### **ONLINE APPENDIX**

# The Effect of Labor Migration on the Diffusion of Democracy: Evidence from a Former Soviet Republic

Toman Barsbai, Hillel Rapoport, Andreas Steinmayr, Christoph Trebesch

#### Appendix 1: Determinants of migration to the West and East

This appendix analyzes the determinants of migration patterns at the community level using exactly the same set of explanatory variables as in our baseline specification in the main analysis (column 3 of Table 1). Table A3 below summarizes the results. The dependent variables are the overall prevalence of emigration (column 1), the share of westward migrants among all migrants (column 2), the prevalence of westward migration (column 3), and the prevalence of eastward migration (column 4).

A first important result is that pre-migration electoral preferences are not systematically associated with the size and direction of migrant flows. In particular, more liberal communities do not have more migrants in the West and more Communist communities do not have more migrants in the East. Conditional on observable community characteristics, there is no evidence for political self-selection of migrants at the community level.

Second, we find that adverse economic shocks pushed many Moldovans abroad, as is widely acknowledged in the literature. A reduction in night-time light intensity between 1992 and 1999 is associated with a significant increase in the prevalence of emigration. Importantly, however, adverse economic shocks cannot explain whether migrants left Moldova for the West or the East. Changes in night-time light intensity are not significantly related with the share of westward migrants among all migrants. This result is in line with the idea that, as a result of migrant networks, it should primarily be the destination choice of the first migrants that affects the destination choice of subsequent migrants.

Third, we can confirm that the drivers of the destination choice of the first migrants are crucial determinants of migration patterns in 2004. Russian and Gagauz minorities facilitate migration flows to the East, while a high share of ethnic Moldovans, the reference category, is positively associated with migration flows to the West. In addition, communities that are closer to a Moldovan-Romanian border crossing see significantly more migration to the West. The marginal effect is large: A 35 kilometer decrease in distance is associated with a one-percentage point increase of a community's population in the West (even after controlling for district-fixed effects that already pick up large parts of the border effects). Hence, small differences in premigration community characteristics have the potential to bring about large differences in migration patterns.

We also find that westward migration is more prevalent in larger communities and in communities with lower dependency ratios and a more educated population. These findings reflect that westward migration is more costly to finance than eastward migration and therefore more accessible to better-off individuals who live in such communities (Luecke et al., 2007).

### Appendix 2: Disentangling political spillovers from the exit effect

As discussed in Section 4.2, the baseline coefficients of westward and eastward migration capture both political spillovers on those who stay behind and the exit of migrants from the electorate. This appendix attempts to assess to which degree the exit effect may bias the interpretation of the migration coefficients as political spillovers. To do so, we run the following thought experiment: We make extreme assumptions on how migrants would have voted had they stayed in Moldova. We then send all migrants back to their home communities and add their hypothetical votes to the observed votes of their communities assuming that migrants would have had the same voter turnout as the non-migrant community population. Finally, we rerun our baseline specification (column 3 of Table 1) using the hypothetical vote share of the Communist Party as new dependent variable. By definition, the exit effect is now neutralized as migrants remain part of the electorate. We consider three different scenarios, which are summarized in Table A6 below.

In scenario 1, there is no political self-selection: All migrants are assumed to have voted like the average stayer in their home communities in July 2009 (column 1). The coefficients of westward and eastward migration are thus exactly the same as the coefficients of our baseline specification. However, the assumption of no political self-selection is not realistic. Given their demographic profile, migrants, particularly those to the West, are likely to have been less supportive of the Communist Party than the average voter before migration. The coefficients should therefore provide an underestimation of political spillovers from the West and an overestimation of political spillovers from the East.

In scenario 2, all migrants would have voted for opposition parties (column 2). Under this extreme assumption, the coefficient of westward migration provides an upper bound for political spillovers from the West because, in contrast to the baseline coefficient, it can no longer be driven upwards by the departure of coefficient of opposition voters. Indeed, the westward migration now drops to -1.11. This is almost double the magnitude of the baseline coefficient of -0.63, which still includes the exit effect (i.e., the fact that the Communist vote share increases due to the departure of opposition voters). These two coefficients define the plausible range of the magnitude of political spillovers of westward migration. The emigration of one percent of a community's population to the West reduces the share of Communist votes among those who stay behind by a minimum of 0.63 (if migrants would have voted as the average stayer) and a maximum of 1.11 percentage points (if migrants would have been opposition voters). Our baseline coefficient of westward migration should therefore be interpreted as a conservative estimate of the political spillovers from abroad.

The opposite is true for the coefficient of eastward migration. Under the assumption that all migrants would have voted for opposition parties, the coefficient of eastward migration provides a lower bound for the political spillovers of eastward migration. Because it can no longer be driven upwards by the departure of opposition voters, the coefficient of eastward migration becomes negative and drops to -0.48, compared to the baseline coefficient of 0.39. Again, these two coefficients mark the range in which the magnitude of political spillovers of eastward migration is most likely to be located. As the range includes zero, we cannot conclude with certainty that there exist political spillovers from eastward migration. What we can conclude, however, is that political spillovers are likely to be much larger for westward than for eastward migration.

For completeness, we also show the unlikely scenario 3, in which all migrants would have voted for the Communist Party (column 3). Only when we make this unrealistic assumption do we no longer find that political spillovers of westward migration decrease the share of Communist votes.

Overall, this exercise provides strong evidence that political spillovers from emigration to the West indeed reduce support for the Communist Party in migrants' home communities and are no artifact of the compositional change of the electorate. Under reasonable assumptions on the direction and degree of political self-selection of migrants, the baseline coefficient of westward migration is a conservative estimate of the true size of political spillovers from the West. The baseline coefficient of eastward migration may, however, overestimate the size of political spillovers from the East.<sup>1</sup>

#### Appendix 3: Robustness checks

We perform a number of checks to assess the robustness of the baseline coefficients of westward and eastward migration. Table A8 below summarizes the results. Column 1 adds 5th-order polynomials of all control variables including pre-migration election results. In case the linear approximation used in the baseline specification is not valid, important confounding variables may still cause biased estimates of the coefficients of interest. 5th-order polynomials of the control variables would account for potential non-linearities in the relationship between community characteristics before migration took off and the evolution of migration and voting patterns thereafter. However, including the polynomials does not significantly change our coefficients of interest.

<sup>&</sup>lt;sup>1</sup> These results are also useful to assess the potential consequences of return migration. If anything, the coefficients are likely to underestimate the electoral consequences of emigration in case of return migration.

Column 2 shows that the coefficient of westward migration remains stable when we do not control for emigration to the East. Column 3 includes the share of Communist votes in the parliamentary election of 2001, the year in which the Communist Party returned to power, as an additional regressor. Hence, we only analyze the change in electoral preferences for the period 2001-2009, during which the Communist Party had a firm grip on power in Moldova. Again, the coefficients of interest are not affected.

Column 4 controls for the demographic composition of migrant flows in terms of age, sex and education. In principle, the absence of certain types of individuals alone may already affect electoral preferences irrespective of the destination of migrants, e.g. through a change in gender roles in communities with a high female migration prevalence. To attribute the political effects of emigration to political spillovers from abroad, they should be unrelated to different pre-departure characteristics of migrants to the West and East. This is a valid concern for the case of Moldova because westward and eastward migrants differ somewhat in their demographic characteristics. Westward migrants are relatively more educated and female than eastward migrants (compare Table A7). However, our results are fully robust to the inclusion of the demographic characteristics partially capture migrants' electoral preferences and thus weaken the impact of the exit effect on the coefficient.

The ability to speak a particular foreign language may potentially confound the relationship between migration and voting patterns. In column 5, we therefore control for the foreign language skills of a community's population. Based on information from the population census of 2004, we control for the shares of the nonmigrant population that are able to speak English, German, Italian, French, Spanish, Portuguese, Greek, Ukrainian, Russian, Gagauz or Bulgarian. Our results hold. The same is true if we control for the foreign language skills of the entire population including those of migrants (results available upon request).

Next, we define the West without Italy, the most important destination of Moldovan migrants in Western Europe, and not necessarily an ideal-type democracy. In line with our finding that our results are mostly driven by emigration to the most advanced democracies, the effect of westward migration becomes even more pronounced (column 6). We also consider an alternative definition of the West based on the rule-of-law index from the World Bank Governance Indicators 2004. The ranking of destination countries relative to Moldova, however, is largely the same and our results do not change (column 7).

Finally, we assess the robustness of our model to using different econometric specifications. So far, we have relied on a specification with lagged outcomes as regressors rather than using first differences (community fixed effects). We have done so for two reasons. First, the structure of our dataset is not a classic panel. The dependent variable is measured at different points in time than the explanatory variables. Taking differences would therefore require taking differences over different periods. Additionally, some explanatory variables are not observed at different points in time, which would not allow us to take differences. Second, first

differencing would imply taking the differences between Communist votes in 1998 and 2009. Controlling for different dimensions of pre-migration electoral preferences in form of the vote shares of other parties would not be possible. At the same time, however, first differencing avoids potential endogeneity problems that may arise from the use of lagged outcomes as regressors in parametric models. In column 8, we therefore present the results of a first-difference specification. The coefficient of westward migration remains unaffected, but the coefficient of eastward migration ceases to be significant at usual significance levels.

In another specification we use the overall migration prevalence and the share of westward migrants among all migrants instead of the prevalence of emigration to the West and East (column 9). The coefficient of overall migration prevalence is close to zero and insignificant while the coefficient of the share of westward migrants is negative and highly significant, which is in line with the previous results.

Finally, we follow Spilimbergo (2009) and use a continuous measure of the level of democracy abroad instead of splitting migrants' destinations into Western and Eastern countries (column 10). The level of democracy abroad is defined as the weighted average of democracy scores in destination countries, where a country's weight is given by the share of migrants in that country among all migrants from the same community. An interaction term between overall migration prevalence and the level of democracy abroad then measures the degree of exposure to democracy abroad. The interaction term is negative and highly significant. Hence, the magnitude of the marginal effect of emigration on Communist votes increases with the level of democracy abroad.

## Appendix figures

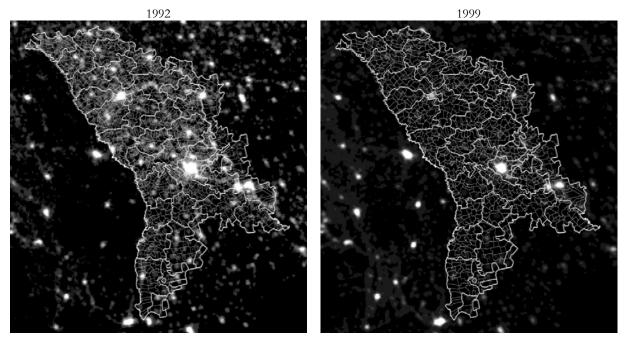


Figure A1: Night-time light intensity of Moldovan communities in 1992 and 1999

The images are based on data from the Defense Meteorological Satellite Program's Operational Linescan System. District borders are drawn in white.

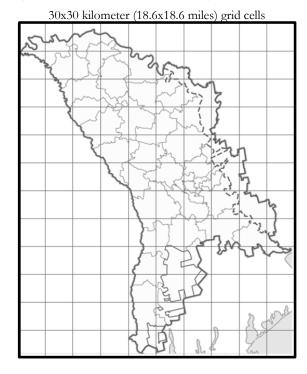
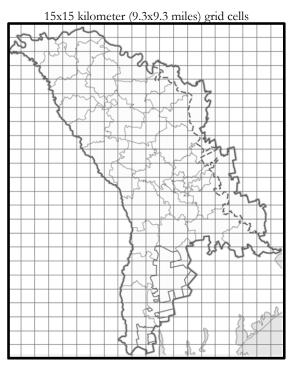


Figure A2: Moldovan districts on a grid with 30x30 and 15x15 kilometer cells



## Appendix tables

	Emigrants to	the West			Emigrants to	the East	
Country	Democracy score	Number of emigrants	Share of emigrants	Country	Democracy score	Number of emigrants	Share of emigrants
Italy	10	53,010	52.83%	Russia	6	153,361	88.79%
Romania	9	10,515	10.48%	Ukraine	6	8,582	4.97%
Portugal	10	9,467	9.43%	Turkey	7	8,228	4.76%
Greece	10	5,584	5.56%	Belarus	-7	356	0.21%
Spain	10	3,868	3.85%	South Korea	8	174	0.10%
France	9	3,504	3.49%	Serbia	6	121	0.07%
Israel	10	2,634	2.62%	Kazakhstan	-6	119	0.07%
Germany	10	1,906	1.90%	Other countries	$\leq 8$	1,777	1.03%
Czech Republic	10	1,787	1.78%				
Great Britain	10	1,399	1.39%				
Ireland	10	1,235	1.23%				
United States	10	1,184	1.18%				
Cyprus	10	855	0.85%				
Bulgaria	9	698	0.70%				
Belgium	10	660	0.66%				
Austria	10	505	0.50%				
Canada	10	387	0.39%				
Poland	10	234	0.23%				
Switzerland	10	215	0.21%				
Netherlands	10	142	0.14%				
Other countries	$\geq 9$	556	0.55%				
Total West		100,345	100.00%	Total East		172,718	100.00%

Table A1: Number of Moldovan emigrants to the West and East in 2004

The table shows the distribution of Moldovan emigrants across destination countries based on Moldova's population census of 2004. Destination countries are classified as West if they have a higher level of democracy (as measured by the 2004 Polity IV score) than Moldova. Countries are classified as East if they have a lower or equal level of democracy than Moldova. Moldova's 2004 Polity IV score is 8.

Variable	Obs.	Mean	Std. dev	Min	Max
Overall prevalence of emigration (%)	848	8.69	3.77	0	30.49
Prevalence of emigration to the West (%)	848	2.84	2.67	0	16.21
Prevalence of emigration to the East (%)	848	5.86	3.45	0	29.74
Share of westward migrants among all migrants (%)	847	32.67	23.22	0	94.62
Communist Party July 2009 (%)	848	46.75	19.77	4.70	97.97
Communist Party 2005 (%)	848	51.49	13.58	10.78	91.97
Communist Party 2001 (%)	848	49.91	17.81	4.67	97.03
Communist Party 1998 (%)	848	29.51	19.83	1.51	94.50
Democratic Party 1998 (%)	848	18.71	11.72	0.62	82.87
Democratic Convention 1998 (%)	848	18.67	14.62	0	74.45
Party of Democratic Forces 1998 (%)	848	8.54	7.22	0	75.18
Voter turnout 1998 (%)	848	79.62	9.67	41.19	100
Democratic Agrarian Party 1994 (%)	848	53.79	22.36	1.49	96.68
Socialist Party 1994 (%)	848	12.04	20.43	0	96.36
Peasants and Intellectuals Bloc 1994 (%)	848	9.45	8.25	0	56.48
Alliance Pop. Christian Dem. Front 1994 (%)	848	6.98	6.35	0	56.81
Community size 0-1500	848	0.28	0.45	0	1
Community size 1501-3000	848	0.42	0.49	0	1
Community size $> 3000$	848	0.30	0.46	0	1
District capital	848	0.04	0.19	0	1
Distance to district capital (km)	848	14.74	8.76	0	87.31
Distance to Romanian border crossing (km)	848	54.99	29.07	1.52	151.24
Chisinau/Balti	848	0.00	0.05	0	1
Population 0-14 years (%)	848	21.18	3.20	10.62	34.60
Population 15-34 years (%)	848	30.04	3.78	18.62	41.23
Population 65 years and older (%)	848	12.36	4.71	2.92	29.71
Population with higher education (%)	848	15.72	6.06	4.03	47.45
Population with primary or no education (%)	848	53.78	10.65	11.32	85.79
Ratio high-skilled/low-skilled	848	0.33	0.28	0.05	4.19
Ethnic Russians (%)	848	2.16	6.48	0	95.18
Ethnic Ukrainians (%)	848	8.41	19.39	0	93.21
Ethnic Gagauz (%)	848	3.02	14.61	0	97.88
Ethnic Bulgarians (%)	848	1.87	8.90	0	91.74
Ethnic fractionalization	848	0.16	0.18	0.01	0.79
Change night-time light 1992-1999	848	-4.82	3.27	-22.41	0.87

Table A2: Summary statistics of community-level variables

The table presents summary statistics for the main community-level variables used in our analysis. Data on migration patterns as well as demographic, ethnic and socio-economic composition of the population come from Moldova's population census of 2004 and are based on the total population including emigrants. All electoral variables are based on official results of parliamentary elections. The variable based on night-time light measures the difference between the average night-time light intensity on the territory of each community between 1992 and 1999. It is based on data from the Defense Meteorological Satellite Program's Operational Linescan System.

Table A3: Determinants	of migration	patterns at the	community level
------------------------	--------------	-----------------	-----------------

	Overall prevalence of emigration		Share o ward m among n	igrants nigrants	Prevaler emigrati the W	on to Vest	Prevaler emigrati the F	ion to last
	(1)		(2		(3)		(4)	
Communist Party 1998 (%)	coef. 0.00	s.e. (0.01)	-0.14	s.e. (0.08)	-0.01	s.e. (0.01)	coef. 0.01	s.e. (0.01)
Democratic Party 1998 (%)	0.00	(0.01) (0.01)	0.05	(0.00) (0.07)	0.01	(0.01)	-0.01	(0.01)
Democratic Convention 1998 (%)	0.03***	(0.01) (0.01)	0.03	(0.07)	0.01*	(0.01)	0.02*	(0.01)
Party of Democratic Forces 1998 (%)	0.00	(0.01)	0.07	(0.10)	0.01	(0.01)	-0.01	(0.01)
Voter turnout 1998 (%)	-0.01	(0.02)	0.01	(0.09)	-0.00	(0.01)	-0.01	(0.01)
Democratic Agrarian Party 1994 (%)	-0.00	(0.01)	0.10*	(0.05)	0.01	(0.01)	-0.01	(0.01)
Socialist Party 1994 (%)	-0.00	(0.01)	0.11**	(0.05)	0.01	(0.01)	-0.01	(0.01)
Peasants and Intellectuals Bloc 1994 (%)	-0.02	(0.02)	0.25**	(0.12)	0.01	(0.01)	-0.03*	(0.02)
Alliance Pop. Christian Dem. Front 1994 (%)	-0.06**	(0.03)	0.13	(0.14)	-0.02	(0.01)	-0.05**	(0.02)
Change night-time light 1992-1999	-0.11*	(0.06)	-0.18	(0.26)	-0.05	(0.03)	-0.05	(0.05)
Community size 1501-3000	-0.19	(0.34)	3.16***	(1.24)	0.28	(0.19)	-0.48*	(0.26)
Community size > 3000	-0.59	(0.41)	6.53***	(1.34)	0.40*	(0.22)	-0.99***	(0.20)
District capital	-3.83***	(1.13)	2.28	(3.45)	-0.14	(0.62)	-3.69***	(0.97)
Distance to district capital (km)	-0.07***	(0.02)	0.09	(0.10)	-0.03**	(0.01)	-0.05***	(0.02)
Distance to Romanian border crossing (km)	-0.01***	(0.01)	-0.10	(0.10)	-0.02**	(0.01)	0.00***	(0.02)
Chisinau/Balti	-7.70*	(3.89)	8.26	(6.38)	-0.63	(1.37)	-7.07**	(3.40)
Population 0-14 years (%)	-0.27***	(0.06)	-0.65*	(0.37)	-0.15***	(0.04)	-0.12*	(0.07)
Population 15-34 years (%)	0.18**	(0.07)	-0.38	(0.37)	0.06	(0.05)	0.12**	(0.06)
Population 65 years and older (%)	-0.24***	(0.08)	-0.28	(0.33)	-0.03	(0.04)	-0.21***	(0.07)
Population with higher education (%)	0.07	(0.07)	0.59***	(0.20)	0.10***	(0.03)	-0.03	(0.06)
Population with primary or no education (%)	-0.01	(0.02)	-0.03	(0.09)	-0.00	(0.01)	-0.00	(0.02)
Ratio high-skilled/low-skilled	0.49	(1.77)	-3.63	(4.12)	-0.92	(0.88)	1.41	(1.43)
Ethnic Russians (%)	-0.03	(0.11)	-1.22***	(0.42)	-0.19***	(0.07)	0.16*	(0.09)
(Ethnic Russians) <sup>2</sup>	-0.00	(0.00)	0.01***	(0.00)	0.00***	(0.00)	-0.00**	(0.00)
Ethnic Ukrainians (%)	-0.06	(0.05)	-0.10	(0.24)	-0.07**	(0.04)	0.01	(0.05)
(Ethnic Ukrainians) <sup>2</sup>	0.00	(0.00)	0.00	(0.00)	0.00*	(0.00)	-0.00	(0.00)
Ethnic Gagauz (%)	-0.02	(0.05)	-0.72**	(0.32)	-0.11**	(0.04)	0.09	(0.06)
(Ethnic Gagauz) <sup>2</sup>	0.00**	(0.00)	0.00	(0.00)	0.00**	(0.00)	0.00	(0.00)
Ethnic Bulgarians (%)	-0.06	(0.05)	-0.01	(0.28)	-0.04	(0.03)	-0.01	(0.05)
(Ethnic Bulgarians) <sup>2</sup>	0.00	(0.00)	-0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
Ethnic fractionalization	5.81***	(1.86)	-4.80	(12.36)	3.08**	(1.61)	2.73	(1.68)
Constant	13.46	(4.43)	50.22***	(18.20)	4.35	(2.34)	9.12	(3.88)
District fixed effects	yes	;	ye	S	yes	3	yes	3
Number of observations	848	3	84	7	848	3	848	3
R <sup>2</sup>	0.39	)	0.6	5	0.5	6	0.4	8

The table reports OLS estimates of the determinants of migration patterns for 848 communities using the same set of explanatory variables as in our baseline specification in the main analysis (column 3 of Table 1). The prevalence of emigration is measured as the share of migrants as percent of the total population. The share of westward migrants among all migrants is measured in percent. Standard errors clustered at the district level in parentheses. \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, and \* at the 10 percent level.

	Basic controls		Plus pre-r election		Plus nig light (full	
	(1)	)	(2)		(3	)
	coef.	s.e.	coef.	s.e.	coef.	s.e.
Prevalence of emigration to the West (%)	-0.70***	(0.20)	-0.63***	(0.18)	-0.63***	(0.18)
Prevalence of emigration to the East (%)	0.44**	(0.17)	0.39**	(0.16)	0.39**	(0.16)
Community size 1501-3000	-1.36	(1.01)	-1.93**	(0.99)	-1.94**	(0.99)
Community size $> 3000$	-2.66**	(1.16)	-2.28*	(1.20)	-2.27*	(1.20)
District capital	0.37	(2.34)	-1.18	(1.91)	-1.31	(2.03)
Distance to district capital (km)	0.00	(0.08)	-0.00	(0.07)	-0.00	(0.07)
Distance to Romanian border crossing (km)	0.03	(0.04)	0.04	(0.04)	0.04	(0.04)
Chisinau/Balti	8.15	(6.27)	5.61	(4.79)	5.45	(4.81)
Population 0-14 years (%)	-0.01	(0.20)	0.03	(0.18)	0.05	(0.19)
Population 15-34 years (%)	0.03	(0.22)	0.15	(0.20)	0.15	(0.20)
Population 65 years and older (%)	-0.06	(0.23)	0.18	(0.21)	0.19	(0.21)
Population with higher education (%)	-0.41***	(0.15)	-0.27*	(0.15)	-0.28*	(0.16)
Population with primary or no education (%)	0.14***	(0.05)	0.13***	(0.04)	0.13***	(0.04)
Ratio high-skilled/low-skilled	3.38	(3.73)	2.85	(3.00)	2.98	(3.06)
Ethnic Russians (%)	1.46***	(0.25)	0.97***	(0.19)	0.96***	(0.19)
(Ethnic Russians) <sup>2</sup>	-0.01***	(0.00)	-0.01***	(0.00)	-0.01***	(0.00)
Ethnic Ukrainians (%)	1.18***	(0.16)	0.66***	(0.14)	0.67***	(0.13)
(Ethnic Ukrainians) <sup>2</sup>	-0.01***	(0.00)	-0.00***	(0.00)	-0.00***	(0.00)
Ethnic Gagauz (%)	1.13***	(0.29)	0.71***	(0.23)	0.72***	(0.23)
(Ethnic Gagauz) <sup>2</sup>	-0.01**	(0.00)	-0.00*	(0.00)	-0.00*	(0.00)
Ethnic Bulgarians (%)	1.21***	(0.20)	0.65***	(0.13)	0.65***	(0.13)
(Ethnic Bulgarians) <sup>2</sup>	-0.01***	(0.00)	-0.00*	(0.00)	-0.00*	(0.00)
Ethnic fractionalization	-25.62***	(6.90)	-13.34**	(6.27)	-13.52**	(6.15)
Communist Party 1998 (%)			0.15***	(0.03)	0.15***	(0.03)
Democratic Party 1998 (%)			0.03	(0.04)	0.03	(0.04)
Democratic Convention 1998 (%)			-0.13***	(0.05)	-0.13***	(0.05)
Party of Democratic Forces 1998 (%)			-0.12	(0.07)	-0.12	(0.07)
Voter turnout 1998 (%)			0.00	(0.05)	0.00	(0.05)
Democratic Agrarian Party 1994 (%)			0.08**	(0.04)	$0.08^{**}$	(0.04)
Socialist Party 1994 (%)			0.10**	(0.05)	0.10**	(0.05)
Peasants and Intellectuals Bloc 1994 (%)			-0.06	(0.06)	-0.06	(0.06)
Alliance Pop. Christian Dem. Front 1994 (%)			-0.13*	(0.07)	-0.13*	(0.08)
Change night-time light 1992-1999					-0.06	(0.15)
Constant	34.83**	(12.08)	22.89	(12.70)	21.89	(13.38)
District fixed effects	ye	s	ye	s	ye	s
Number of observations	84					
R <sup>2</sup>	0.7		0.8	32	0.8	2

Table A4: Full regression results of columns 1-3 of Table 1

The table reports the full OLS estimates of our baseline results summarized in Table 1. The dependent variable is the vote share of the Communist Party in the July 2009 parliamentary election at the community level (in percent). Standard errors clustered at the district level in parentheses. \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, and \* at the 10 percent level.

	Per-capita tax revenues 2009	Unemployment rate 2009	Per-capita number of shops 2009
	(1)	(2)	(3)
Night-time light 2009	0.012***	-0.597***	1.06E-04***
	(0.003)	(0.224)	(4.78E-05)
Community size 1501-3000	-0.025***	-2.769*	-2.50E-04*
	(0.009)	(1.573)	(1.38E-04)
Community size > 3000	0.008	-1.723	0.001***
	(0.013)	(1.824)	(0.000)
Chisinau/Balti	0.762***	1.210	-0.005*
	(0.250)	(7.428)	(0.003)
Constant	0.204***	21.186***	0.003***
	(0.007)	(1.300)	(0.000)
Number of observations	848	848	848
$\mathbb{R}^2$	0.19	0.01	0.06

Table A5: Night-time light intensity as a proxy for economic conditions at the community level

The table reports OLS estimates for 848 Moldovan communities. The dependent variables are the per-capita tax revenues (column 1), the unemployment rate (column 2), and the per-capita number of shops in 2009 (column 3). These variables are based on statistics published by the Moldovan Ministry of Economy and Trade. Robust standard errors in parentheses. \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, and \* at the 10 percent level.

Assumed electoral preferences of emigrants to the West:	Same as community	Non-Communist	Communist
Assumed electoral preferences of emigrants to the East:	Same as community	Non-Communist	Communist
	(1)	(2)	(3)
Prevalence of emigration to the West (%)	-0.63*** (0.18)	-1.11*** (0.15)	0.28* (0.17)
Prevalence of emigration to the East (%)	0.39** (0.16)	-0.48** (0.19)	0.99*** (0.17)
Full set of controls	yes	yes	yes
District fixed effects	yes	yes	yes
Number of observations	848	848	848
R <sup>2</sup>	0.82	0.81	0.82

Table A6: Migration patterns and Communist votes accounting for the exit of migrants from the electorate

The table reports OLS estimates for 848 Moldovan communities The dependent variable is the hypothetical vote share of the Communist Party in the July 2009 parliamentary election at the community level (in percent), assuming that emigrants would not have left Moldova and remained part of their communities' electorate. We assume that migrants would have had the average voter turnout of their home communities. The full set of controls includes community-level variables capturing population size, age structure, ethnic composition, skill level and distribution of the population, a dummy for district capitals and the cities of Chisinau and Balti, the distance to the district capital and the next Romanian border crossing as well as pre-migration election results and night-light intensity. Standard errors clustered at the district level in parentheses. \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, and \* at the 10 percent level.

	characterist	

				Migrants to the	West
	All migrants	Migrants to — the East	All	Full democracies	Flawed democracies
Education					
Compulsory secondary education	36%	42%	26%	25%	26%
Additional secondary education	44%	44%	43%	42%	43%
Higher education	20%	14%	31%	32%	31%
Age					
15-24 years	30%	34%	21%	23%	20%
25-44 years	54%	51%	61%	62%	60%
45 years and older	16%	15%	18%	15%	20%
Sex					
Male	57%	64%	43%	59%	36%
Female	43%	36%	57%	41%	64%
Remittances					
US\$ 0	20%	21%	17%	22%	15%
US\$ 1-500	59%	60%	57%	50%	59%
US\$ 501-800	16%	16%	16%	19%	15%
US\$ 801-1000	4%	2%	8%	8%	8%
US\$ 1001-1500	1%	0%	2%	2%	2%
US\$ 1501 or more	0%	0%	0%	1%	1%

The table shows the distribution of skills, age, sex and remittances for Moldovan emigrants across destinations. Demographic data come from Moldova's population census of 2004. Remittances data come from the Labor Force Survey of 2008. Following Table A1, destination countries are classified as East if they have a lower or equal level of democracy than Moldova (as measured by the 2004 Polity IV score). Countries are defined as West if they have a higher level of democracy than Moldova. Within Western destinations, the table distinguishes between full and flawed democracies based on the classification provided by the Economist Intelligence Unit's index of democracy of 2006 (the index is not available for earlier years). Full Western democracies include Portugal, Greece, Spain, France, Germany, the Czech Republic, Great Britain, Ireland, the United States, Belgium, Austria, Canada, Switzerland and the Netherlands. Flawed Western democracies include Italy, Romania, Israel, Cyprus, Bulgaria and Poland. Moldova is also classified as flawed democracy.

#### Table A8: Robustness checks

	Fifth-order polynomials of all control variables	Only emigration to the West without controlling for emigration to the East	Control for share of Communist votes in 2001	Control for migrant charac- teristics	Control for foreign language skills of the population	West: without Italy	West: better rule of law than Moldova	Estimation in first differences	Estimation with share of westward migrants among all migrants	Exposure to democracy abroad
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Prevalence of emigration to the West (%)	-0.54*** (0.21)	-0.68*** (0.17)	-0.54*** (0.17)	-0.86*** (0.15)	-0.73*** (0.20)	-1.22*** (0.21)	-0.63*** (0.18)	-0.87*** (0.26)		
Prevalence of emigration to the East (%)	0.44*** (0.16)		0.38** (0.14)	0.43** (0.18)	0.34** (0.16)	0.40** (0.16)	0.39** (0.16)	0.20 (0.24)		
Overall prevalence of emigration (%)									0.03 (0.14)	4.74*** (0.85)
Share of westward migrants among all migrants (%)									-0.10*** (0.03)	
Democracy abroad										4.67 (7.94)
Overall prevalence of emigration * democracy abroad										-5.44*** (0.97)
Full set of controls	yes	yes	yes	yes	yes	yes	yes	-	yes	yes
District fixed effects	yes	yes	yes	yes	yes	yes	yes	-	yes	yes
Number of observations	848	848	848	847	848	848	848	848	847	848
R <sup>2</sup>	0.85	0.82	0.83	0.82	0.82	0.82	0.82	0.03	0.82	0.82

The table reports OLS estimates for 848 Moldovan communities. The dependent variable is the vote share of the Communist Party in the July 2009 parliamentary election at the community level (in percent). See Appendix 2 (robustness checks) for more details on the different columns. The full set of controls includes community-level variables capturing population size, age structure, ethnic composition, skill level and distribution of the population, a dummy for district capitals and the cities of Chisinau and Balti, the distance to the district capital and the next Romanian border crossing as well as pre-migration election results and night-light intensity. Standard errors clustered at the district level in parentheses. \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, and \* at the 10 percent level.

	30x30km	n grid cells	15x15kn	n grid cells
	1st iteration	Average over 100 iterations	1st iteration	Average over 100 iterations
	(1)	(2)	(3)	(4)
Prevalence of emigration to the West (%)	-0.56*** (0.18)	-0.53	-0.61*** (0.22)	-0.50
Prevalence of emigration to the East (%)	0.42*** (0.14)	0.41	0.37*** (0.15)	0.29
Full set of controls	yes	yes	yes	yes
Grid cell fixed effects	yes	yes	yes	yes
Iterations		100		100
Avg. number of grid cells		52		162
Number of observations	848		848	
R <sup>2</sup>	0.81		0.85	

Table A9: Migration patterns and Communist votes with fixed effects for geographical grid cells

The table reports OLS estimates for 848 Moldovan communities. The dependent variable is the vote share of the Communist Party in the July 2009 parliamentary election at the community level (in percent). The regressions include dummies for geographical grid cells of different sizes. Figure A2 in the appendix illustrate how the quadratic grid cells compare to the size of Moldovan districts. Columns 2 and 4 shift the grid in random directions and show average results after 100 iterations. The full set of controls includes community-level variables capturing population size, age structure, ethnic composition, skill level and distribution of the population, a dummy for district capitals and the cities of Chisinau and Balti, the distance to the district capital and the next Romanian border crossing as well as pre-migration election results and night-light intensity. Standard errors clustered at the district level in parentheses. \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, and \* at the 10 percent level.

	Communist votes (%)			nmunist seats parliament
	Level	Change w.r.t. observed result	Level	Change w.r.t observed result
Observed result in July 2009 parliamentary elections	45.5		48	
<ol> <li>Same level of emigration, but to different destinations         <ul> <li>a) Move migrants from West to East</li> <li>b) Move migrants from East to West</li> </ul> </li> </ol>	48.5 40.6	+3.0 -4.9	51 43	+3 -5
<ul><li>2) No emigration to the West or/and East</li><li>a) No emigration to the West, same level of emigration to the East</li></ul>	47.3	1.8	50	+2
b) No emigration to the East, same level of emigration to the West	43.6	-1.9	46	-2

Table A10: Counterfactual results of the July 2009 parliamentary election

The table reports counterfactual vote shares of the Communist Party and the resulting changes in the distribution of parliamentary seats for the July 2009 parliamentary election using different migration scenarios. With a total of 101 seats in parliament, one percent of the votes corresponds roughly to one seat in parliament. An absolute majority of 51 seats is needed to form the government. The counterfactual analysis is based on the point estimates from the baseline specification (column 3 of Table 1). To arrive at nation-wide counterfactual election results, we weigh the predicted electoral preferences and voter turnout of their home communities. In the first type of scenario, we hold the level of migration flows constant, but change their direction. Scenario 1a) examines the case where all migrants to the West had gone to the West instead. In the second type of scenario, we change the level of migration flows. Scenario 2a) examines the case where all migrants to the West had never migrated and stayed in Moldova instead.

	Dependent variable: Voter turnout July 2009	Baseline specification with Communist votes in July 2009 as dependent variable and control for voter turnout in July 2009
	(1)	(2)
Prevalence of emigration to the West (%)	-0.52*** (0.08)	-0.60*** (0.17)
Prevalence of emigration to the East (%)	-0.31*** (0.09)	0.40** (0.15)
Full set of controls	yes	yes
District fixed effects	yes	yes
Control for voter turnout 2009	-	yes
Number of observations	848	848
R <sup>2</sup>	0.49	0.82

Table A11: Voter turnout and the effect of migration patterns on Communist votes

The table reports OLS estimates for 848 Moldovan communities. The dependent variables are voter turnout in the July 2009 parliamentary election (in percent) (column 1) and the vote share of the Communist Party in the July 2009 parliamentary election (in percent) (columns 2). Compared to our baseline specification (column 3 of Table 1), in column 2 we also control for voter turnout in July 2009. The full set of controls includes community-level variables capturing population size, age structure, ethnic composition, skill level and distribution of the population, a dummy for district capitals and the cities of Chisinau and Balti, the distance to the district capital and the next Romanian border crossing as well as pre-migration election results and night-light intensity. Standard errors clustered at the district level in parentheses. \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, and \* at the 10 percent level.