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DO UKRAINIANS VOTE WITH THEIR FEET: LOCAL PUBLIC EXPENDITURES AND INTER-REGIONAL MIGRATION[1]

This paper explores whether Ukrainians "vote with their feet" by migrating to the regions with relatively higher regional-level per capita public expenditures on education, healthcare services and social assistance. Using the data on inter-regional residential migration flows in 2002–2013 and controlling for the differences in relative wages and unemployment, the population density, the share of young people and air pollution in a multiple regression model, it tries to test the validity of the Tiebout hypothesis in Ukraine. The results lend some support for this hypothesis when Kyiv City is included in the sample of regions, but not in a smaller sample without the capital city. Brief policy implications regarding fiscal decentralization and promotion of internal migration in Ukraine conclude the paper

Keywords: internal migration, the Tiebout hypothesis.

Introduction

Ukraine has pronounced regional differences in economic and human development, with lagging regions[2] located predominantly in the west and the south. Geographical mobility of labor, which is one of the major market-based mechanisms in reducing inter-regional disparities and adjusting to regionally asymmetric shocks in developed economies, is fairly low and not yet effective as the equilibrating force in Ukraine [12][3].

Ukrainians changing their place of residence within the country are more likely to move to communities located either within the same region (58 % of all registered moves within Ukraine in 2012) or in the neighboring regions (56.6 % of all inter-regional moves, or 23.7 % of all moves within the country in 2012) which often have similar employment and income opportunities as the place of origin. Those who move to non-neighboring regions choose predominantly the capital city of Kyiv whereas the moves between lagging and better off oblasts located in different parts of Ukraine are relatively rare. This implies that decisions of Ukrainian individuals and families to migrate within the country are dictated not only by labor market factors.

This paper looks at the alternative explanation of migration behavior and explores whether Ukrainians «vote with their feet» by migrating to the regions that provide a better bundle of locally provided public goods as suggested by Charles Tiebout [10]. It is expected that if people cannot effectively influence the parameters of government spending undertaken by their local government through direct voting and elected representatives, as happens in Ukraine, they can relocate to another region that offers a more preferred package of public goods and therefore vote with their feet. Given that people do not have equal abilities to relocate and might be bound by job or community ties, those who place the highest value on community qualities such as education, health care services, public transport, safety, etc. will be the first to move out to more attractive places.

As the total and working-age population persistently declines in Ukraine forcing the regions to compete for the labor force, it is increasingly important to understand the effects of local expenditure policy on inter-regional migration of population. The current political debate regarding fiscal decentralization, local government reform and possible federalization of Ukraine, reinforced in 2013 when the country has plunged into political turmoil, emphasizes the need to know whether and how people (voters) respond to the inter-regional differences in local government spending.

Literature review. To the best of our knowledge, there is scant research on the effects of local government spending on relocation of people across regions in fiscally centralized transition economies similar to Ukraine. Most studies of inter-regional migration in transition economies instead tend to emphasize the influence of labor market opportunities, demographic indicators or housing conditions [3; 4; 5; 8]. It is correctly noted in the review of studies on internal migration in developing countries by Robert Lucas that

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[1] This paper is based on the author's background paper "Characteristics and determinants of internal labor mobility in Ukraine" written for the World Bank's report [12]. It is available at http://documents.worldbank.org/curated/en/2012/05/17012928/characteristics-determinants-internal-labor-mobility-ukraine.

[2] Regions refer here to 24 oblasts, Crimean Autonomous Republic and the cities of Kyiv and Sevastopol as administrative units with a special status.

[3] The same situation was observed in other transition economies as well [6; 8].

"...economists have been largely preoccupied with the migration of labor. Movements of families or parts of families to gain access to (better) schooling, health facilities, or other publicly provided services has therefore often been of peripheral concern" [7, p. 786].

First efforts to analyze the impact of regional differences in local public expenditures on internal migration in Ukraine have been made by Korchynsky and Kolodiy [1]. The authors found that the correlation between total local budget expenditures per capita (as a percentage of the national average) and net migration rate is strong and increasing: the coefficient of correlation increased from 0.79 in 2000 to 0.86 in 2006 if local budget expenditures in the same year are used, and from 0.38 in 2000 to 0.84 in 2006 if local budget expenditures are lagged one year. They conclude that despite a very limited local government fiscal autonomy in Ukraine, imperfect information and violation of other assumptions on which the Tiebout hypothesis is based, the correlation analysis presented in the paper supports the validity of hypothesis in Ukraine. However, this simple correlation analysis does not take into account other important factors of inter-regional migration. Besides, it looks on total local public expenditures some part of which is not directly related to the level and quality of public goods provided to the households and so is not able to influence the migration behavior of population.

This paper aims at analyzing the determinants of inter-regional migration in Ukraine in a multiple regression model and clarifying the role of local per capita expenditures on education, healthcare services and social assistance in attracting or distracting migrants. By doing this it fills gap in the existing studies on the factors of residential migration in Ukraine and adds to the current political debate concerning fiscal decentralization.

Analysis of the relationship between local public expenditures and inter-regional migration in Ukraine

Data and definitions. According to the United Nations manual "a migrant is a person who has changed his usual place of residence from one migration-defining area to another (or who moved some specified minimum distance) at least once during the migration interval... Every migrant is an out-migrant with respect to the area of departure and an in-migrant with respect to the area of arrival. He is to be distinguished from an «emigrant» who is an international migrant, departing to another country by crossing an international boundary" [11, p. 2–3].

The primary source of data on migration flows in Ukraine is administrative data on in-migration (inflows, arrivals), out-migration (outflows, departures) and net migration (inflows less outflows) based on the *propiska*-type civil registration of population in their place of permanent residence during a given period. In our analysis of inter-regional migration we use administrative data on the registered residential moves of population between 26 regions of Ukraine leaving aside Sevastopol city[4]. The used data are annual and cover the period from 2002 to 2013 for which demographic and survey-based indicators (e.g. unemployment rate) have been calculated with taking into account the structure of population according to the last population Census conducted in December 2001. The data refer to gross flows to/ from a region as opposed to bilateral flows between a pair of regions which will be analyzed separately.

It should be noted that official migration statistics underestimates the true magnitude of population residential flows within Ukraine because only some proportion of individuals/ families changing their place of residence is properly registered by the State Migration Service of Ukraine due to the need to provide the documents that prove the right to be registered in a particular residence and few incentives to comply strictly with the rules of registration. This, however, is a typical problem of most migration studies in CEE countries, as population registers are the only reliable source of data on migration in these countries [2; 3; 4; 5].

Amongst the most frequently used indicators in the analysis of internal population migration based on administrative records are the following [11, p. 41–42]:

$$In-migration \quad rate_{i,t} = \frac{Inflows_{i,t}}{Population_{i,t}} * 100\%$$

$$Out-migration \quad rate_{i,t} = \frac{Outflows_{i,t}}{Population_{i,t}} * 100\% \qquad (1)$$

$$Net \quad migration \quad rate_{i,t} = \frac{Inflows_{i,t} - Outflows_{i,t}}{Population_{i,t}} * 100\%$$

where $Inflows_{i,t}$ ($Outflows_{i,t}$) stands for in-migration to (out-migration from) a region i during a year t, and $Population_{i,t}$ is the average annual de facto population of the respective region i in a year t. In- and out-migration rates show the region's relative attraction and distraction respectively, whereas the net migration rate is used to identify the "winners" and "losers" in the context of inter-regional migration.

Empirical model. Taking into account the previous empirical work on modeling regional migration in transition and developed economies [4; 6; 9], the preferred equation for analyzing the factors of inter-regional migration in Ukraine is:

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[4] Although population registers count migrations (events) rather than migrants (transitions), we use these terms interchangeably assuming that the share of multiple and return migration is negligible.

$$m_{i,t} = \beta_0 + \beta_1 \frac{w_{i,t-1}}{w_{t-1}} + \beta_2 \frac{u_{i,t-1}}{u_{t-1}} + \beta_3 \frac{edu_{i,t-1}}{edu_{t-1}} +$$

$$+\beta_4 \frac{health_{i,t-1}}{health_{t-1}} + \beta_5 \frac{assist_{i,t-1}}{assist_{t-1}} + \alpha' X_{i,t-1} + \delta_t + \xi_{i,t},$$

(2)

where

– $m_{i,t}$ is one of the three region-level migration rates (in-migration, out-migration and net migration) calculated according to formulas (1) in a year t;

– $\frac{w_{i,t-1}}{w_{t-1}}$ is the wage ratio, i.e. the average gross monthly wage in region i divided by the average wage in 26 regions, in the previous year. It is used as the ratio to eliminate the effects of inflation and to take control for relative wages. It is expected that relatively higher wages attract more in-migrants;

– $\frac{u_{i,t-1}}{u_{t-1}}$ is the ratio of the unemployment rate in region i to the average unemployment rate in 26 regions in the previous year. It expected that the higher this ratio in a region, the more (less) intensive flows of out-migrants (in-migrants) relative to the region's population;

– $\frac{edu_{i,t-1}}{edu_{t-1}}, \frac{health_{i,t-1}}{health_{t-1}}, \frac{assist_{i,t-1}}{assist_{t-1}}$ are the main variables of our interest included in the model to test the Tiebout hypothesis. These are the ratios of per capita public spending in region i on education, healthcare services and social assistance, respectively, divided by the average spending in 26 regions. The relatively higher expenditures are expected to attract more in-migrants;

– $X_{i,t-1}$ is a vector of other region-specific characteristics which are expected to influence in-migration or out-migration. Following Jan Fidrmuc [4], we use the log of the population density in the beginning of a given year to account for the degree of urbanization that is expected to be positively related to in-migration and net migration. We also use the share of youth in the region's de jure population in the beginning of a given year to control for the effect of differences in demographic composition of population on migration in view of the fact that young people have higher propensity to migrate for education, employment, and family reasons. Finally, emissions of air pollutants from stationary and mobile sources of pollution (in kg per 1000 persons) are used as a measure of social disamenities which are likely to distract people from living in a region[5];

– δ_t refers to year dummies to control for changes in the macroeconomic and institutional environment;

– $\xi_{i,t}$ refers to compound disturbance term.

All independent variables are lagged by one year or taken in the beginning of a given year to ensure that they are predetermined and sequentially exogenous. All data except for local public expenditures are taken from statistical yearbooks and on-line statistics provided by the State Statistic Service of Ukraine. Information on local public expenditures in 26 regions is taken from the annual statistical publication of the Ministry of Finance of Ukraine «Budget of Ukraine».

Descriptive statistics for the used variables is provided in Table 1. It shows that the average migration rates changed a little over time and variation across the regions is quite stable. Kyiv city has been the leading region in terms of positive net migration relative to its population in all years except for 2011 and 2013 when Kyiv oblast surpassed the capital city due to mass outflows to the suburbs of people that kept working in Kyiv city while living outside it. There is a positive and significant correlation between in-migration and out-migration rates, with correlation coefficients varying between 0.65 in 2005 to 0.94 in 2010. This implies that high in-migration rates are observed in regions with high out-migration rates. Hence, there is no evidence for one-way relocation of Ukrainians from one group of regions to another, and there are many factors that could explain their migration behavior across the regions.

Average local per capita expenditures on education, healthcare services and social assistance increased significantly during 2001–2012, predominantly due to inflation (table 1). But variation in expenditures across the regions (measured by the coefficient of variation) decreased over the same period, particularly in expenditures on healthcare services. Kyiv City surpassed the other regions in terms of per capital expenditures on all three items in 2001–2004 but then it often yielded the palm to the other regions, most often to Volyn and Rivne oblasts. It is noteworthy that Kyiv City had one of the lowest per capita expenditures on social assistance in 2012 that can be attributed to much lower share of poor households in the registered population[6].

Correlation between migration rates and lagged values of per capita public expenditures at the regional level was mainly positive, statistically significant and rather strong in 2002–2009.

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[5] In an earlier version of this study for 2002–2010 we also used the crime rate as a possible measure of social disamenity. A break in statistical time series in 2012 because of the important amendments to the Criminal Code of Ukraine makes impossible the use of the crime rate for the analysis in 2012 and thereafter.

[6] According to the Household Budget Survey carried out by the State Statistics Service of Ukraine, the share of households with total per capita income less than statutory subsistence minimum in 2012 was 2.4 % in Kyiv City as opposed to 18.1 % in Ternopil oblast.

Table 1. **Descriptive statistics**

Variable	Indicator	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
In-migration rate, %	mean	0.55	0.57	0.60	0.58	0.58	0.58	0.56	0.52	0.56	0.57	0.59	0.56
	SD	0.25	0.32	0.36	0.35	0.33	0.31	0.31	0.27	0.27	0.30	0.34	0.33
Out-migration rate, %	mean	0.58	0.61	0.66	0.64	0.63	0.62	0.60	0.55	0.58	0.58	0.61	0.59
	SD	0.17	0.20	0.22	0.21	0.21	0.21	0.21	0.20	0.21	0.23	0.23	0.21
Net migration rate, %	mean	-0.03	-0.04	-0.06	-0.06	-0.05	-0.04	-0.04	-0.02	-0.02	-0.01	-0.03	-0.03
	SD	0.18	0.21	0.27	0.26	0.22	0.21	0.20	0.13	0.10	0.13	0.17	0.18
Population density, persons per 1 sq.km	mean	200.08	199.88	200.08	200.84	201.55	202.28	202.90	203.74	198.68	199.04	199.52	200.77
	SD	625.78	628.41	632.78	639.58	646.25	652.43	657.94	664.21	640.03	643.37	646.94	654.18
Share of youth (15-24 years), %	mean	15.18	15.45	15.64	15.70	15.65	15.57	15.37	14.90	14.37	13.85	13.19	12.61
	SD	1.17	1.11	1.07	1.04	0.97	0.90	0.83	0.80	0.78	0.82	0.88	0.98
Air pollution, kg per 1000 persons*	mean	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.11	0.12	0.12	0.12
	SD	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.09	0.08	0.08	0.09	0.09
Nominal wage, UAH*	mean	281.2	340.6	419.2	532.2	727.3	940.8	1210.8	1620.2	1721.0	2020.5	2353.5	2705.1
	SD	78.0	88.2	99.5	123.3	159.5	201.1	268.5	348.5	348.1	367.3	453.6	504.9
Unemployment rate, %*	mean	11.7	10.3	9.8	9.5	7.8	7.4	7.0	6.9	9.3	8.5	8.3	7.9
	SD	3.0	2.7	2.5	2.0	1.6	1.6	1.6	1.5	1.6	1.5	1.4	1.3
Per capita expenditures on education, UAH*	mean	121.3	148.9	191.5	231.7	355.0	458.9	617.4	840.8	924.5	1107.6	1286.0	1556.3
	SD	16.2	16.2	16.9	22.0	36.7	47.6	66.3	88.4	93.3	117.4	121.0	146.9
Per capita expenditures on health care, UAH*	mean	101.7	120.0	150.9	177.7	244.9	323.1	419.9	556.5	621.4	772.7	828.1	1007.1
	SD	20.6	18.9	20.2	26.9	30.2	35.2	45.8	33.8	38.0	49.5	73.5	97.7
Per capita expenditures on social assistance, UAH*	mean	86.6	100.0	118.4	134.4	163.3	223.4	391.9	483.1	580.9	764.2	912.5	1099.7
	SD	19.9	16.8	22.3	20.6	19.9	30.8	40.8	49.9	61.6	97.3	117.5	145.5

Source: State Statistics Service of Ukraine, Ministry of Finance of Ukraine, author's calculations.
Note: * Values of variables starting from air pollution refer to the previous year. Means and standard deviations are calculated for 26 regions excluding Sevastopol city.
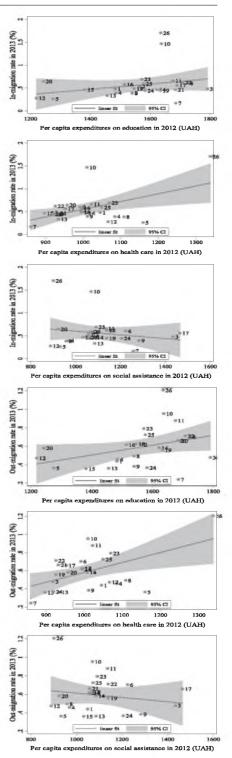

Fig. 1. In- and out-migration rates in 2013 vs. per capita public expenditures in 2012

Source: State Statistics Service of Ukraine, Ministry of Finance of Ukraine, author's calculations.

Note: 1 = Crimean AR, 26 = Kyiv City, and the rest are the codes for oblasts: 2 = Vinnytsia, 3 = Volyn, 4 = Dnipropetrovsk, 5 = Donetsk, 6 = Zhytomyr, 7 = Zakarpattia, 8 = Zaporizzhia, 9 = Ivano-Frankivsk, 10 = Kyiv, 11 = Kirovohrad, 12 = Luhansk, 13 = Lviv, 14 = Mykolaiv, 15 = Odesa, 16 = Poltava, 17 = Rivne, 18 = Sumy, 19 = Ternopil, 20 = Kharkiv, 21 = Kherson, 22 = Khmelnytsky, 23 = Cherkasy, 24 = Chernivtsi, 25 = Chernihiv.

Starting from 2010 correlation between in- / out-migraton rates and expenditures on social assistance became even negative and insignificant, whereas correlation between migration and expenditures on education often lost significance. Figure 1 shows scatterplots of inter-regional migration rates in 2013 versus local per capita public expenditures in 2012 along with the linear fit line and a 95 % confidence interval (gray zone). It reveals positive albeit insignificant correlation between migration rates and expenditures on education; positive and significant but weak correlation with expenditures on healthcare services (the coefficient of correlation is about 0.50 for both migration rates); and negative insignificant correlation with expenditure on social expenditures.

This suggests that there is a weak support for the Tibeout hypothesis in Ukraine when we look at in-migration rates. However, out-migration results, with correlation coefficients of the same sign and significance, are somewhat puzzling because it is expected that higher public expenditures that attract more incoming migrants to the region should also help retain current population and lead to lower out-migration rate.

Determinants of inter-regional migration: analysis of gross flows in 2002–2013. In order to test the Tibeout hypothesis with taking into account the other potential factors of inter-regional migration we estimated a multiple regression model (2). In view of the fact that Kyiv City (code 26) is an outlier as shown in figure 1, we used two samples of regions: (1) a larger sample of regions consisting of 26 regions except for Sevastopol City; and (2) a smaller sample that also excludes the city of Kyiv. Estimation results for both samples and three migration rates as dependent variables are reported in table 2. All specification presented here include lagged wage ratio and unemployment rates, the log of the population density, demographic and social characteristics, year dummies, and regional random effects. Taking into account the outcomes of the Breusch and Pagan Lagrangian multiplier test and of the Hausman specification test, the regressions are estimated using a random effects model.

The results for a larger sample of regions (specifications 1–3 in table 2) suggest that after controlling for the differences across the regions in relative wages and unemployment, the population density,

Table 2. **Regression results: determinants of inter-regional migration rates in 2002–2013**

Independent variable	26 regions			25 regions (without Kyiv City)		
	(1) In-migration rate	(2) Out-migration rate	(3) Net migration rate	(4) In-migration rate	(5) Out-migration rate	(6) Net migration rate
Nominal wage ratio	0.313*** (0.104)	0.171*** (0.060)	0.142 (0.095)	0.406*** (0.091)	0.069 (0.057)	0.286*** (0.091)
Unemployment rate ratio	-0.042 (0.033)	0.034* (0.018)	-0.086** (0.036)	-0.044* (0.027)	0.025 (0.016)	-0.077** (0.031)
Density (log)	0.105** (0.042)	0.078** (0.033)	0.055** (0.025)	-0.338*** (0.081)	-0.214*** (0.062)	-0.007 (0.048)
Share of youth (15-24 years)	0.039*** (0.011)	-0.036*** (0.006)	0.072*** (0.011)	0.021** (0.010)	-0.017*** (0.006)	0.041*** (0.011)
Ratio of local per capita expenditures on education	-0.389*** (0.122)	0.098 (0.070)	-0.427*** (0.121)	-0.127 (0.106)	0.093 (0.066)	-0.152 (0.111)
Ratio of local per capita expenditures on health care	0.343*** (0.094)	-0.192*** (0.053)	0.510*** (0.097)	-0.041 (0.098)	0.050 (0.060)	-0.080 (0.110)
Ratio of local per capita expenditures on social assistance	-0.029 (0.039)	-0.154*** (0.022)	0.125*** (0.043)	-0.029 (0.036)	-0.070*** (0.022)	0.036 (0.041)
Air pollution	-0.483** (0.244)	-0.618*** (0.150)	-0.206 (0.188)	0.164 (0.217)	-0.413*** (0.139)	0.066 (0.202)
Constant	-0.651*** (0.220)	0.890*** (0.162)	-1.621*** (0.160)	1.474*** (0.368)	1.620*** (0.276)	-0.659*** (0.242)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Random/ Fixed effects	Random	Random	Random	Random	Random	Random
N	312	312	312	300	300	300
R² within	0.2466	0.6221	0.3417	0.2348	0.5986	0.2684
R² between	0.4026	0.2174	0.7962	0.1872	0.5333	0.2866
R² overall	0.3961	0.2345	0.7164	0.1899	0.5353	0.2797

Note: Dependent variables are the gross in-migration/ out-migration rates and net migration rate as a percentage of the region's average annual population defined by formulas (1). All independent variables except for the population density and the share of youth (which refer to the beginning of a given year) are lagged by one year. Both samples exclude Sevastopol city. Standard errors are reported in parentheses. *, **, *** denote significance levels at the 10 %, 5 %, and 1 % level, respectively.

the share of young people and air pollution, the supply of local public goods roughly measured by per capita spending for education, healthcare services and social assistance by local governments affects inter-regional migration: higher spending on health and social assistance attracts more in-migrants on a gross and net basis (see specifications 1 and 3), but higher spending for education discourages in-migration. The latter finding is quite unexpected as families with dependent children which place high value on the quality of education below the tertiary level are likely candidates for Tiebout-type migration. This result may be interpreted in a way that married couples with small children are much less likely to change their place of residence from one region to another than single people because of higher direct and indirect migration costs. Alternative explanation is that due to unregistered residential migration, everyday commuting of many pupils from the suburbs to schools located in the capital city and differences in the age structure of population, expenditures on education per one registered person in the region may differ a lot from the actual expenditures per pupil. Besides, the ability of local governments in Ukraine to influence the amount and structure of spending on education is quite limited due to existing norms set by the Ministry of Education and Science governing staffing arrangements, teaching hours, non-teaching staffing ratios, class sizes, etc. [13]. As a consequence, relatively higher local public spending on education is not always associated with a better quality of services in schools but can be a sign of higher inefficiency that discourages in-migration.

However, the effects of local expenditures become insignificant in a smaller sample which excludes Kyiv City (specifications 4–6 in table 2). The only significant factor is the ratio of per capita expenditures on social assistance which is inversely related to the out-migration rate (specification 5 in table 2). Hence, higher per capita spending on social assistance bind people to their place of residence making them less inclined to out-migration. Meanwhile, migrants changing their place of residence from one oblast to another are not responsive to the differences in per capita spending on education and healthcare services. Much lower coefficients of determination in the models of in-migration and net migration for a reduced sample (specifications 4 and 6 in table 2) than for a larger sample (specifications 1 and 3 in table 2) point to the fact that heterogeneous preferences of people and some other unobserved factors gain more importance in explaining variation in inter-regional migration rates when Kyiv City is not included in the sample.

Conclusions

Our results regarding Tiebout-type migration behavior are quite sensitive to whether Kyiv City is included in the analysis or not. Inclusion of Kyiv City which is the major attraction for internal migrants because of a better quality of life makes many variables of our interest significant. This emphasizes the importance of studying the effects of local public spending on migration rates in different samples before drawing any general conclusions about the validity of the Tiebout hypothesis. Looking at only one larger sample could yield misleading conclusions that Ukrainians do vote with their feet by responding to the differences in per capita local government spending through migration. But migration to/out of Ukrainian regions except Kyiv City is mainly dictated by economic reasons (relatively higher wages and better employment opportunities), location of higher education institution and some unobserved factors rather than the relative level of local government spending on education, healthcare or social assistance.

Although our results do not in general lend support for the Tiebout hypothesis, some reasonable policy implications can be drawn. In particular, we could expect higher responsiveness of Ukrainians to the differences in per capita local government social expenditures through inter-regional relocation if these expenditures were directly linked to the quality of provided services and were not accompanied by out-of-pocket payments[7], if information about their level and structure were more available to the public, and, most importantly, if less barriers to internal migration existed in Ukraine[8]. From this follows that a comprehensive set of policy measures addressing institutional and structural barriers to internal migration should be supplemented by the measures supporting more effective fiscal decentralization and public finance management reforms. It is also important to remember that policies to address regional inequality and promote greater economic efficiency should focus not only on places but also on people, their skills, residential preferences and mobility constraints.

The policy importance of the issue calls for further study of the determinants of inter-region-

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[7] See the World bank study of public and private spending on education and health care in Ukraine [13].

[8] According to the survey of experts and focus group discussions conducted in 2012, the top barriers to migration are Ukraine's registration system of the place of residence which complicates portability of social benefits; lack of access to credit to cover high costs of moving; and underdeveloped housing and mortgage markets [12].

al migration in Ukraine. Using more explanatory variables in our model of gross migration flows to testing for the robustness of results, analyzing in detail the available statistics on bilateral flows between the regions as well as on urban-rural migration can be good areas to continue.

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ЧИ ГОЛОСУЮТЬ УКРАЇНЦІ НОГАМИ: ВИДАТКИ МІСЦЕВИХ БЮДЖЕТІВ ТА МІЖРЕГІОНАЛЬНА МІГРАЦІЯ

Статтю присвячено дослідженню питання, чи голосують українці ногами, переїжджаючи на місце проживання у регіони, в яких відносно вищі видатки місцевих бюджетів на освіту, охорону здоров'я та соціальне забезпечення у розрахунку на одну особу. Використовуючи дані про зареєстровані міжрегіональні міграційні потоки у 2002–2013 рр. та враховуючи ефекти міжрегіональних відмінностей рівнів заробітної плати та безробіття, щільність населення, частку молоді та забруднення повітря у багатофакторній регресійній моделі, у статті зроблено спробу протестувати правильність гіпотези Тібу в Україні. Результати оцінювання дають певні підстави для підтвердження цієї гіпотези у випадку, якщо місто Київ включено до вибірки регіонів, але не у меншій вибірці без столиці. У заключній частині наведено короткі висновки стосовно фіскальної децентралізації та сприяння внутрішній міграції в Україні.

Ключові слова: внутрішня міграція, гіпотеза Тібу.