR DEMOCRACY

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## Abstract

*What affects individual preference for different types of political regime? Is it something individual or are there factors from outside that form preferences? This paper investigates the determinants of individual preferences for democratic values and looks at differences in impact of influencing factors in transition and non-transition countries. It combines both individual and country level characteristics in order to see whether they impact person's attitude. I found that preferences for democracy are formed by impact of both individual and country-level factors. However, the direction of impact depends on the type of political regime and stage of economic development in the country. First, GDP per capita, growth of inequality and inflation are positively affecting personal preferences for democratic values in the democratic countries and negatively in the countries with autocratic regime. In turn, growth of unemployment in democratic countries decreases individual support of democracy and has a positive impact on support in the countries with autocratic regime. That agrees with the literature that beliefs and attitude towards political systems depend on country's past experience. Age has different effect in transition and non-transition economies proving that being raised in different environments matters in terms of formation of political preferences.*

**Keywords:** Democracy, macroeconomic factors, individual characteristics, transition countries

**JEL Classification:** D7, J2, O1, P1, P2

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tank in Belarus. BEROCC supports academic and applied research, arranges educational programs on modern economics and other outreach activities.

## 1. Introduction

There is a hypothesis that economic growth is positively affecting the democratization of the countries and raises the support for democracy by the population (eg. Lipset, 1959; Huntington, 1991; Barro, 1999). In this paper I explored the question of how the growth of economy together with other macroeconomic factors is influencing individual attitudes to democratic values. The results showed that GDP per capita has a positive and significant effect on individual preferences for democracy but only in the democratic countries, while the effect is opposite in the countries with autocracy. This goes in line with Buera et al. (2011) showing that preference for a type of political regime depends on country's past experience and performance. Besides, I explore differences in impact of influencing factors on preference for democracy in transition and non-transition countries because of differences in social and political environment. The obtained results showed that indeed being raised and maturing in different environment matters in terms of influencing preference for democratic values.

A question that is unanswered and attracts attention is what determines individual preference for democracy. Macroeconomic instability that is observed worldwide lately is likely to impact individual attitude on democratic values and political institutions. The world economic crisis brought deterioration of economic situation in the countries and provided new challenges to cope with. It is likely that macroeconomic indicators affect on how person is preferring democracy.

Besides, the research of political support was mostly focused on exploring economics with steady functioning democracies or the overall cross-country studies without any specific accent (Barro, 1999). I looked at a similar question in a context of transition economies, where institutions are still forming. It is widely explored in the literature how different country characteristics impact the process of democratization of the country. However, the question of how these characteristics affect individual preferences for democracy remains still open. In addition, people in the transition countries were raised and obtained education under different political regimes and environment which are likely affecting individual preferences for types of regimes. Thus, I expect that preferences for democracy in transition countries are not the same as in the Western world.

The basic assumption is that preference for democracy in the countries with the authoritarianism or autocracy is higher if the macroeconomic performance is low. In this case the transformation towards democracy looks like the way to increase welfare. At the same time in democratic countries dissatisfaction with democratic political regime will be higher in similar

situation. Thus, preference for democracy or other political regime (Buera et al., 2011) depends on country past experience. Hence, I included not only macroeconomic indicators (GDP per capita, GDP growth, inflation, unemployment and Gini coefficient), but also their interaction with a dummy for democratic regime in the country. Estimation of effect of macroeconomic factors revealed significant influence of standard of living together with inflation and unemployment. However, the impact of these factors depends on the country's political regime. Interaction of democratic regime in the country with GDP per capita, inflation, inequality has a positive impact on individual support of democracy, while these factors affect negatively in the autocratic countries. At the same time unemployment in the democratic regime decreases propensity of support of democracy, while in the autocratic countries it has a positive effect on individual attitude towards democratic values.

It looked important to check how the presence of oil and other natural resources impacts preferences for democracy. Literature (Barro, 1999) revealed negative relationship between democratization and availability of natural resources, as in this case the economic growth can be achieved not through the accumulation of human capital and technology but through the sales of resources. In turn, this reduces country's need for democratic reforms and changes. The reason is that countries, that export a lot of natural resources could be subject to the so called "resource curse" that may influence development of non-democratic institutions and in turn affect democratic preferences of individuals. As suggested by Ng (2006) I used resource dependence (share of exports of natural resources in GDP) as a proxy for presence of the "resource curse". The obtained results showed that the sign of relationship between preferences for democracy and resource dependence in autocratic economies is negative consistent with finding in Barro (1999). That means that growth of GDP associated with exports of natural resources decreases the propensity of democratic support.

Next, wars and changes of political regimes that occurred in some countries may have influenced individual preferences for democratic values. Then again, the regime that is functioning in the country now is likely to play an important role. I controlled for this effect by including the dummy for armed conflicts. Estimation of this effect revealed slightly significant positive influence of this factor in the transition economies.

However, macroeconomic factors and political regime functioning in the country are not the unique determinants of the preferences for democracy they also depend on individual factors. It is possible that age and educational level have influence on person's choice that is different from western world. As certain groups of people matured and obtained degree before the transformation period started, and the values at that time were different from what they are now,

age and education level in transition countries may reflect this difference. To test this I compared effect of age and education and their interactions with transition dummy. Using Life in Transition Survey (LITS) and World Bank data I found evidence that direction of age's impact is different in transition and non-transition economies, which supports the assumption that living and maturing under different types of regime matters in terms of expectations and evaluation of democratic ideas.

Thus, the results indicate that both individual and country-level factors influence preference for democracy.

This paper aims to contribute the literature on the factors forming preferences for democracy. The research differs from similar works in a following way. First, it uses both macroeconomic and individual level data and looks at their impact power. Second, it separates transition countries from the general dataset due to differences in the environment of these countries.

The question of how regime and democracy in particular impacts the country's economic growth is widely explored and argued in the literature. One part of the literature (Acemoglu and Robinson, 2000; Dollar and Kraay, 2003) claims that democratization stimulates rates of economic development. It occurs through different channels like increase in inflow of international investment, accumulation of high-qualified human capital and as a result increase in economy's productivity. The other side (eg. Barro, 1999) argues that the impact of democratization depends on a level of a political freedom, meaning that there is a positive relationship at a low level, while it becomes opposite when the level of political freedom in the country is already at least moderate. It also may have no effect on economic performance like it was shown by Gerring et al. (2005). However, recently Acemoglu et al. (2014) provided evidence that democratization has a significant positive effect on country's GDP.

Question of how economic growth affects level of democratization is widely discussed and raises different opinions. Lipset (1959) was one of the first who showed that economic growth together with education positively affect popularization of democratic values among the population. This statement was also supported by several researchers (Barro, 1999; Papaioannou and Siourounis, 2008). On the other hand, Acemoglu et al. (2008) found no evidence of such positive relationship.

Literature focused on similar question showed that GDP growth positively affects preference for democracy (Barro, 1999; Minier, 2001). Acemoglu and Robinson (2001) pointed that recessions together with growth of unemployment might promote change of economic regime

in the country. This is because problems with economic situation raise dissatisfaction and arouse mistrust among individuals towards existing political regime. Later on Clarke (2003) showed that unemployment negatively affects personal level of happiness that in turn matters for attitude to democratic institutions. As for the individual characteristics, level of education is revealed by the literature as a very important factor in the context of individual propensity of democracy approval (Lipset, 1959; Almond and Verba, 1963).

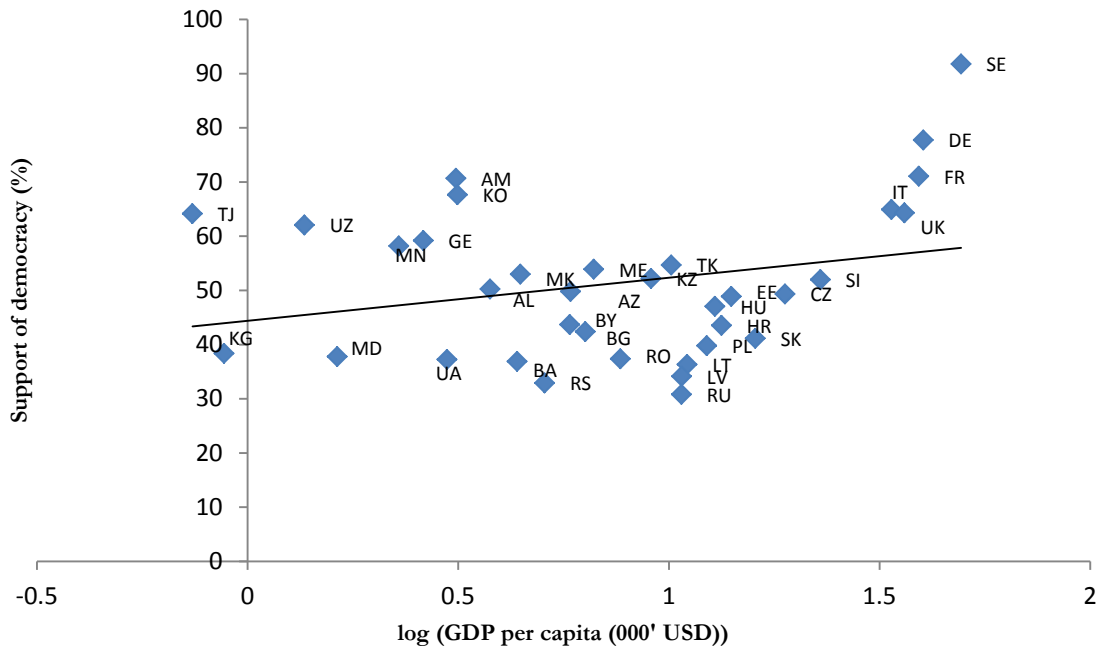
The rest of the paper is organized as follows. Section 2 introduces methodology. Section 3 discusses the data and provides information on the explanatory variables. Results are presented in Section 4. Conclusions derived from obtained results are presented in Section 5.

## **2. Data and empirical specification**

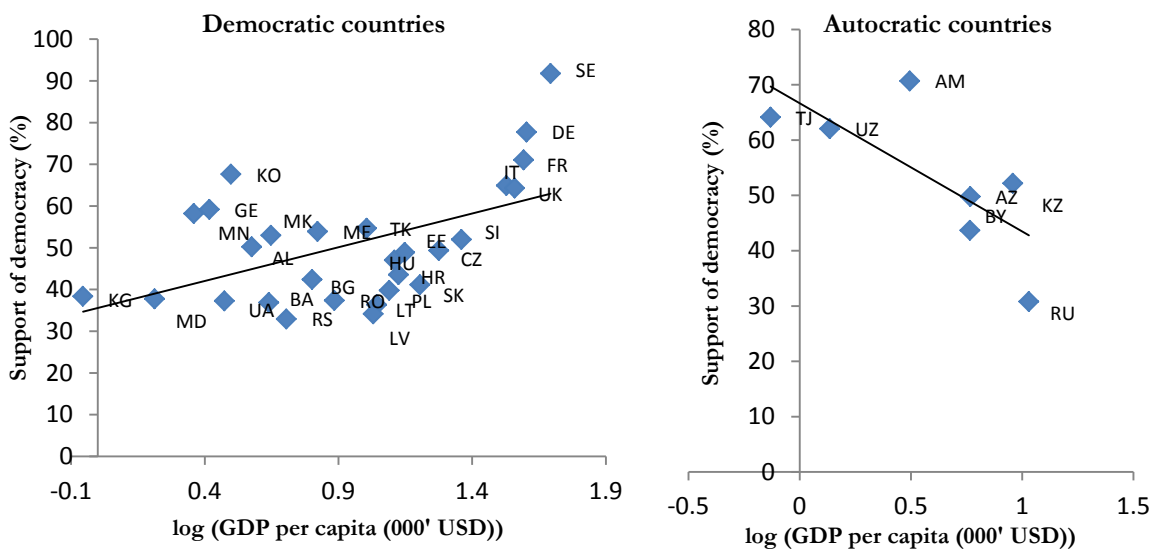
The paper uses three sources of data. Macroeconomic information was collected from database on World Development Indicators of the World Bank and global report of a Center for Systemic Peace, while individual level cross-sectional data was obtained from Life in Transition Survey (LITS) 2010. Usage of that data sample allowed getting broad data palette in the context of economic development and perception of democratic values (Graph 1).

However, despite the trend line of the whole dataset is positive, separation of the countries by type of political regime period allows us to see that the trend of relation between GDP per capita and preference for democracy in these two blocks of the countries is opposite (Graph 2), that is in some way an evidence of the fact that it is important to take into account what type of political system is presented in the country.

### **Graph 1. Support of democracy and GDP per capita**

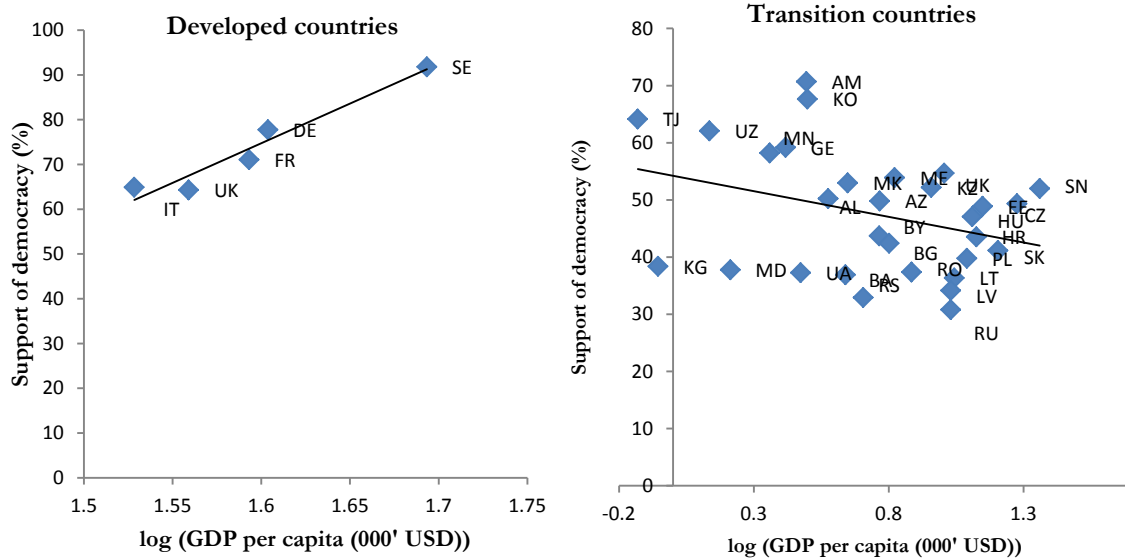


**Graph 2. Support of democracy and GDP per capita in democratic and autocratic countries**



Similar story relates connection between level of GDP per capita and support of democracy depending on the stage of economic transformation (Graph 3). Again, relationship between these two factors is opposite in transition and non-transition countries.

**Graph 3. Support of democracy and GDP per capita in transition and developed countries**



Not surprisingly countries from Western Europe are the leaders in terms of favoring democracy. Thus around 92% of Swedish, 78% of German and 71% of French expressed support. Democracy attitudes of new members of EU are rather dispersed (from 52% support in Slovenia to 34% support in Latvia), which is likely due to economic situation and consequences of economic crisis and transformation, countries had to go through. As for post USSR countries, picture and attitude vary greatly from one country to another. On the one hand Armenia, Tajikistan, Uzbekistan and Georgia belong to the group of strong supporters (71%, 64%, 62% and 59% respectively). However, if we go west the picture is opposite, so that 44% of Belarusians, 37% of Ukrainians and only 31% of Russians think that democracy is preferable to any other form of political system. Thus, indeed attitude towards democratic values is different in the countries. And the question is can these differences be explained by levels of living and other macroeconomic characteristics or there are some reasons like education, or other individual factors that diverse people's attitude for this form of state rule.

### Individual characteristics

The LITS micro data contains information of 35 countries, each of which is presented by 1000 respondents. The descriptive statistics of the data are presented in the Table 1.1. Individual preference for democracy – variable of interest – shows that in general around 51% of respondents expresses support for democracy (Table 1.1). However, the comparison of means of transition and non-transition countries (Table 1.3) reveals that preference for democracy in non-transition countries is around 22% higher than in transition economies.

A number of individual controls are taken into account and their choice is based on similar studies dedicated to this topic. First, this is a group of demographic characteristics, which includes gender, marital status age. Practice shows, that younger people tend to be more flexible and supportive compared with elder people. Marital status is divided into several categories. Thus, people are divided into such groups as single, married, divorced or widower. Information existence of children is also included into the regression and is described by a relevant dummy variable.

Information on educational level is also taken into account. Education is divided into three groups. High level of education equals to one in case respondent obtains degree from university or other institution. Middle level of education corresponds to completed upper secondary or tertiary school. Low level of education shows that respondent accomplished just primary or lower secondary education and the rest are people without any education. The dispersion of level of education, the main explanatory variable, revealed that around half of the respondents (49%) have completed secondary education, 28% finished just primary school and 20% have a degree of higher education. At that inhabitants in transition countries are more educated, however the share of people with high educational degree is relatively higher in non-transition countries (Table 1.3).

Respondent's employment status is also taken into consideration and people are split into following categories: employed by state or private enterprise, self-employed, retired and other. The share of self-employed and working in state sector is almost the same for transition and non-transition countries (26% and 25% respectively), while share of people working in private companies is significantly higher in non-transition economies (30% vs. 22% in transition).

Information regarding level of income describes three groups of earnings. Low Income includes respondents, whose subjective level of income of the household is located in the lowest 20% of income distribution. High Income includes subjectively evaluated their household's earnings to be located in top 20% of income distribution. And the rest of the respondents belong to the Middle Income group. Thus, mostly respondents evaluated their level of income as medium (85% and 88% in non-transition countries), while 14% and 11% respectively classified themselves as poor. The share of rich inhabitants is almost same (around 1%) both for transition and non-transition countries.

Other than demographic individual characteristics include information on type of residence, attitude towards risk, satisfaction with life. The general summary statistics (Table 1.1) showed that the majority lives in urban area (60%). Such feature of character as riskiness was mentioned by 35% of individuals and 47% evaluated their attitude to life as satisfied. However, comparison of means for transition and non-transition world shows that individual satisfaction



with life in non-transition countries is around 30% higher, while life in non-transition countries is more urbanized (Table 1.3).

### **Country Characteristics**

Information about countries, which are collected from database on World Development Indicators of the World Bank, contains information about standard of living in the country, which is described as GDP per capita and economic growth. It is also described by Gini coefficient. I also control for inflation and unemployment rates in the country, type of political regime, existence of natural resources and their exports to other countries. Information on post wars was also included into the model, as these might also has an effect on individual perception of democracy.

The summary statistics on macroeconomic data, which was mostly collected from the World Bank database, is presented in Table 1.2. The Gini coefficient used in the paper was obtained from the World Bank. It should be noted that in case there was no information on Gini coefficient for the year, the coefficient from the closest year was used. Information on type of regime and occurrence of an armed conflict in the country was collected from Global Report prepared by Center for Systemic Peace. Again, comparison of means of country variables revealed certain diversity (Table 1.3). First, the gap in average GDP per capita is huge. The GDP per capita is equal to around 30 thousand USD for developed countries and is less than 8 thousand USD in the block of transition economies. Non-transition block is 100% democratic, while 26% of transition economies have an autocratic regime (Armenia, Azerbaijan, Belarus, Kazakhstan, Russia, Tajikistan and Uzbekistan). Finally, both average rates of inflation and unemployment are around 5% higher in transition economies.

As for the regional distribution (Table 1.4) 35% of respondents represent CIS countries, 28% Baltic, Central and Eastern Europe countries, 23% - South Europe and the rest (14%) are from Western Europe.

### **Model specification**

The model specification follows the literature on similar topic and intends to estimate propensity of favoring the democratic values by individuals. The estimation procedure uses probit econometric techniques, which allows one to calculate these propensities of interest taking into account influence of both macroeconomic factors and individual characteristics.

The basic model specification is considered in the following form:

$$\mathit{prob}(\mathit{Democracy}_{ik} = 1) = \Phi(\beta X_{ik} + \gamma Y_k + \varepsilon_{ik}), \quad (1)$$

where  $\mathit{Democracy}_{ik}$  – is a preference for democracy of person  $i$  from country  $k$ . It is equal to 1 in case person agreed with the statement that “Democracy is preferable to any other form of political system”.  $\Phi$  is the cumulative distribution function (CDF) of the standard normal distribution.

$X_{ik}$  – are individual characteristics of person  $i$ , that include level of education, income, gender, age, marital status, existence of children and other information.

$Y_k$  - are country characteristics, that cover information regarding GDP per capita, unemployment level, inflation rate, Gini coefficient, type of regime in the country.

The basic specification is estimated for the total dataset and separately for transition and non-transition countries in order to see the general picture and whether there are any differences in the impact of exogenous variables on the individual preference for democracy in transition and non-transition world.

Next the estimation proceeds with a focus on the impact of macroeconomic factors depending on the type of regime in the country and is based on the model with the following specification:

$$\mathit{prob}(\mathit{Democracy}_{ik} = 1) = \Phi(\beta X_{ik} + \gamma Y_k + \delta D_k + \gamma' Y_k * D_k + \varepsilon_{ik}), \quad (3)$$

where  $D_k$  – a dummy variable that is equal to 1 in case country  $k$  has a democratic regime. The cross-term  $Y_k * D_k$  makes it possible to see whether there are differences in the effect of the macroeconomic factors as well as existence of oil and armed conflicts in democratic and autocratic countries.

Finally, estimation proceeds with testing differences in impact of influencing factors in transition and developed countries and uses the following model:

$$\mathit{prob}(\mathit{Democracy}_{ik} = 1) = \Phi(\beta X_{ik} + \gamma Y_k + \beta' X_{ik} * T_k + \gamma' Y_k * T_k + \varepsilon_{ik}), \quad (2)$$

where  $T_k$  – a dummy variable that is equal to 1 in case country  $k$  is a transition country. The cross-terms  $X_{ik} * T_k$  and  $Y_k * T_k$  allow comparing strength and direction of effects transition countries and the rest of the dataset.

### 3. Results

First, I look at the general picture of what is the direction of impact of different factors on perception of democracy in order to make sure that there is no strangeness in the data. Table 2.1 shows marginal effects from probit model and presents results of estimation for the whole dataset. The first glance shows that education positively affects individual attitude. Moreover, each stage of obtained education significantly increases probability for democratic support (higher education - by 17.8 percentage points, secondary education – by 9.3). This goes in line with the literature (Lipset, 1959, Barro, 1999; Przeworski et al., 2000; Glaeser, 2004) which claimed that that the growing level of human development positively affects both the level of economic growth and democratic development in the country. Women are less likely to have positive attitude towards democracy and political liberties. Age matters in terms of influence, at that positive perception of democracy is specific to those aged from 18 to 54 compared to elder generation, which supports the statement that senior citizens are more conservative than younger ones. Income shows positive impact on support of democracy. Surprisingly individuals from middle income group are showing more positive attitude than those, who counts themselves as rich people. Employment in a state sector together with self-employment positively effect on perception of democracy and increases propensity of support by 1.8 and 4.4 percentage points respectively. Inclusion of a variable satisfaction with life, which is more a subjective measure than an objective one, showed that those who are satisfied strongly support the democratic values (by 7.4 percentage points). In turn, being divorced or widowed, which also could be a proxy of satisfaction with life, has opposite negative effect.

Inclusion of different macroeconomic variables together with individual factors allowed evaluating their importance as well. The results showed that GDP per capita, growth rates of GDP have positive and significant effect. Somewhat surprisingly overall effect of unemployment does not line up with those of other macroeconomic indicators. Inflation on the other hand decreases the propensity of support of democracy. Living in transition countries negatively affects individual attitude towards democracy and decreases the propensity of support by 21.1 percentage points.

Next, I proceed with testing impact of various macroeconomic characteristics on individual support of democracy (Table 2.2). First, I look at whether the regime that rules in the country matters in terms of impact on individuals perception of democratic values. To capture this relationship I included dummy for the regime type into the regression. The dummy is equal to one in case there is a democracy and 0 if it is autocracy in the country. The results presented in the Columns 1 and 2 of the table 3.2 showed that in general (Column 1) the democratic regime has a negative and significant impact on individuals attitude towards democracy and decreases propensity of support by 24.1 percentage points. As for the transition economies (Column 3), no significant relationship was found. I also included cross-dummies on type of regime and

macroeconomic variable in order to see whether the effect of these factors is different depending on the regime in the country. The obtained results showed that GDP per capita has a positive impact on perception of democracy in democratic countries (additional 1 percent increase in GDP per capita raises the propensity of support by 3.7 percentage points). However, in case of autocracy the effect is opposite (reduces probability by 2.9 percentage points). The possible explanation here is that improvement in the level of living in the countries with autocratic regimes makes people feel satisfied with the regime and economic situation, so that they do not want any changes. Change of political regime might be associated here with uncertainty and bearing high risks in terms of deterioration of living standards and power. This holds both for the general dataset and transition countries (Columns 1 and 2). This finding raises doubts about the assumption that economic growth eventually leads to democratization.

Effect of unemployment is opposite depending on the type of regime in the country. In case of democratic regime it has a negative and significant effect, which goes in line with previous findings in the literature (Di Tella et al., 2001; Wagner and Schneider, 2006). As for the non-democratic countries, the growth of unemployment increases support of democracy within the population, which is quite surprising. But the main result is still present here – the effect on individual perceptions of democracy depends critically on the current regime and in the same way as GDP variables.

Testing of whether the Gini (income distribution) coefficient matters in terms of affecting of perception of democracy (Columns 3 and 4) reveals that direction of effect is opposite depending on the regime in the country. Thus, in case of autocratic regime the effect is negative and significant, meaning that growth of gap between rich and poor in the country decreases propensity of individual support of democracy. As for the democratic countries, the picture is vice versa, so that if the gap between higher and lower income groups goes up, the support of democracy also increases. The possible explanation here is that probably here democracy is associated with some income redistribution, when the higher income groups have to support poor through different mechanism like taxation, monetary policy or charity.

Estimation of how the previous armed conflict and exporting raw materials impact people's attitude towards democracy is presented in the Columns 5 and 6 and reveals opposite effect for the general dataset and transition countries. The effect of renting natural resources is negative and significant for the transition economies and decreases propensity of support by 15.4 percentage points, while it is positive and significant for the whole dataset. The possible explanation of the negative and significant sign can be that here economic growth occurs not due to accumulation of human capital and technology but through the sales of resources. Thus, people

do not see necessity in reforms, which is expressed in reduction of democratic support. Armed conflict occurred in the past has a positive and significant effect on people's perception of democracy and increases probability of support by 1.5 percentage points, while it does not play significant role in case of the general dataset. Thus, this backs hypothesis of the importance of inclusion of this factor and difference in its' strength and role depending on the country.

Analysis of diversity in support for democracy in transition and developed countries (Table 2.3) reveals several differences in factors' influence on individual perception (Column 1 and 2). First, attitude of people aged from 18 to 34 to democracy is opposite in transition and non-transition countries. The possible reason here is that younger people tend to be in opposition towards country's governing regime, which is explaining minus sign in case of non-transition developed economies. On the other hand transformation to democracy possibly goes in line with expectations of a better quality of life among young generations in transition economies. As for the macroeconomic factors and its' influence, the direction of impact also differs. First, GDP per capita positively affect individuals preference for democratic values in non-transition countries and additional 1 percent increase in GDP per capita raises it by 2.0 percentage points, while in case of transition economies rates of economic growth is a factor that plays significant positive role. The potential explanation here is that growth rate of GDP works as proxy of expectations of improving living standards in the future in transition world. As for rates of inflation and unemployment, they are opposite. Unemployment negatively affects individual preference for democracy in non-transition country and the direction of inflation effect is positive, while in transition economies the picture is strictly opposite with a weaker strength of effect of these two factors.

The differences in strength and direction of influencing factors in transition and non-transition world are presented in Column 3 Table 2.3). Here inclusion of the cross-term dummies allows comparing the effects in two blocks of the countries. Higher education has significantly lower effect in transition countries, meaning that in the non-transition economies higher educational degree increases the propensity of support by 23.1 percentage points while in transition economies the effects is around 8.0 percentage points lower. Impact of relatively young age goes in opposite directions like it was described above and the effect becomes insignificant in case of age groups of 45 to 64. We see the confirmation of one of the assumptions here, that indeed age has different influence in transition and non-transition economies The strength of earnings role is significantly lower in transition economies. As for the macroeconomic factors and their importance, again picture does not change much from described above. Individuals in transition economies take into account not GDP per capita but rates of economic growth, which is opposite to general picture. Rates of unemployment and inflation keep moving in opposite directions and the signs of their influence are different in transition and non-transition world. At

that positive sign of unemployment effect in transition world is quite an unusual and interesting finding.

Finally, as a robustness check, in order to check whether the results are comparable with the literature, which mostly focuses on the country-level information, I perform estimation procedure using OLS with just the aggregate level data, similar to one made by Friedrichsen and Zahn (2011). Again, this does not make the results more informative compared with the aggregate level data. However, allows checking whether the results go in line with similar studies. Thus, a country average on support of democracy is used as a dependent variable and main macroeconomic variables (GDP per capita, growth of GDP per capita, inflation and unemployment rates) as influencing factors. The results are presented in Table 2.4.

Estimation results to some extent go in line with other literature on similar topic (Barro, 1999; Wagner et al., 2009). GDP per capita economic growth are positive and significant and increase preference for democracy, while inflation has significant negative effect. Impact of unemployment is a result that was surprising and unexpected. Literature assumes it having significant negative effect on satisfaction with democracy, which is opposite to obtained results.

Comparison with the estimations based on individual level data (Table 2.1, Column 1) allows to conclude that the factors have similar signs of the effects and differ just in terms of its strength and significance (economic growth in particular). Therefore, access to individual level data allows obtaining some insights compared with country's averages.

#### **4. Conclusions**

This paper looked at what impacts individuals preference for democracy and how the macroeconomic performance matters for democratic support. It employed both individual (37364 individuals from 35 countries) and country level data to investigate this relationship.

The results showed that both individual and macroeconomic factors affect attitude towards democracy. The macroeconomic block showed that economic growth, unemployment, inflation, income inequality, raw materials that go for exports have a significant influencing power that affects individual choice and are different in transition and non-transition economies. For example, higher GDP in democratic developed economies increases probability of support of democracy, while it has an opposite effect in transition countries. However, the impact of these factors strictly depends on the political regime that exists in the country. Growth of inequality and inflation are positively affecting personal preferences for democratic values in the democratic countries and

negatively in the countries with autocratic regime. In turn, growth of unemployment in democratic countries decreases individual's support of democracy and has a positive impact on support in the countries with autocratic regime. That implies that exclusion any on these factors way lead to inconsistent biased results.

In addition, comparison of results for transition and non-transition world revealed that effect of age has a different direction depending whether individual comes from transitional country or not. This result supported the idea that being raised in different environments with various political regimes may impact differently on individual perception of democratic values.

Areas for the future research may include analysis using a time-series cross country data, that may help answering on a question how individual preferences for democracy are affected throughout the time and do they stay unchanged no matter how they country's economy is performing.

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**Table 1.1 Summary statistics (micro-level data)**

Variable	Description	Mean	St. Dev.
Democracy	=1 if respondent agrees that democracy is preferable to any other form of political system	0.51	0.499
Primary education	=1 if respondent completed elementary of uncompleted secondary school	0.28	0.447
Secondary education	=1 if respondent completed secondary school but not tertiary	0.49	0.499
Higher education	=1 if respondent completed tertiary school	0.20	0.402
Married	= 1 if married	0.59	0.492
Single	=1 if single	0.2	0.397
Divorced/Widowed	=1 if divorced or widowed	0.21	0.407
Kids	=1 if individual has kids	0.37	0.483
Female	=1 if respondent is female	0.6	0.489
Urban	=1 if respondent lives in urban area	0.6	0.489
Rural	=1 if respondent lives in rural area	0.4	0.49
Low income	=1 if income of respondent's household is in the bottom 20%	0.13	0.334
Medium income	=1 if income of respondent's household is in the range between 21% and 80%	0.86	0.359
High income	=1 if income of respondent's household is in the upper 20%	0.01	0.089
Age from 18 to 24	=1 if respondent's age is from 18 to 24	0.12	0.322
Age from 25 to 34	=1 if respondent's age is from 25 to 34	0.19	0.395
Age from 35 to 44	=1 if respondent's age is from 35 to 44	0.19	0.39
Age from 45 to 54	=1 if respondent's age is from 45 to 54	0.18	0.38
Age from 54 to 65	=1 if respondent's age is from 55 to 64	0.15	0.361
Age from 65	=1 if respondent's age is from 65	0.17	0.378
Employed by private company	=1 if respondent works for wages in a private company	0.24	0.424

Employed by state company	=1 if respondent works for wages in a state company	0.17	0.372
Self-employed	=1 if respondent is a self-employed	0.09	0.289
Retired	=1 if respondent is a retired	0.22	0.416
Other	=1 if respondent is involved in other activities	0.29	0.456
Satisfied	=1 if respondent is satisfied with life	0.47	0.499
Riskiness	=1 if respondent evaluates himself as risky	0.35	0.478

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Source: LITS data

**Table 1.2 Summary statistics (macro-level data)**

Variable	Description	Mean	St. Dev.
GDP per capita	GDP per capita (000' USD)	12.1	12.3
Growth of GDP	Rate of GDP growth (%)	4.87	2.79
Inflation	Rate of inflation (%)	10.16	9.65
Democratic regime	=1 if there is a democratic regime in the country	0.79	0.41
Rents of natural resources	Total natural resources rents (% of GDP)	0.18	0.39
Gini coefficient	Gini coefficient	0.33	0.05
Armed conflict	=1 if there was an armed conflict (wars of independence, communal wars, ethnic wars, revolutionary wars, and inter-state wars) during the last 20 years	0.44	0.49
Unemployment	Rate of unemployment (%)	12.27	8.13

Source: World Bank and Polity IV

**Table 1.3 Means comparison of transition and non-transition countries**

	Non-Transition	Transition	Difference Significance
Democracy	0.68	0.46	***
Primary education	0.29	0.27	
Secondary education	0.41	0.51	***
Higher education	0.24	0.19	**
Married	0.56	0.6	*
Single	0.25	0.18	**
Divorced/Widowed	0.2	0.21	
Kids	0.34	0.38	*
Female	0.57	0.61	*
Urban	0.54	0.45	***
Rural	0.32	0.42	***
Low income	0.11	0.14	*
Middle income	0.88	0.85	*
High income	0.01	0.01	
Age from 18 to 24	0.09	0.12	*
Age from 25 to 34	0.17	0.2	*
Age from 35 to 44	0.21	0.18	*
Age from 45 to 54	0.18	0.17	
Age from 55 to 64	0.16	0.15	
Age from 65	0.18	0.17	
Employed by private company	0.3	0.22	**
Employed by state company	0.16	0.17	
Self-employed	0.09	0.09	
Retired	0.22	0.22	
Other	0.23	0.3	**
Satisfied	0.71	0.41	***
Riskiness	0.37	0.35	

Source: LITS

**Table 1.4 Means comparison of transition and non-transition countries**

	Non-Transition	Transition	Difference Significance
GDP per capita (000' USD)	30.4	7.7	***
Growth of GDP per capita	1.63	5.42	*
Inflation	6	11.1	**
Democratic regime	1	0.74	***
Rents of natural resources	0.13	0.19	**
Gini coefficient	0.34	0.33	
Armed conflict	0.33	0.46	***
Unemployment	8.6	13.2	**

Source: World Bank and Polity IV

**Table 1.5 Regional distribution**

Regional distribution	%	Obs
Western Europe	14.16	5504
CEE and Baltics	27.8	10805
SE	22.76	8844
CIS and Mongolia	35.28	13711

Source: LITS

**Table 2.1. General Influence of Macroeconomic and Individual Factors on Perception of Democracy**

	All
Secondary education	0.095***
Higher education	0.178***
Female	-0.041***
Age 18-24	0.0411***
Age 25-34	0.0219*
Age 35-44	0.02994**
Age 45-54	0.0421***
Age 55-64	0.0277***
Children	-0.00341
Medium income	0.1097***
High income	0.0681**
Self-employed	0.0444***
Employed by state company	0.0181**
Employed by private company	0.003
Retired	-0.0148
Riskiness	0.0084
Urban	-0.0094
Married	0.013
Divorced/Widower	-0.0302***
Satisfied with life	0.0737***
GDP per capita (000' USD)	0.0044***
Growth of GDP per capita	0.0194***
Inflation	-0.0029***
Unemployment	0.0066***
Transition economy	-0.211***
Observations	37,364

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



**Table 2.2. Influence of Macroeconomic and Individual Factors on Perception of Democracy**

	1	2	3	4	5	6
	All	Transition	All	Transition	All	Transition
Secondary education	0.104***	0.098***	0.108***	0.1021***	0.103***	0.11***
Higher education	0.193***	0.168***	0.197***	0.173***	0.191***	0.18***
Female	-0.0373***	-0.0306***	-0.0373***	-0.0299***	-0.037***	-0.02924***
Age 18-24	0.0506***	0.068***	0.0372***	0.053***	0.035**	0.057***
Age 25-34	0.0256**	0.048***	0.015	0.0334**	0.015	0.034**
Age 35-44	0.0321***	0.05***	0.0224*	0.0367**	0.023*	0.0367**
Age 45-54	0.0394***	0.053***	0.035***	0.453***	0.037***	0.045***
Age 55-64	0.0251**	0.033***	0.0222**	0.0273**	0.023**	0.026**
Children	-0.0075	-0.011	-0.0121*	-0.0136*	-0.0138**	-0.0107
Medium income	0.0958***	0.0878***	0.096***	0.0853***	0.0959***	0.088***
High income	0.0625**	0.0197	0.066**	0.0196	0.068**	0.0155
Self-employed	0.0496***	0.0466***	0.052***	0.0504***	0.048***	0.06***
Employed by state company	0.0163*	0.0286***	0.0237***	0.0332***	0.0245***	0.034***
Employed by private company	0.0015	0.016*	0.0085	0.0193**	0.0094	0.0204**
Retired	-0.0178*	-0.0088	-0.0146	-0.0085	-0.0129	-0.008
Riskiness	0.0093	0.016**	0.017***	0.024***	0.0185***	0.0228***
Urban	-0.0002	0.0072	0.004	0.0109	0.005	0.01
Married	0.0164**	0.0084	0.0126	0.0046	0.0118	0.0047
Divorced/Widower	-0.0276***	-0.0291***	-0.0303***	-0.0326***	-0.0313***	-0.032***
Satisfied with life	0.0711***	0.0667***	0.0718***	0.066***	0.0709***	0.063***
Democratic regime	-0.241***	-0.204	-0.625***	-0.6***	-0.603***	-0.681***
GDP per capita (000' USD)	-0.0289***	-0.0299***	-0.0208***	-0.0268***	-0.0248***	-0.012***
GDP per capita * Democratic regime	0.0367***	0.0302***	0.028***	0.0208***	0.0332***	0.0082***
Growth of GDP per capita	0.0044	0.0034	-0.0056*	-0.0064**	-0.0046	-0.009***

Growth of GDP*Democratic regime	-0.0123	-0.005	-0.0082	-0.005	-0.0037	-0.0181**
Inflation	-0.0039***	-0.0041***	-0.0072***	-0.0073***	-0.0051***	-0.0119***
Inflation * Democratic regime	0.0032***	-0.0011	0.0075***	0.0026**	0.0055***	0.0067***
Unemployment	0.0103***	0.094***	0.0093**	0.008*	0.0151***	-0.0047
Unemployment * Democratic regime	-0.00416*	-0.0046**	-0.0076	-0.0069	-0.0118***	0.0037
Gini			-1.395***	-1.379***	-1.46***	-1.377***
Gini * Democratic regime			1.802***	1.46***	1.779***	1.626***
Armed conflict					-0.0004	0.015*
Rents of natural resources					0.0711***	-0.154***
Observations	37,364	31,860	36,273	28,765	36,273	28,765

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 2.3. Influence of Macroeconomic and Individual Factors on Perception of Democracy in Transition and Developed Countries**

	1	2	3	3
	Transition	Non transition		*transition dummy
Secondary education	0.0901***	0.0904***	0.106***	-0.0152
Higher education	0.157***	0.186***	0.231***	-0.0803***
Female	-0.0348***	-0.0412***	-0.0479***	0.0129
Age 18-24	0.068***	-0.0754**	-0.0832**	0.149***
Age 25-34	0.047***	-0.594**	-0.0667**	0.113***
Age 35-44	0.049***	-0.0302	-0.0345	0.0835***
Age 45-54	0.054***	0.0136	0.0158	0.0378
Age 55-64	0.033***	0.0188	0.0218	0.0112
Children	-0.00077	-0.009	-0.0108	0.01
Medium income	0.096***	0.144***	0.154***	-0.058***
High income	0.0199	0.129**	0.166**	-0.148**
Self-employed	0.0371***	0.0481**	0.0573**	-0.02
Employed by state company	0.0174*	0.042**	0.0496**	-0.032
Employed by private company	0.001	0.0355**	0.0415**	-0.0405**
Retired	-0.0219*	0.378*	0.0444*	-0.0665**
Riskiness	0.0084	-0.0017	-0.00202	0.0104
Urban	-0.00103	-0.032**	-0.0374***	0.0359**
Married	0.0088	0.0028	0.0032	0.0057
Divorced/Widower	-0.0311***	-0.038**	-0.043**	0.0114
Satisfied with life	0.074***	0.069***	0.0784***	-0.0042
GDP per capita (000' USD)	-0.00074	0.02***	0.023***	-0.0237***
Growth of GDP per capita	0.0154***	-0.00004	-0.0005	0.0159**
Inflation	-0.0038***	0.042***	0.049***	-0.0528***
Unemployment	0.0048***	-0.055***	-0.064***	0.069***
Transition economy			0.111	
Observations	31,860	5,504	37,364	

**Table 2.4. Influence of Macroeconomic Factors on Average Perception of Democracy**

VARIABLES	All
GDP per capita (000' USD)	0.0187***
Economic growth	0.002***
Inflation	-0.002***
Unemployment	0.024***
Observations	34

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1