

IZA DP No. 2530

## The Russian-Ukrainian Political Divide

Amelie Constant  
Martin Kahanec  
Klaus F. Zimmermann

December 2006

# The Russian-Ukrainian Political Divide

**Amelie Constant**

*IZA, Georgetown University and DIW DC*

**Martin Kahanec**

*IZA*

**Klaus F. Zimmermann**

*IZA, Bonn University, DIW Berlin,  
Free University Berlin and CEPR*

Discussion Paper No. 2530  
December 2006

IZA

P.O. Box 7240  
53072 Bonn  
Germany

Phone: +49-228-3894-0  
Fax: +49-228-3894-180  
E-mail: [iza@iza.org](mailto:iza@iza.org)

Any opinions expressed here are those of the author(s) and not those of the institute. Research disseminated by IZA may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit company supported by Deutsche Post World Net. The center is associated with the University of Bonn and offers a stimulating research environment through its research networks, research support, and visitors and doctoral programs. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

## ABSTRACT

### **The Russian-Ukrainian Political Divide<sup>\*</sup>**

The Orange Revolution unveiled significant political and economic tensions between ethnic Russians and Ukrainians in Ukraine. Whether this divide was caused by purely ethnic differences or by ethnically segregated reform preferences is unknown. Analysis using unique micro data collected prior to the revolution finds that voting preferences for the forces of the forthcoming Orange Revolution were strongly driven by preferences for political and economic reforms, but were also independently significantly affected by ethnicity; namely language and nationality. Russian speakers, as opposed to Ukrainian speakers, were significantly less likely to vote for the Orange Revolution, and nationality had similar effects.

JEL Classification: D72, J15

Keywords: transformation, voting preferences, Ukraine, ethnicity, Orange Revolution

Corresponding author:

Klaus F. Zimmermann  
IZA  
P.O. Box 7240  
53072 Bonn  
Germany  
E-mail: [zimmermann@iza.org](mailto:zimmermann@iza.org)

---

<sup>\*</sup> Financial support from Volkswagen Foundation for the IZA project on “The Economics and Persistence of Migrant Ethnicity” is gratefully acknowledged.

## **1. Introduction**

The Orange Revolution in Ukraine<sup>1</sup> unveiled a significant voting divide between ethnic Ukrainians, who typically supported the reformist “Orange” opposition, and ethnic Russians, who usually were in favor of the more conservative pro-Russian wing of the political spectrum. While this political cleavage was evident on the surface, it is not properly understood whether it was genuinely driven by ethnicity or caused by other factors like different reform intentions between the ethnic groups.

For example, geographical proximity to Russia and the resulting social and economic ties could have led people living in the eastern parts of Ukraine to support pro-Russian forces. Because ethnic Russians are concentrated in the eastern parts of Ukraine, the overall impression could have been that it was ethnicity rather than geographical distribution that was driving political preferences and unrest. Similarly, individual preferences for political and economic reforms clustered along ethnicity lines could have misled observers to conclude that it was ethnicity and not reform preferences that drove the Russian-Ukrainian political divide.

However, there is empirical evidence that predicts the existence of a significant ethnicity-related political divide. As we have shown elsewhere (Constant, Kahanec, and Zimmermann, 2006), there has been a rising ethnicity-related earnings divide in favor of ethnic Russians in Ukraine’s transformation period. Consequently, there has been an increasing potential for an ethnicity-based political divide with a tendency to foster political groups that might be able to reverse this trend. We, therefore, expect to find strong and stable ethnicity-based preferences for the reform process linked to the Orange Revolution independent of the individual preferences for democracy and a market-oriented system.

According to the literature on voting behavior in the tradition of Lipset (1963), ethnic division often turns elections into a referendum, where the relative sizes of ethnic groups consistently drive election results. An alternative view is that voting behavior is driven by perceptions about personal gains or losses inflicted upon the particular individuals or groups by the possible election results. In this vein, Brainerd (1998), who studies support for transformation in Russia, finds that predicted wage losses had little impact on voting behavior in the 1993 elections. Similarly, Fidrmuc (2000) studying the support for reforms in the Czech Republic, Hungary, Poland, and Slovakia reveals a number of distinct voting patterns that are driven by individual characteristics and career prospects. That individual prospects play an important role in determining voting behavior is corroborated by Kapstein and Milanovic (2000), who find that younger, better educated, and richer individuals supported Yeltsin in the 1996 Russian elections.

Several researchers have analyzed the political processes driving the Orange Revolution. Arel (2005) stresses the geographical polarization of election results. Oksamytna and Khmelko (2006) and Khmelko (2006) discuss the effects of age, gender, education, geographical location, language, ethnic self-identification, and other factors on aggregate election results during the Orange Revolution. To our knowledge, however, there is no study that analyzes and quantifies these effects in a microeconomic framework.

This paper investigates whether one can trace a stable independent ethnicity factor that can help to explain the turbulent election results of 2004-2005. We are also interested in the potential role that different measures of ethnicity, such as language and nationality, may have in driving the political watershed and the seriously diverging voting preferences. In particular, we are interested in whether these two salient measures of ethnicity have independent effects on the voting behavior of the people of Ukraine.

To investigate the role of language and nationality in shaping the propensity to vote for the reformist political parties prior to the Orange Revolution, we use micro data from the Ukrainian Longitudinal Monitoring Survey (ULMS). In the first step, we evaluate the effects of these two measures of ethnicity on the likelihood to prefer the pro-Orange parties. In the second step, we relax the assumption that voting preferences of different ethnic groups are determined by the same processes, except for a possible ethnic shift factor in the likelihood to vote for pro-Orange parties. In particular, we permit variation in the effects of different factors on the voting preferences of different ethnic groups using a new decomposition method.

The paper proceeds as follows: Section 2 describes ethnic differences in Ukraine, and outlines the functioning of the political system. Section 3 presents the data used. Section 4 stages the voting preference model, and presents the empirical results. Section 5 deals with the ethnic divide in voting preferences. Section 6 concludes.

## **2. Ethnicity and Politics in Ukraine**

The ethnic identity of the inhabitants of the present-time Ukraine is a result of turbulent past developments. The two largest ethnicities, the Russians and Ukrainians, originate from the same ancient state of Kievan Rus.<sup>2</sup> After the fall of Kievan Rus, Russians and Ukrainians emerged as distinct ethnic groups over the centuries of foreign rulers, including the Russian Empire, Poland, the Cossack state, and Austro-Hungary, that governed large parts of the present-time Ukraine. Ukrainian identity developed in spite of Russification by Imperial Russia. After the Russian Revolution in 1917 and its brief independence<sup>3</sup> until 1922, Ukraine was incorporated into the USSR as the Ukrainian SSR. As a Soviet State, the Ukraine was stamped by Russian dominance in social,

economic, and political life. Yet the Ukrainian identity and language have survived and persisted.

Since August 1991 (with the fall of the Iron Curtain and the declaration of the Ukrainian independence), the Ukrainian language has been reinstated as the official language in Ukraine, and ethnic Ukrainians are the largest ethnic group in the new state. To wit, in the 2001 Ukrainian Census 67.5 percent of the country's population named Ukrainian and 29.6 percent named Russian as their native language. With independence ethnic Ukrainians gained a platform for a better position in the Russian-Ukrainian ethnic relations in Ukraine. It must be also noted that the government in its nation-building effort has tried to curtail regionalism, and mitigate ethnic identity issues while pledging allegiance to territorial citizenship.<sup>4</sup>

Nowadays, it is primarily language and nationality that distinguish ethnic Russians and Ukrainians. Russian and Ukrainian languages are similar but distinct. We take these two salient features of ethnicity as exogenous measures with respect to individual voting preferences.<sup>5</sup>

Concerning the political institutions, Ukraine is a semi-presidential representative democratic republic with a multi-party system. Executive power is exercised by the Cabinet, while legislative power is vested in the Parliament. Ukraine has a large number of political parties. Since some of these parties have minuscule electorates, they often form electoral coalitions for the purpose of participating in national elections.

In the period preceding the Orange Revolution, political parties offered two main alternatives to the Ukrainian electorate. The main opposition parties, who would later become the key proponents of the Orange Revolution, aimed at disempowering the incumbent political elites in favor of more liberal policies and policies aiming at

Ukrainian integration in transatlantic structures. In contrast, the incumbent parties proposed more conservative policies and privileged relations with Russia.

The Orange Revolution was a series of mass protests in Ukraine in response to allegations of electoral fraud in the 2004 presidential elections. The protests were fueled by a number of alleged cases of voter intimidation and the perception of massive corruption in Ukraine. Two key figures led the protests, Viktor Yushchenko and Yulia Tymoshenko. They represented the alternative to the incumbent regime of Leonid Kuchma and Viktor Yanukovich.

Nationalist sentiments during the Orange Revolution were ignited by alleged Russian and Western involvement in the events. Russian president Vladimir Putin did not conceal his political support to Viktor Yanukovich, while a number of western agencies provided material and logistical support to the revolutionary movement. These sentiments peaked when rumors that the Russian secret service was involved in the poisoning of Viktor Yushchenko prior to the revolution spread among protesters.

The parties that orchestrated the Orange Revolution had several objectives that had some ethnic and/or nationalistic content and were generally considered to be ethnicity-wise pro-Ukrainian. Some of their most important political objectives were intensified economic and political relations with the West, including EU and NATO membership, elimination of Ukrainian economic and political dependence on Russia, and disempowerment of the largely pro-Russian oligarch structures. For example, Mr. Yushchenko often criticized the fact that the Russian Federation was involved way too much in the electoral campaign and appreciated the help of the West in counterbalancing Russia's involvement. In contrast, Mr. Yanukovich regularly appealed to historical ties with Russia and extensively addressed the language issue, pledging to promote the Russian language to a second official state language. In addition, he supported the



discussion on the issue of the so-called South-Eastern Ukrainian Autonomous Republic in predominantly Russian areas.<sup>6</sup>

### **3. Data and Variables**

The Ukrainian Longitudinal Monitoring Survey (ULMS) is a nationally representative micro-dataset and the primary source of information for this study.<sup>7</sup> It started in 2003 covering 8,621 individuals from 4,056 households. Besides a number of standard demographic variables at the individual and household level, it also contains information on individual voting preferences. We use the 2003 data and the second wave carried out in 2004.

We study ethnic groups as identified by self-reported nationality<sup>8</sup> and primary domestic language in the 2003 wave of the ULMS. Respondents were asked to indicate their nationality from the list including Ukrainian, Russian, Byelorussian, Jewish, or other nationality and their first domestic language from the list including Ukrainian, Russian, mixed Ukrainian and Russian, Byelorussian, Jewish, Polish, Hungarian, or other. The mix of Ukrainian and Russian languages is commonly called *Surzhyk* in Ukraine, and we will use this term somewhat vaguely to denote the language of those people that reported mixed Ukrainian and Russian as their primary domestic language.<sup>9</sup>

From the total of 8,621 individual observations for each of the years included in the survey we select those who were older than 18 in the survey year and thus eligible to vote at the time of the survey. Furthermore, we eliminate observations with missing data in key variables, including voting, economic and political preferences, gender, age, marital status, number of children, education and health, labor market status, and settlement size and region. These restrictions leave us with 4,925 observations in the baseline sample. Table 1 summarizes the frequencies of individuals by nationality and

language. From this table it is apparent that the numbers of people who identify themselves as Russian and speak Ukrainian or Surzhyk as their first domestic language are relatively small, totaling 79 observations. Table 1 reveals that ethnic Russians and Ukrainians are represented in our sample fairly proportionally, as compared to their respective shares in the Ukrainian population documented by the 2001 Census.<sup>10</sup>

[Table 1 about here]

In Table 2 we report mean values of various important variables for the four largest ethnic groups in Ukraine, namely preferences for the political change, preferences for the political and economic system, various religious denominations, age and educational attainment. Individual voting preferences in 2003 and 2004 are elicited in the ULMS by the question what party would the respondent vote for, if the parliamentary elections were held the coming Sunday. To capture the people's voting preferences with regard to the upcoming political polarization, we generated a binary variable "pro-Orange" that takes the value of one if a person would vote for the election blocs of the protagonists of the Orange Revolution and zero otherwise. The voting divide shows up immediately in the first row. While about 54 percent of Ukrainian speakers with Ukrainian nationality prefer pro-Orange parties, less than 11 percent of Russian speakers with Russian nationality do so. Generally, the pattern of voting preferences is consistent with the notion that the "less Russian" the group is, the larger is the share of its members who prefer pro-Orange parties.

[Table 2 about here]

We further have valuable information on the individual preferences towards the political and economic system. Concerning political preferences, respondents were asked what kind of political system the person would like his or her children to live under, with the possible answers ranging from a pre-perestroika Soviet system to a Western-type democracy. Economic preferences were elicited similarly. Respondents had the choice of answers ranging between a pre-perestroika central planning to a free market economy without governmental regulation. To illustrate this divide, we have assigned points to the various answers. On political preferences we gave points from one to four and on economic preferences points from one to six; the scale is ascending with a more pro-Western response. Afterwards, we calculated the average scores for each ethnic group. We observe that while the differences are not as conspicuous as in the case of voting preferences, they are quite considerable. Surzhyk speakers of Ukrainian nationality are the most conservative ethnic group in both economic and political preferences. At the other end of the spectrum lie the Ukrainian speakers of Ukrainian nationality. Russian speakers of Russian nationality are the second most conservative ethnic group, while those Russian speakers that have Ukrainian nationality are notably less conservative.

Turning to religious affiliations and other characteristics, Table 2 shows that for the most part the more “Western” the religion is, the lesser the proportion of people with stronger Russian ethnicity that adhere to it is. For example, as measured by proportions in respective ethnic groups, followers of the Russian Orthodox Church come mostly from the group of Russian speakers who have Russian nationality and to a lesser degree from those Russian speakers who have Ukrainian nationality. Surzhyk speakers are considerably less likely and Ukrainian speakers are the least likely to be followers of the Russian Orthodox Church. Similarly, Catholic and Greek Catholic denominations are virtually confined to Ukrainian speakers with Ukrainian nationality.

While ethnic groups differ in terms of age and education as well, this difference is somewhat less marked. Still, it is interesting that Russian nationals who speak Russian are, on average, the oldest group (almost 51 years old) and educational attainment of Surzhyk speakers is relatively substandard. Finally, as shown in Table 3, ethnic groups are dispersed fairly unevenly across the Ukrainian regions (oblast). In particular, the southern and eastern regions of Ukraine exhibit overrepresentation of people of Russian nationality or Russian language. In contrast, the central, northern, and western regions are mainly populated by people of Ukrainian ethnicity.

[Table 3 about here]

#### **4. Estimation Framework and Results**

Voting preferences are shaped by individual attitudes towards the values that different parties represent as well as individual characteristics such as age, gender, and political and economic preferences that drive these attitudes. Whether ethnicity directly drives differentials in voting preferences or these are mainly driven by other characteristics that vary across ethnic groups, such as political or economic preferences, religious affiliation, or other individual characteristics, is the key issue investigated in this section.

We employ an econometric framework to assess the role of ethnicity, that is, language and nationality, in driving voting preferences. Given the binary choice character of voting preferences in the context of the Orange Revolution, the binary probit model is a natural starting point of such analysis. To isolate the effects of ethnicity on voting preferences from those of other demographic, social, and economic variables, we control for these other variables in the regressions. Given the uneven distribution of ethnicities across Ukraine, particularly important is controlling for regional dummies, since these

may capture social and economic ties to Russia and the West that may be driven by geographic proximity to the respective societies. Namely, we estimate the following model depicting the probability of pro-Orange voting preferences:

$$P(\textit{Orange} = 1) = \Phi(\beta'X) \quad (1)$$

where  $\Phi$  is the standard normal distribution of voting preferences and  $X$  is a vector of variables driving these preferences. The independent variables of particular interest in  $X$  are the two measures of ethnicity, nationality and language, and the two sets of variables covering reform preferences, economic and political. As reference categories we use the Ukrainian language, Ukrainian nationality, and pre-perestroika economic and political systems.

In Table 4 we present the regression results of the probit model. Column 1 is the baseline model, with ethnicity as the main determinant of pro-Orange choice and additional controls for age, gender, and the year 2004. The year dummy captures other general factors happening in that year. Columns 2 to 4 contain the results of augmented estimations as we control for a number of additional individual social, economic, and demographic characteristics that have an impact on the probability to vote pro-Orange. These include political and economic preferences, religion, number of children, marital status, whether a person has self-reported health problems, settlement size dummies (village, urban settlement, small town up to 20,000 inhabitants, medium town with 20-99,000 inhabitants, city with 100-500,000 inhabitants, and large city with more than 500,000 inhabitants), geographic region (oblast), highest attained educational level, employment status (employee, entrepreneur, farmer, family helper), and a range of non-

employment status variables (including unemployed, retiree, student, disabled, and maternity leave).

[Table 4 about here]

Column 1 reveals that both nationality and language have significant negative effects on voting preferences. This finding suggests that the Russian-Ukrainian voting divide is a phenomenon that has a substantial ethnic component. In particular, the coefficient of Russian nationality is significantly negative, meaning that people of Russian nationality are less likely to vote pro-Orange than the benchmark group of Ukrainian speakers with Ukrainian nationality. The coefficients of Russian and Surzhyk language are also significantly negative, verifying the ethnic divide. But are these findings sufficiently stable if more control variables are included into the model?

The rest of the columns in Table 4 verify that the findings are fairly stable. The negative impact of Russian nationality on the likelihood to vote pro-Orange remains about the same size. The negative effect of speaking the Russian language is somewhat decreasing in absolute value with the inclusion of demographic and labor market variables in column 3 and regional variables in column 4, but remains highly significant. While the coefficient of Surzhyk language is still negative in column 3, as we control for regional and settlement size dummies this variable loses significance, indicating that the correlation between Surzhyk language and voting preferences is explained by the regional distribution of linguistic groups. These findings imply that it is being of Russian nationality or speaking Russian that negatively affects pro-Orange voting relative to Ukrainian speakers of Ukrainian nationality.

Further, Table 4 explores the contribution of revealed preferences concerning the political and economic systems to the pro-Orange voting behavior. We have covered the indicators of these preferences by two sets of dummy variables: (i) for the options for the political system preferences we have: reformed Soviet system, current system, Western-type democracy, and other systems, with the pre-perestroika Soviet system as the reference case, and (ii) for the economic system preferences, we have the options of reformed centrally planned system, current system, strongly regulated market system, weakly regulated market system, free market economy, and other systems, with the pre-perestroika centrally-planned economy as the reference case. Our estimates confirm that more liberal and pro-Western political and economic preferences imply a higher likelihood that an individual votes pro-Orange. While the effects of political and economic preferences are partly explained by economic, social, and settlement and regional control variables, (see columns 3 and 4), the fairly stable and highly significant parameter estimates across the estimated models confirm the strong role of the economic and political preferences on voting preferences.

Hence, the pro-Orange voting preferences are significantly explained by both ethnicity and preferences for particular political and economic systems. What relative roles do both alternatives exhibit on the voting preferences? To answer this question, we treat the estimates in column 4 of Table 4 as the reference case with a Pseudo- $R^2$  of 0.347. A reduced model excluding the ethnicity variables lead to a Pseudo- $R^2$  of 0.341 and a likelihood-ratio test-statistic of 41.48 with 3 degrees of freedom. A reduced model excluding the variables measuring the preferences concerning the political and economic system lead to a Pseudo- $R^2$  of 0.306 and a likelihood-ratio test-statistic of 266.30 with 10 degrees of freedom. From these results we confirm that both ethnicity and systems

preferences are important, although the latter are somewhat more relevant than the former.

To understand the magnitude of the estimated ethnicity effects, we compute the marginal effects of changing Russian nationality and Russian language dummy variables from 0 to 1 on the probability of being pro-Orange. Taking the structural estimates from column 4, it turns out that speaking the Russian language decreases the likelihood of voting pro-Orange by 9.5 percentage points, as compared to being Ukrainian speaker; being of Russian nationality decreases this likelihood by 9.9 percentage points as compared to being of Ukrainian nationality.

As concerns the control variables, we observe that age and gender do not have a significant independent effect on voting preferences. The effects of age vanish with the inclusion of demographic and labor market controls. It is interesting that the gender effect becomes significant with inclusion of political and economic preferences but loses its explanatory power as we control for demographic and labor market variables. Concerning the other control variables, several distinct patterns arise (coefficients not reported). Compared to the benchmark Ukrainian Orthodox Church (Kyiv Patriarchy) denomination, people of the Ukrainian Orthodox Church (Moscow Patriarchy) and Orthodox Church (with no partition) are significantly less likely to vote pro-Orange. On the other hand, people of the Greek Catholic denomination significantly more likely prefer pro-Orange parties than the benchmark group. These findings signify yet another component of ethnicity in voting preferences.

Given that we control for economic and political preferences, marital status, number of children, education, and employment status do not seem to play any significant role in shaping voting preferences.<sup>11</sup> While employment status is for the most part insignificant, disabled people (and marginally also those that report general health



problems) show significant preferences against the Orange parties, perhaps because of their limited capacity to respond to the potential challenges inherent in the regime changes purported by the pro-Orange parties. Further, people in the military service are somewhat less likely to vote pro-Orange. Another distinct pattern is that people who live in the western regions of Ukraine are significantly more likely to vote pro-Orange. Finally, inhabitants of small and medium towns are significantly less likely to vote pro-Orange than villagers and inhabitants of cities.

### **5. Decomposition of the Voting Divide**

The technique of including ethnic dummy variables in a binary choice model is a very useful tool to measure the effects of ethnicity on voting preferences, but it assumes that different ethnic groups behave in a similar way, except for a shift factor driven by ethnicity. This assumption may be somewhat too restrictive, since for different ethnic groups different variables may have different effects. The most conspicuous is the example of the effects of region where the respondent lives. In particular, respondents of Russian ethnicity living in regions close to the Russian border may have, given the relatively intense economic and social ties to Russia, good incentives to vote against pro-Orange parties in fear that these parties would restrain these ties. However, people with Ukrainian ethnicity in such regions may well respond quite differently: they might be concerned about the intense relations with Russia that often favor ethnic Russians and therefore vote for pro-Orange parties, hoping that they will curtail these, from their perspective unfavorable, relations with Russia. In particular, ethnic Ukrainians may, in contrast to ethnic Russians, perceive such ties to Russia as a threat to their social and economic interests.

For these reasons we consider a method that decomposes ethnic differentials in voting preferences as developed by Fairlie (1999, 2003, and 2005). This method computes the difference in the probability  $P(Orange = 1)$  between different ethnic groups and quantifies the contribution of group differences in explanatory variables to the outcome differential. In particular, we apply the decomposition technique on the model specification corresponding to column 4 in Table 4; obviously, omitting the nationality and language indicators.

The results are presented in Table 5. We observe that significant parts of the differentials in voting preferences between ethnic groups are explained by observable characteristics. Consistent with the results presented above, the “less Russian” the ethnic group is the higher is its propensity to indicate pro-Orange voting preferences. To illustrate, at one extreme, we can ascribe less than 1 percentage points of the voting differential between Surzhyk and Ukrainian speakers of Ukrainian nationality to their belonging to different linguistic groups. In contrast, more than 17 percentage points can be attributed to ethnic differences between Ukrainian speakers of Ukrainian nationality and Russian speakers of Russian nationality.

[Table 5 about here]

## **6. Conclusion**

While the Russian-Ukrainian political cleavage gained worldwide attention during the Orange Revolution, the role of the different dimensions of ethnicity on this divide has not been properly understood. Using rich information on voting preferences before the Orange Revolution this paper provides an understanding of the 2005 events. Reform preferences reported among individuals in 2003 and 2004 are shown to have had a strong

impact on the willingness to vote for the parties of the Orange Revolution. Undoubtedly, we also find that ethnic Russians were less likely to vote pro-Orange than ethnic Ukrainians just prior to the Orange Revolution and this is independent of their preferences for a western type market economy and a western type democracy.

What is a potential explanation for the independent effects of ethnicity? As we have established elsewhere (see Constant, Kahanec and Zimmermann, 2006), there was a rising ethnic economic divide *in favor* of ethnic Russians during Ukraine's transformation in the years before the Orange Revolution that suggested a rising ethnic political divide. Ethnic Russians had probably the desire to preserve the incumbent elite in power in hopes to sustain the benefits and the profitable positions they enjoyed during the Soviet era or later. Ethnic Ukrainians had strong economic incentives for a political change. In fact, in our analysis here in this paper, we find that being of Russian nationality and/or speaking the Russian or Surzhyk language had a negative effect on voting for the pro-Orange parties in comparison to the Ukrainian ethnicity, which is in line with our hypothesis.

These findings confirm that language and nationality are distinct dimensions of ethnicity that exercised a catalytic role on the voting preferences and election outcomes in Ukraine during the Orange Revolution. Their strength and relevance should not be underestimated. The Russian-Ukrainian earnings divide has a companion: the Russian-Ukrainian political divide.

## Notes

1. The Orange Revolution was a defining moment in Ukraine's recent history. It indicates the period from the late November 2004 to January 2005, where a series of protests and political events were in the daily forefront in Ukraine. The protests begun right after the 2004 presidential election that was admittedly the result of direct electoral fraud. This period demonstrated an amazing active participation of Ukrainians in politics. The Orange Revolution came to a peaceful finale after the "fair and free" second run-off election.
2. Also known as Kievan Ruthenia, it was an important state with Kiev as its capital and lasted from about 880 until the middle of the 12<sup>th</sup> century.
3. In two states, Ukrainian People's Republic and West Ukrainian People's Republic.
4. Some researchers have even found that the Ukrainian electorate was on a de-polarizing path and close to national integration (Hesli, Reisinger, and Miller (1998)).
5. Constant, Kahanec, and Zimmermann (2006) find that these two factors of ethnicity play a crucial role on the earnings divide between ethnic Russians and Ukrainians.
6. See Salnykova (2006).
7. For a more detailed description of the ULMS see Lehmann, Pignatti, and Wadsworth (2006), Gorodnichenko and Sabirianova (2005), and Ganguli and Terrell (2006).
8. Note that nationality (*natsionalnost*) in the Ukrainian context reflects social, ethnic, and/or cultural identity rather than citizenship. We use the term nationality accordingly.
9. Out of Ukrainians who speak Ukrainian as their first language about 12 percent speak Russian as their second domestic language, 86 percent speak Russian, and *all* understand Russian. Out of Russians who speak Russian as their first language about 11 percent speak Ukrainian as their second domestic language, 46 percent speak Ukrainian, and 69 percent understand Ukrainian.

10. According to the 2001 Ukrainian Census, of Ukrainians who report either Ukrainian or Russian nationality (95.1 percent of the total population) 81.8 percent report Ukrainian and 18.2 percent Russian nationality. In the same Census, 67.5 percent of the country population named Ukrainian as their native language (including Surzhyk speakers), while 29.6 percent reported Russian language.

11. Further estimations for a restricted sample of employed respondents (not reported here) show that inclusion of occupation and industry controls does not affect our results on the role of ethnicity for voting preferences.

## References

- Arel, D. (2005, February). *The Orange Revolution: Analysis and Implications of the 2004 Presidential Elections in Ukraine*. (Paper presented at the Third Annual Stasiuk-Cambridge Lecture on Contemporary Ukraine, Cambridge University, Cambridge, UK).
- Brainerd, E. (1998). Winners and Losers in Russia's Economic Transition. *American Economic Review*, 88, 1094-1116.
- Constant, A., Kahanec, M. & Zimmermann, K. F. (2006). *The Russian-Ukrainian Earnings Divide*. IZA Discussion Paper 2330, IZA: Bonn.
- Fairlie, R. W. (1999). The Absence of the African-American Owned Business: An Analysis of the Dynamics of Self-Employment. *Journal of Labor Economics*, 17, 80-108.
- Fairlie, R. W. (2003). *An Extension of the Blinder-Oaxaca Decomposition Technique to Logit and Probit Models*. Economic Growth Center Discussion Paper 873, Yale University: New Haven.
- Fairlie, R. W. (2005). An extension of the Blinder-Oaxaca decomposition technique to logit and probit models. *Journal of Economic and Social Measurement*, 30, 305-316.
- Fidrmuc, J. (2000). Political support for Reforms: Economics of Voting in Transition. *European Economic Review*, 44, 1491-1513.
- Ganguli, I. & Terrell, K. (2006). Institutions, Markets and Men's and Women's Wage Inequality: Evidence from Ukraine. *Journal of Comparative Economics*, 34, 200-227.
- Gorodnichenko, Y. & Sabirianova P. K. (2005). Returns to Schooling in Russia and Ukraine: A Semiparametric Approach to Cross-Country Comparative Analysis. *Journal of Comparative Economics*, 33, 324-350.

- Hesli, V., Reisinger, W. & Miller, A. (1998). Political Party Developments in Divided Societies: The Case of Ukraine. *Electoral Studies*, 17, 235-256.
- Kapstein, E. & Milanovic, B. (2000). *Dividing the Spoils: Pensions, Privatization, and Reform in Russia's Transition*. World Bank Policy Research Working Paper 2292, World Bank: Washington, DC.
- Khmelko, V. (2006). *Ethno-Cultural Aspects of Electoral Regionalism in Ukraine during the Presidential Elections in 2004*. Unpublished working paper, National University of Kyiv-Mohyla Academy: Kyiv.
- Lehmann, H., Pignatti, N. & Wadsworth, J. (2006). The Incidence and Cost of Job Loss in the Ukrainian Labor Market. *Journal of Comparative Economics*, 34, 248-271.
- Lipset, S. M. (1963). *Political Man: the Social Bases of Politics*. (New York: Anchor Books).
- Oksamytna, S. & Khmelko, V. (2006). *Regional Divisions of Ukraine in the 2004 Presidential Elections: Gender, Age and Educational Differences of Electoral Preferences*. Unpublished working paper, National University of Kyiv-Mohyla Academy: Kyiv.
- Salnykova, A. (2006). Nationalism in Ukraine's Elections of 2004. Retrieved December 1, 2006, from Center for European, Russian and Eurasian Studies, University of Toronto, Web site:  
<http://www.utoronto.ca/jacyk/gsc2006/files/salnykova,%20paper.pdf>.

Table 1

Proportions of individuals by nationality and language

Nationality	Language			Total
	Ukrainian	Surzhyk	Russian	
Ukrainian	51.90%	12.02%	19.35%	83.27%
Russian	0.69%	0.91%	15.13%	16.73%
Total	52.59%	12.93%	34.48%	100%

*Note: Own calculation from ULMS, based on 4,925 observations.*



Table 2

Selected descriptive statistics by nationality and language

<i>Characteristics:</i>	Ukrainian Nationality			Russian Nationality	Total
	Ukrainian Language	Surzhyk Language	Russian Language	Russian Language	
Share pro-Orange	0.543	0.257	0.211	0.106	0.375
Preferred economic system	2.940	2.015	2.641	2.347	2.677
Preferred political system	2.487	1.695	2.136	1.875	2.226
Ukrainian Orthodox Kiev Patriarchy	0.396	0.422	0.296	0.153	0.342
Ukrainian Orthodox Moscow Patriarchy	0.106	0.096	0.106	0.156	0.112
Russian Orthodox	0.007	0.032	0.064	0.141	0.042
Orthodox	0.101	0.147	0.139	0.164	0.124
Catholic	0.128	0.002	0.003	0.003	0.069
Greek Catholic	0.109	0.003	0.003	0.004	0.059
Protestant	0.003	0.000	0.003	0.001	0.002
Age	46.54	50.22	46.84	50.86	47.71
Completed higher education	0.170	0.101	0.213	0.216	0.177
Number of observations	2,556	592	953	745	4,846

*Note:* Observations with the response “Other” were excluded from the calculations of the scores for preferred economic and political systems.

Table 3

Geographical distribution by nationality and language

	Ukrainian Nationality			Russian Nationality
	Ukrainian Language	Surzhyk Language	Russian Language	Russian Language
<i>Macroregions:</i>				
Center	54.12%	19.50%	16.59%	9.80%
North	63.26%	24.44%	8.15%	4.16%
East	9.49%	12.43%	40.70%	37.38%
Kyiv City	34.92%	1.59%	47.22%	16.27%
South	36.31%	15.67%	24.74%	23.28%
West	95.84%	0.64%	1.44%	2.08%

*Note: Own calculations from ULMS, based on 4,846 observations.*

Table 4  
Probabilities to Vote pro-Orange

<i>Variables</i>	(1)	(2)	(3)	(4)
<i>Ethnicity</i>				
Russian nationality	-0.351** (0.070)	-0.330** (0.075)	-0.309** (0.075)	-0.278** (0.080)
Surzhyk language	-0.732** (0.061)	-0.465** (0.065)	-0.374** (0.066)	-0.020 (0.077)
Russian language	-0.958** (0.051)	-0.939** (0.055)	-0.796** (0.059)	-0.281** (0.077)
Age	-0.017** (0.001)	-0.004** (0.001)	-0.002 (0.003)	-0.002 (0.003)
Female	0.034 (0.039)	0.140** (0.042)	0.085 (0.047)	0.091 (0.049)
Year 2004	0.073 (0.039)	0.027 (0.042)	0.049 (0.053)	0.074 (0.056)
<i>Political preferences</i>				
Reformed Soviet		0.368** (0.073)	0.334** (0.074)	0.307** (0.078)
Current system		0.776** (0.110)	0.719** (0.112)	0.708** (0.120)
Western-type democracy		1.006** (0.080)	0.894** (0.083)	0.706** (0.088)
Other		0.627** (0.194)	0.455* (0.198)	0.311 (0.223)
<i>Economic preferences</i>				
Reformed centrally planned		0.190* (0.076)	0.178* (0.076)	0.102 (0.079)
Current system		0.322* (0.137)	0.297* (0.142)	0.150 (0.150)
Strongly regulated market		0.366** (0.083)	0.336** (0.084)	0.243** (0.090)
Weakly regulated market		0.563** (0.093)	0.496** (0.096)	0.431** (0.101)
Free market economy		0.610** (0.104)	0.535** (0.106)	0.431** (0.113)
Other		0.352 (0.298)	0.418 (0.311)	0.395 (0.347)
<i>Other Controls</i>				
Education level			Yes	Yes
Religion			Yes	Yes

**Table 4**  
**Probabilities to Vote pro-Orange**

<i>Variables</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
Children			Yes	Yes
Marital status			Yes	Yes
Health status			Yes	Yes
Labor market status			Yes	Yes
Settlement size				Yes
Geographical region				Yes
Constant	0.842** (0.071)	-0.535** (0.096)	-0.613** (0.171)	-1.402** (0.260)
Pseudo R-squared	0.142	0.264	0.288	0.347
Log likelihood	-2,795.1	-2,397.6	-2,319.0	-2,125.1
Number of observations	4,925	4,925	4,925	4,925

*Note:* Binary probit model with “1” = pro-Orange and “0” otherwise. The benchmark is a Ukrainian speaking male of Ukrainian nationality preferring a pre-perestroika Soviet-type political and centrally planned economic system. The benchmark year in 2003. Robust standard errors in parentheses.  
 \* significant at 5%; \*\* significant at 1%.

Table 5

Decomposition results on the probability to vote pro-Orange

<i>Nationality</i>		Ukrainian				
<i>Language</i>		Ukrainian	Surzhyk	Russian		
Ukrainian	Surzhyk	Difference	0.286			
		Explained	0.283			
		Unexplained	0.003			
	Russian	Difference	0.332	0.046		
		Explained	0.230	-0.017		
		Unexplained	0.102	0.063		
Russian	Russian	Difference	0.437	0.151	0.105	
		Explained	0.265	0.046	0.069	
		Unexplained	0.172	0.105	0.036	

*Note:* A positive number implies that the column group is more pro-Orange than the respective row group.