

# FINANCIAL REMITTANCES AND ELECTION TURNOUT IN THE MUNICIPALITIES OF THE REPUBLIC OF SERBIA: THE ECONOMY OF VOTING

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## ABSTRACT

This paper investigates possible evidence on whether remittances from abroad have had a significant influence on the outcome of Serbia's presidential elections. Using the linear random-intercept model and based on presidential-election data for municipalities between 2002 and 2017, the study finds that voter turnout rates were positively related to the share of remittances in the municipalities' GDP per capita. For a 1% increase in the share of remittances in municipalities' GDP, the voting turnout increases by 0.31% on average. Also, regarding the within-municipality effect, as the share of remittances in GDP increases over time by 1%, voter turnout decreases by 0.42%. Further, it reveals how the size of the population temporarily abroad had a negative effect on voter participation throughout the entire period examined across both municipalities and time. The study also captures the effects of education and ethnicity. Specifically, as the share of highly educated people increases by 1% over time, so the election participation rates in a particular municipality also increase by 0.83%. After introducing categorical variables for the ethnic composition of the municipality, the study finds that in municipalities with a non-Serb majority, the level of participation was on average 3.31% lower, from 2002 to 2017. Finally, a statistically significant difference in voter turnout was recorded between the economically most developed and the least developed regions: the most developed region had on average 7.71% higher election participation than the region characterized by high emigration and large financial inflows. As far as Serbia is concerned, the final results confirm the findings of

previous literature that the economical vacuum, created by the disappearance of state support, is filled by remittances. Possible reasons for the results are discussed.

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## INTRODUCTION

Today, the world's population is characterized by an extraordinary degree of spatial mobility in its various forms (Stanković, 2014). Over the past twenty years, two major shifts have influenced the spatial distribution of population: the development of transportation and communication; and the opening up of national economies (Montesinos et al., 2020). Both changes have reshaped the nature and composition of migratory flows and have made it easier for migrants to cross borders, and perhaps more importantly, to stay in touch with their communities of origin (Massey et al., 1993). Subsequently, the stability of these connections has enabled the sharing of resources across borders, most notably remittances.

In the last few decades, Serbia has had extensive emigration flows. As a result, among other things, it has created a relatively large diaspora (Penev and Predojević-Despić, 2012): between the 1991 and the most recent 2011 census, on average, 4% of the total population of the Republic of Serbia was temporarily abroad for reasons of work or study (Penev and Predojević-Despić, 2012). One of the effects of labour emigration has been the substantial inflow of remittances from abroad: since 2000, there has been an increase in the volume of remittances to Serbia, and this has become one of the most stable sources of external financing for the economy. Up to the outbreak of the Global Financial Crisis (GFC), in 2008, remittances accounted for more than 10% of GDP, placing Serbia among the leading countries of the world in this respect (Peković, 2017). Today, Serbia is one of Europe's largest recipients of remittances (Eurostat, 2020) along with North Macedonia, Albania, and Bosnia and Herzegovina. Arguably, remittances to Serbia have been many times higher than foreign

direct investment (Bukvić, 2016). As in other developing countries, unlike formal assistance and aid, it has reached the communities targeted, rather than the local officials (Krilova, 2009).

*Table 1: Migrant remittance inflows to Serbia, 2007–2020*

Year	Migrant remittance inflow (USD million)
2007	3.76
2008	3.55
2009	4.65
2010	4.12
2011	3.96
2012	3.55
2013	4.03
2014	3.97
2015	3.37
2016	3.21
2017	3.59
2018	4.32
2019	4.16
2020	3.87

Source: The World Bank <https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT?locations=RS>

Despite a significant influx of financial remittances, very few studies have analysed their more profound effect, even though there is an ever-increasing interest in research into so-called ‘political remittances’. In particular, various studies have suggested how migration might change the patterns of political participation both among emigrants and in the home communities (Ahmadov and Sasse, 2015; Krawatzek and Müller-Funk, 2019; Batista et al., 2019). Whereas the research has mostly emphasized the economic consequences of international migration and remittances, there is a noticeable gap in the knowledge concerning the relationship between emigration, remittances and political effects in Serbia. This gap is rather unexpected, given that the country has a long tradition of out-migration (*Table 2*), both economic and political, and has a significant number of its citizens abroad (Brunnbauer, 2016). Arguably, it offers a classic ‘lab’ in which to study the impact of out-migration and to construct a solid foundation for inferences about the interconnection between emigration, remittances and political participation.

Table 2: Emigration stock from the Republic of Serbia, 1971, 1981, 1991, 2002, and 2011

Census year	Total population	Abroad, %
1971	7 202 898	2.8
1981	7 729 236	3.5
1991	7 822 795	3.5
2002	7 892 813	5.3
2011	7 414 711	4.0

Source: Statistical Office of Serbia <https://www.stat.gov.rs/en-us/oblasti/stanovnistvo/>

The study is motivated by the simple observation that voter turnout in those municipalities from which many emigrants originate appears to have been significantly lower than in those that have a more modest number of their citizens living abroad. Thus, the study aims to gain insight into the scope and impact of remittances as an instrument for shaping political participation in Serbia. Empirical research will determine whether and to what extent remittances contribute to the difference in electoral participation, given that the concentration of emigration flows in certain regions of Serbia suggests that the effect of remittances could be greater in those areas than in regions that have significantly fewer remittances.

In the next sections, I present the theoretical framework and the research questions, followed by the limitations of the study, the hypothesis, the research design and the data analysed. I then introduce the methodology and present the results. The paper closes with a discussion and a brief conclusion.

## THE THEORETICAL FRAMEWORK OF REMITTANCES AND VOTING BEHAVIOUR

Before trying to understand the complexity of the relationship between remittances and the voting of those who are left behind, I must emphasize the existence of endogeneity regarding the connection between out-migration and voting practice. Back in the 1970s, in his seminal book *Exit, Voice, and Loyalty*, Albert Hirschman (1970) conceptualized voting with the feet as one aspect of political behaviour and pointed to the distinction between exit and voice. He later argued that the availability of exit, in opposition to voice, requires more time and greater effort. Furthermore, he emphasized that in most cases a productive voice demands teamwork, in contrast to exit, which does not require any teamwork (Hirschman, 1993). Hence, in the case of Serbia, the relation between emigration

motivation and voting and the corresponding endogeneity problem should not remain unaddressed. Basically, the nature and composition of the out-migration flow, which consist largely of young and educated people who do not agree with the dominant political views, impose the problem of a possible correlation between migration motivation and voting behaviour, for which the study cannot offer a proper control variable. This inferential challenge that we face implies that the results of the study should be regarded as inconclusive and should be treated with a dose of caution.

Much ink has been spilt over whether the remittances sent home have affected voter turnout in the home country's elections, and there are many possible explanations for the varying levels of emigrants' transnational engagement in the politics of their homeland. These could include demographic characteristics, such as age or gender (Burgess, 2012; Guarnizo et al., 2003); socioeconomic characteristics, such as education and occupation (Borjas, 1987; Guarnizo et al., 2003); homeland ties and social arrangements (Burgess, 2012); and the political climate in the host society (Ciornei and Østergaard-Nielsen, 2020). Also, researchers have investigated the impact of migration and remittances on the political behaviour of those who have stayed behind (Meseguer and Burgess, 2014). A central premise in the literature is that remittances empower recipients, by making them less dependent on the state. Hence, by providing some level of financial autonomy, as several authors have suggested, financial remittances could undermine electoral participation among non-migrants (Goodman and Hiskey, 2008; Krilova, 2009; Hiskey and Córdova, 2012; Abdih et al., 2012; Ahmadov and Sasse, 2016).

Having said that, some researchers have explored the political effects of remittances at the national level (Abdih et al., 2012; Pfütze, 2014; O'Mahony, 2013; Ahmed, 2012), but we still have only a small number of studies that explore the effect of financial remittances on individual-level political attitudes and behaviour (Meseguer et al., 2016; Germano, 2013). Some of this work has connected remittances to economic voting, i.e., where voters penalize a governing party for poor economic performance and reward them when the economy is doing reasonably well (Roberts, 2008; Germano, 2013; Ahmed, 2017). Other studies have considered how fluctuations in remittance volume might affect the political attitudes of recipients with regard to welfare (Tertychnaya et al., 2018).

Using two sorts of homeland-related political activity – electoral and community –, Ahmadov and Sasse (2016) demonstrated that the experience and settings in the destination country are crucial components of emigrants' engagement. They used data from a survey of Ukrainian migrant voters in fifteen

different countries, conducted during the 2010 Ukrainian presidential election. Interestingly, they discovered that the rates of electoral engagement among temporary migrants was around 1.24 times that of respondents who planned to stay permanently (all other variables being held constant). Furthermore, they showed that the level of assimilation and destination features are good predictors of transnational political commitment among those emigrants who show at least a modicum of interest in the politics of their homeland. Importantly, the study shows that higher remittances from the host countries may relate to both less electoral and less community commitment. But we cannot easily interpret the relationships detected as causal, since one cannot exclude a selection-bias effect: as the authors emphasized, the survey was conducted exclusively among emigrants who turned up at polling stations, and thus the sample may not be representative (of the Ukrainian immigrant population in the selected countries), since it mostly includes those who are at least minimally politically active.

According to Goodman and Hiskey (2008), a combination of factors may make the citizens of high-migration towns less engaged in politics than people who live in towns with limited migratory activity. First, those who migrate may also be those most prone to political participation. Consequently, all else being equal, high-emigration towns may be left with lower levels of participation in formal politics, i.e., a political brain drain (Goodman and Hiskey, 2008). The second factor is that, by sending economic and social remittances back home, those who are already abroad satisfy the essentials of the town. As this process occurs, those left behind may become disengaged from formal politics and more dependent on remittances from abroad that serve as developmental aids. Thus, according to Goodman and Hiskey (2008), one must ask how these emigration flows have affected the democratization and voting behaviour of those who have stayed behind. Furthermore, since the number of those temporarily working abroad is going to increase, remittances are unlikely to weaken as an income source. Analysing the aggregate data, the study confirmed that voter turnout rates for the 2000 presidential election in Mexico were negatively affected by the percentage of households receiving remittances at the municipal level. Unfortunately, as the authors admitted, the cross-sectional nature of the study limited the ability to capture changes over time and the results need to be treated with caution.

Likewise, by using data for ten rural communities in Michoacan, Germano (2013) showed that those dependent on financial remittances are less likely to require economic support from local officials. He also found that those receiving financial remittances were more satisfied with the performance of the incum-

bent(s) and chose not to get involved in local politics. Arguably, due to the social safety-net effect of the remittances, their recipients in Mexican municipalities are less likely than non-recipients to identify the economy as a pressing problem and more likely to have a more positive view of incumbent politicians (Germano, 2013).

Abdih et al. (2012) came to a similar conclusion, arguing that financial flows allowed households to acquire assets without government help, which consequently reduced their motivation to hold the government to account. These results were justified by the evidence that emigrants have become the main providers of economic security (Meseguer and Burgess, 2014). This means that remittance recipients had fewer criticisms of the government and fewer incentives to engage in the election. Hence, increasing dependence on remittances and alienation from political participation threaten to undermine democratic progress since governments are faced with idle citizens (Krilova, 2009). Taken together, these studies suggest that remittances may discourage non-migrants from becoming involved in politics and that a dependence on money from abroad could lead to a passive citizenship and a decline in voter turnout.

Some studies have gone beyond identifying just a correlation between remittances and turnout. Using data for all Mexican municipalities that had municipal elections in 2010–2012 and the presidential election of 2012, López García (2018) confirmed the existence of a negative relationship between the proportion of households receiving remittances in a municipality and voter turnout. Additionally, she revealed that the negative effects decline as the proportion of households with return migrants in a municipality raises. Further, using municipality-level data from Mexico and individual-level data from Latin America and sub-Saharan Africa, López García and Maydom (2019) found that both remittances and crime reduced inclination to vote.

The so-called political autonomy argument has emphasized that remittances could raise the price of recipients' votes (González-Ocantos et al., 2018). While previous literature used aggregated data, this study employed individual-level survey data from Latin America and a case study of El Salvador. The researchers examined the relationship between remittance receipt and party targeting, by focusing on whether political parties regarded recipients as a target for political strategies. The research supported the claims that remittance recipients were attractive targets for parties. Finally, by using differences in the levels of development achieved in 24 Latin American countries, Córdova and Hiskey (2019) found confirmation of an inverse correlation between levels of development and the extent to which remittance users participate in politics.

On the other side, Pfutze (2012) recognized, in the case of Mexican municipal elections for the period 2000–2002, that international remittances had a positive effect on electoral competitiveness by reducing the power of the dominant party. Furthermore, he identified a strong positive relationship between average remittances per household and electoral support for opposition party candidates at the local level. Besides, the study presented evidence of a causal link between migration to the United States and the electoral triumph of the opposition to the Institutional Revolutionary Party (PRI – Partido Revolucionario Institucional) in Mexican local elections. Using elections data of 2000–2002, he showed that international migration significantly increased the probability that a party other than the PRI would win an election for the first time: a 1% increase in the proportion of migrant households in a municipality was estimated to raise the probability of an opposition party victory in a hitherto continuously PRI-ruled town by more than 0.5% (Pfutze, 2012). In addition, the paper showed that high levels of migration were a powerful predictor of an earlier opposition victory: a 1 percentage point upsurge in the share of migrant households lifted the likelihood that a municipality had a non-PRI government before 1994 or 1997 by 1.7% and 3.4%, respectively (Pfutze, 2012). Also, a later paper confirmed the possibility that economic remittances can reduce support for the incumbent (Pfutze, 2014).

Recent analysis by Ciornei and Østergaard-Nielsen (2020) highlights the role of democratic institutions in influencing the decision of emigrants to participate in the elections of their country of origin. The study found that transnational turnout is moulded by both political and institutional contexts (Ciornei and Østergaard-Nielsen, 2020). It argues that emigrant communities from developing democracies experience a sharp political learning curve that leads to their participation in the politics of their home country, particularly if they live in countries with solid democratic practices and established connections with their homelands. Most importantly, the study showed that, besides being an indicator of commitment to family back home, remittances also increase the levels of expatriates' involvement in the home country's politics. Moreover, the effect of remittances remains notable after controlling for the number of economic activities between the home and the host society. Arguably, this finding proves that the link between remittances and turnout is not solely a sign of broader transnational participation, but is also an important determinant in itself (Ciornei and Østergaard-Nielsen, 2020). The paper exploited a dataset covering the aggregate turnout of emigrant citizens from 25 countries of Europe, Africa and Latin America. Although the researchers started with 100 countries, data on elections



held between 2009 and 2016 were found for 27 countries, and full data – with explanatory variables – were only available for 25 countries.

Regarding the nexus between the governing party and remittances, by drawing on a four-wave panel study of Kyrgyz citizens between 2010 and 2013 and a cross-sectional sample of 28 countries of Central Eastern Europe, the Caucasus and Central Asia, Tertytchnaya et al. (2018) revealed how remittances could induce fluctuations in support for the incumbent in developing countries. Specifically, the researchers expected a positive correlation between remittances, on the one hand, and economic evaluations and incumbent approval, on the other: they showed that when people experience a decrease (increase) in remittances, they become less (more) satisfied with their household's economic situation and pin responsibility on the party in power. Their reasoning confirmed the analysis of economic voting, which emphasizes "the importance of pocketbook assessments for incumbent approval" (Tertytchnaya et al., 2018:3). It is argued that voters judge the incumbent government's achievements on the weight of their purses, but those who receive remittances "may be rewarding or punishing incumbents at home for economic developments abroad, in remittance sending economies, that are largely outside of the incumbent's control" (Tertytchnaya et al., 2018:3). The authors bolster the external validity of their judgements by enriching their analysis with cross-national data from the 28 countries of Central Eastern Europe, the Caucasus and Central Asia covered in the 2010 European Bank for Reconstruction and Development (EBRD) *Life in Transition* surveys. The results of the analysis strongly support the main theoretical claim by establishing a strong connection between variations in remittances, economic evaluations and incumbent endorsement.

Intriguingly, Campello and Zucco (2016) explored the idea, in the Latin American context, suggested by Kramer (1971) regarding economic voting: that voters sometimes do not recognize the situation in which economic performance is determined by factors beyond government control. Similarly, remittance flows could be seen as an exogenous factor, beyond government control, that could improve or damage voters' assessments of presidential performance, thus determining the outcome of the election (Tertytchnaya et al., 2018). Moreover, an analysis of the Serbian context shows how remittances are pro-cyclical (Lerch et al. 2007), i.e., they tend to increase with wage rises and tend to slow down in times of higher unemployment in Serbia. One explanation might be that more remittances are sent in periods of relative prosperity (Lerch et al., 2007). The other rationale, however, would suggest that remittances themselves lead to this higher prosperity (Jovicic and Dragutinovic Mitrovic, 2006). Specifically, if the

living standards of people in Serbia depend on the level of remittances, then a higher inflow of remittances means higher living standards and, according to the logic of economic voting, implies an increase in voter turnout (Verba et al., 1995).

Escribà-Folch et al. (2015) suggested that remittances stimulate democratization in dictatorships. Similarly, using data from 133 developing countries for 1972–2012, Deonanan and Williams (2017) found that remittances from abroad enhance the quality of democratic institutions in those developing countries.

All in all, the effects of financial flows on election participation depend heavily on the observed socio-demographic and political characteristics of both the countries of origin of the remittances and their destination. Consequently, remittances could increase voter turnout in the homeland communities by improving the engagement of residents in political decisions. By contrast, in some countries and communities the opposite occurs: the remittances satisfy the essential needs of the receiving communities, making them disengaged from politics and more dependent on remittances from abroad.

In light of the above, this study expects to position the Republic of Serbia somewhere between the two opposing outcomes in terms of the effect of remittances on voters' participation. Due to the great socio-demographic and socio-economic diversity at the municipality level, the paper expects significant variation from one municipality to another in both the size and the nature of the association between remittances and voting.

## RESEARCH HYPOTHESES

The substantial financial flows sent by migrants may challenge the state as an exclusive welfare provider. Previous studies, albeit in the context of Mexico, confirm this (Goodman and Hiskey, 2008; Germano, 2013). In contrast, those who do not have a household member working abroad, especially those from economically deprived municipalities, must enter into regular contacts and establish political relations with the local administration and bureaucrats in order to acquire certain goods and benefits or, in the event of economic problems, aid.

This paper argues that the negative impact of remittances on voter turnout is more powerful where emigration patterns are historically rooted in municipality development, because financial remittances constitute the lion's share of GDP per capita and because international migration has become the only feasible way to survive for increasing numbers of households (Burgess, 2012). The argument behind this is that remittance beneficiaries have fewer incentives

to hold state authorities responsible, since they no longer depend on the state for assistance (López García, 2018). Consequently, those municipalities where remittances generate a significant percentage of GDP per capita are likely to have a significant portion of the country's remittance-dependent population, and that population is likely to be politically passive. By contrast, those people who are not recipients of financial inflows from abroad will take more interest in politics, and turnout will be higher among them.

Briefly, then, remittances may reduce the incentive for recipients to vote, because they no longer have to rely on local government assistance. In light of this, the study expects a negative effect of remittances on electoral participation.

Thus, I propose the following hypothesis:

*H<sub>0</sub>: Voter turnout is lower in municipalities with higher remittance inflows as a share of GDP per capita.*

Also, knowing how workers' remittances can improve democratic institutions back home (Deonanan and Williams, 2017) and challenge dictatorships (Escribà-Folch et al., 2015), one cannot exclude the alternative hypothesis:

*H<sub>a</sub>: Voter turnout is higher in municipalities where the inflow of remittances accounts for a higher share of GDP per capita.*

## LIMITATIONS

Given the ongoing difficulty of properly recording the outflow of emigrants from, and the inflow of remittances to, Serbia, it is a problem to gain much insight into the past, present and potential future roles and functions of remittances. Although Serbia is characterized by a specific economic and political emigration context and has plenty of its citizens abroad, the database has its limitations (Penev and Predojević-Despić, 2012). The main reason – the lack of trustworthy sources of migration data – largely arises from the complex character of this demographic component (Nikitović et al., 2015). Furthermore, according to Nikitović et al. (2015), comparison of the census data against the immigration statistics of destination countries (so-called mirror statistics) revealed that the 2002 census, and particularly the 2011 census, both underestimated the number of emigrants from Serbia. The foreign registers and statistics are based on the criterion of an individual's nationality, not ethnicity. And additional problems are posed by the frequent changes in the name of the state and its territory: first Yugoslavia, then Serbia and Montenegro, and finally the Republic of Serbia (Penev and Predojević-Despić, 2012).

Since the Republic of Serbia does not have adequately efficient legislative mechanisms to encourage Serbian citizens to deregister their residency when they plan to go abroad for a longer spell, the official statistics on migration streams do not really cover the cross-border migration of Serbian citizens, and we can only trace this mobile group of people through the census (Nikitović et al., 2015). Therefore, this study uses only official data obtained from the Statistical Office of Serbia, and only the data referring to that portion of the population temporarily residing or working abroad that still possesses Serbian citizenship. Finally, the census definition of those persons 'working, staying abroad' includes persons working for a foreign employer; persons working abroad in their own workshop or office; persons working as crew members of foreign ships and aircraft; and persons residing abroad as family members of those persons working abroad, listed previously.

Unlike all previous censuses, according to the methodology of the 2011 survey, the contingent of persons working and staying abroad includes persons studying abroad, provided they do not return daily or weekly to Serbia, as well as persons who are living abroad for some other reason (Stanković, 2014).

Importantly, the supplementary census forms for those people working and living abroad, which, with minor variations in organization and methodology, were used in the 1981, 1991 and 2002 censuses, were abandoned in 2011 for lack of financial resources. Therefore, the basic source of information about this emigrant contingent were those members of their household left in Serbia if, of course, they were present at the time of enumeration. Basically, in order to emphasize that the majority of migrants recorded in the census are in regular contact with their families back home and have a deep-rooted connection to their municipality of origin, this paper still uses the term 'temporary', even though this practice has been largely abandoned in recent decades (Stanković, 2014). Arguably, the temporary nature of migration increases the motivation to remit money (Merkle and Zimmermann, 1992).

Furthermore, the decline in the number of the temporarily absent population in the 2011 census would probably have been somewhat smaller, had more Albanian migrants been included from the municipalities of Bujanovac and Preševo, where the Albanian population boycotted the 2011 census (Stanković, 2014).

Also, due to the inability of the Serb authorities to conduct the census across the whole territory of the country, the following tables and graphs do not contain data related to the Autonomous Province of Kosovo and Metohija.

Finally, regarding data on financial remittances, it is important to emphasize some limitations that are embedded in the chosen approach to their estimation. Namely, the paper uses data from Petree and Baruah's 2006 study, which

surveyed 343 migrant-sending households in two rural regions of central and eastern Serbia. Given that the survey was carried out only in agrarian provinces, the data are confined to the perceptions of rural families that were in receipt of remittances from Switzerland (Petree and Baruah, 2006). Thus, the differences between regions regarding both volume and frequency of financial streams were not accounted for. Furthermore, the household survey was conducted over eight weeks, from the beginning of February to the end of March 2006, i.e. they do not offer a realistic picture of patterns of remittance for the whole of the period that this paper covers, but provide only a snapshot of remittance flows. Also, while our model assumed that the level of remittances was stable across the time period observed (adjusted only for the size of the household between two successive censuses), the World Bank estimated that remittance flows to developing countries declined by 23% (on average) between 2008 and 2009 (Tertytchnaya et al., 2018), and in the case of Serbia they increased. Finally, by adopting this method of calculation, the study expected a decline in the significance of remittances, as a consequence of the economic development of Serbia (i.e. an increase in its GDP).

## DATA

The data used in the analysis came from official state sources (*Table 3*). Information on electoral participation rates and electoral outcomes was collected from the Statistical Office of the Republic of Serbia (<https://www.stat.gov.rs/sr-Latn/oblasti/izbori/predsednicki-izbori>). Data on the socio-demographic structure of the population in selected municipalities and on the population temporarily abroad that has registered (permanent) residence in the territory of Serbia, and citizenship of the Republic of Serbia, were obtained from the population censuses conducted in 2002 and 2011 by the Statistical Office of the Republic of Serbia (<https://www.stat.gov.rs/sr-Latn/oblasti/popis>). Due to methodological and practical difficulties in collecting data on the volume of remittances to Serbia, the only foreign source of data used in the paper was a study concerning the remittance corridor between Switzerland and Serbia.

Because municipal-level data on international migration and demographic indicators were gathered by population census every ten years, the cross-sectional nature of the data is not going to limit the study. Thus, the paper utilizes panel data analysis – i.e., a random-intercept or so-called unified model (Bartels, 2009) – in order to examine the ways in which remittances affect voter turnout

rates. There is more information about the statistical method adopted in the section devoted to methodology. Finally, all estimations were conducted using the STATA 16 statistical software package.

*Table 3: Summary statistics of municipal-level variables*

Variable	Mean	Standard Deviation	Minimum	Maximum
Share of remittances in GDP, %	35.39	13.21	1.74	76.39
Share of people with higher education, %	9.69	7.39	0.48	60.56
Share of unemployed in total population, %	11.40	4.35	1.13	25.13
Urban/rural (1 for urban administrative units, 0 for rural)	0.25	0.44	0	1
Share of unmarried in total population, %	39.90	4.52	27.72	54.37
Ethnic minorities make up the majority in the municipality (1 for municipalities in which ethnic minorities make up a majority, 0 for those in which Serbs are in the majority)	0.11	0.31	0	1
Share of population abroad, %	5.57	6.86	0.19	57.50
Life expectancy at birth (in years)	73.92	2.55	69.10	80.22
Average age (in years)	42.45	3.11	29.30	55.56

*Source:* Data on the share of the unemployed, the population abroad, life expectancy at birth, average age, ethnic composition, the share with higher education, and the rural/urban division are drawn from the 2002 and 2011 census files. Data on the share of remittances in GDP per capita was calculated by the author, based on the field research of the Switzerland–Serbia remittances corridor (Petree and Baruah, 2006:36);  $n = 966$ .

To understand the causal relationship, the study examined 161 municipalities and cities. In addition to the capital Belgrade and 28 cities, the territory of Serbia consists of 145 municipalities, making 174 territorial units in total. Some units were excluded, as their administrative status changed during the observed period, and thus, it was not possible to collect the necessary data for statistical analysis. In the end, the study sample size included around 93% of territorial units, both cities and municipalities.

## VARIABLES

### THE DEPENDENT VARIABLE

**Voter turnout** This variable designates the rate of registered participation (at the municipal administrative level) in the presidential elections of 2002, 2003, 2004, 2008, 2012, and 2017 (labelled ‘*Voter turnout*’). Whereas in some municipalities,

political participation was as high as 83.8%, in others the level was as low as 5.5% (*Table 4*).

Voter turnout at the municipal level is the percentage of eligible voters who participated in an election. It ranges from 0 to 100. Further, the study is limited to presidential elections and only uses the level of participation in the first electoral round. The Republic of Serbia is an electoral democracy, and the president is elected by popular vote to serve a five-year term. Finally, all people with Serbian citizenship and over 18 years of age are eligible to vote, and their names can be found on the electoral roll.

*Table 4: Descriptive statistics of voter turnout at the municipal level, 2002–2017*

		(%)
Statistics	Value	
Number of observations	966	
Standard Error	−0.34	
Median	54.90	
Mean	53.64	
Deviation	10.87	
Variance	118.25	
Kurtosis	4.23	
Skewness	−0.48	
Minimum	5.55	
Maximum	83.87	

Source: Statistical Office of Serbia (<https://www.stat.gov.rs/en-us/oblasti/izbori/>)

Generally, there are two reasons why researchers use the vote as a form of political engagement. First, voting is a form of participation that is defined as being highly accessible to the average citizen: it requires a low investment of resources, both time and money, unlike other forms, such as party activism or protests. Second – and a more practical reason –, it is the only form of political engagement in the Republic of Serbia for which official data exists.

## INDEPENDENT VARIABLES

**Remittances** The size of the remittance (labelled '*Share of remittances in GDP*') was based on an evaluation provided by Petree and Baruah's (2006) field research: an estimated CHF 4,600 per year to individual households in Serbia (Petree and Baruah, 2006:36). This research, within the remittance corridor be-

tween Switzerland and Serbia, using a sample of agricultural household types (343 households), showed that almost all the surveyed families in Serbia that had sent family members abroad received remittances (91%). Almost half of the surveyed households (40%) had been in continuous receipt of remittances for 20 years, and on average those remittances accounted for 40% of the income of recipient families (Petree and Baruah, 2006). Using the average exchange rate in 2018, the annual average value of the remittances was EUR 4,426 per recipient household. I then divided that sum by the average number of household members, based on census data from 2002 and 2011. Finally, this figure was used to calculate the share of remittances in the GDP per capita of a particular municipality. Further, the share of remittances in the municipality's GDP is calculated based on the trend observed from 2002 to 2011. Namely, after splitting the difference in the value of remittances between 2002 and 2011 by the number of years between the two observed points (9), the study managed to calculate the share of remittances in the municipality GDP for every election year, by filling the rest of the values for election years 2003, 2004, 2008, 2012 and 2017 through interpolation. The municipality GDP per capita was obtained from the Statistical Office of Serbia, separately for 2002 and 2011 (<https://www.stat.gov.rs/sr-Latn/oblasti/nacionalni-racuni/regionalni-podaci>).

It is extremely difficult to gain an accurate assessment of the financial stream to Serbia. Official figures published by the National Bank of Serbia and the International Monetary Fund have drastically underestimated the total flow, due to the large portion of remittance transfers made through informal channels, which are difficult (if not impossible) to estimate. As an illustration, the National Bank of Serbia estimates that about 550,000 people send remittances; the official data suggest that, on average, these amount to about EUR 6,500 annually. Meanwhile, the former minister of diaspora and religion confirmed in the media that the volume of remittances in 2009 was about USD 5 billion, and that, on average, each member of Serbian society gets a bonus of about EUR 780 from abroad (Bobić, 2009). Back in 1972, Ivo Vinski (1972) calculated the average guest worker's economic remittances to Yugoslavia. He found that, on average, a Yugoslav worker in Germany produced a net monthly worth of 1,250 Deutsche Mark (DM), of which he or she remitted DM 265 back home; this worked out at DM 3,180 per year (Vinski, 1972).

**Population temporarily abroad** The second independent variable is the share of the population temporarily abroad (labelled '*Share of population abroad*'). This is the proportion of the total population of the municipality (according to the census results) that is working or studying abroad. It reveals the relative (numerical) importance of the observed emigrant contingent in the municipalities.



Although this definition has limited the pool of possible remitters and excludes many of those who regularly remit money to family and friends, this very mobile group of remitters has still maintained the narrative of return, by making financial flows consistent over time (Bauböck, 2003; Sinatti, 2011; Silva, 2014; Gherghina and Propeanu, 2020).

**Age** In addition to education, age (labelled '*Average age*') is one of the primary socio-demographic characteristics of the population. This study explores the influence of the age structure of the respective municipalities, using the average age of municipality residents. The average age was calculated by dividing the total sum of their ages by the number of people in the municipality.

Differences in age-specific voting behaviour are becoming more and more significant, making it an issue of growing importance to both social and political scientists. It can contribute to our understanding of the participation of older people and their impact on election turnout and political outcomes (Goerres, 2009; Vanhuyse and Goerres, 2011). Thus, the importance of introducing an independent variable that captures the impact of ageing on voting patterns is immense. The average age of those who are temporarily resident abroad is 34.7 years, which makes them considerably younger than the resident population, with its average age of 42.2 years (Stanković, 2014); meanwhile, the average age of eligible voters is around 47, according to the results of the last census.

**Education** The share of people with higher education (approximately 15–16 years of education) in the population of the municipality aged over 15 (labelled '*Share of those with higher education*'), serves as an indicator of the level of development. Information regarding the level of education at the municipality level was obtained for the census year, and was then calculated for each election year (in the same way as in the case of remittances). According to the development theory, marginalized or deprived people are less likely to vote than their more educated compatriots. Thus, better education leads to an increased propensity to vote (Kaplan and Venezky, 1995). Consequently, the study argues that economically developed municipalities, with a more-educated population, will record higher voter turnout. Arguably, individuals with higher education are more involved in political activities than are those with less education (Verba et al., 1995; Franklin, 2004; Schlozman et al., 2012).

**Minority** Of the 161 municipalities in the Republic of Serbia that were observed in the course of this study, 17 had an absolute or relative non-Serbian majority in both censuses (labelled '*Minority/majority*'). Knowing the political role of ethnic minorities is essential for their integration into any community; thus, by using this categorical variable ('1' for a municipality where the non-Serbian

ethnic group is in the majority and '0' if Serbs make up the majority), the research will be able to control for the effect of ethnic composition on voting behaviour. Since the study examined only presidential elections, it was expected that there would be a notable voting gap between the participation rate of the majority and the minorities. I based this assumption on the recent history of inter-ethnic disputes (Bosnia and Kosovo wars) between Serbs, on the one hand, and Albanians and Bosniaks, on the other.

**Unmarried** By using a variable regarding the proportion of those who are not married (labelled '*Share of unmarried*') in the population aged over 15 years, the study intends to explore the existence of a marriage gap in voting behaviour. It is important to note that this group of unmarried people includes both those who have never been married and those who have been married at some point (divorcees, widows and widowers). According to Nicholas and Raymond Wolfinger (2008), married people are more likely to vote than those who have never been married. Similarly, Denver (2008) has found evidence that single, divorced, or separated people had a lower turnout ever since the 1970s in Britain. Finally, the 2016 CNN Exit Poll found that the marriage gap is more telling than the gender gap (CNN Exit Poll, 2016).

**Life expectancy** Research suggests that public health (labelled '*Life expectancy at birth*') is also relevant socially and politically at the aggregate level: various studies have explored the interconnection between health and voting. Using the National Longitudinal Study of Adolescent Health and the General Social Survey, Pacheco and Fletcher (2015) found that people who self-reported excellent health are more prone to vote.

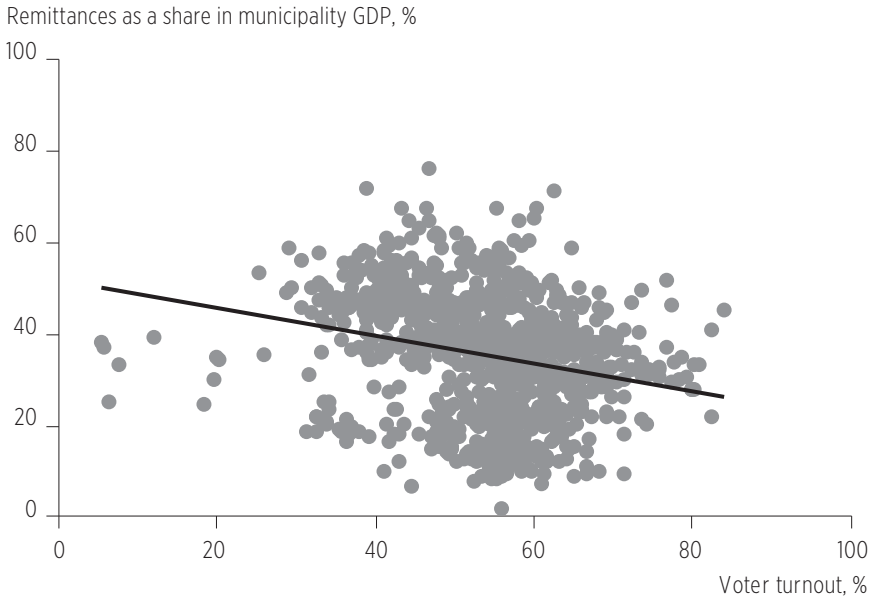
**Unemployment rate** The unemployment rate (labelled '*Unemployment rate*') represents the share of those without a job in the population aged over 15. The study expects to find that higher unemployment rates motivate voters (Cebula, 2008, 2017).

**Urban/Rural division** The paper uses a categorical variable (labelled '*Urban/rural*') where '1' is for an urban municipality and '0' for a rural municipality; this is used here to identify any rural-urban voting gap. Although previous literature was vague about the relationship between urban/rural residence and voting turnout, and about the fact that rural areas have more moderate levels of education and income, the study expects to find lower levels of turnout in rural municipalities.

## METHODOLOGY<sup>1</sup>

Since the study expects the share of financial remittances in the municipality GDP per capita and voter turnout to have a linear relationship (i.e., be related in such a way that their values form a straight line when plotted on a graph; see *Figure 1*), the study will utilize a linear random-intercept model (maximum likelihood – ML). Because this model is a simple random-intercept model fitted by ML, I am going to use the ‘xtreg’ Stata command with the ‘mle’ option.

*Figure 1: Correlation between voter turnout rates and remittances as a share in municipality GDP*



Source: Author's calculation.

By using a multilevel modelling setup, we introduce the issue of unobserved heterogeneity in the following equation format:

$$Y_{ij} = \beta_{0j} + \beta_1 X_{1ij} + \beta_2 X_{2ij} + e_{ij} \quad (\text{Level-1 equation})$$

$$B_{0j} = \gamma_{00} + \gamma_{01} Z_{1j} + u_{0j} \quad (\text{Level-2 equation})$$

<sup>1</sup> This section is based on Bartels (2009).

In panel data,  $i$  represents measurement occasions and  $j$  represents individuals or municipalities. Two variables,  $X_{ij}$  and  $X_{2ij}$ , are fitted at level 1. For our dataset (i.e., panel data), these are time-varying variables.  $Z_{ij}$  is a time-constant level-2 variable that is a municipality-specific variable in our dataset and  $e_{ij}$  represents the level-1 error. Finally,  $u_{0j}$  represents unobserved heterogeneity across clusters, and there are three general paths available for treating it: ordinary least squares (OLS), fixed effect (FE), and random effect (RE) (see Bartels, 2009).

The statistical approach used in this study is the so-called unified statistical model. This simple but efficacious procedure can solve a considerable number of statistical problems associated with other statistical models, while keeping their positive aspects. The strategy resolves interpretation problems if one assumes that the within- and between-cluster effects are equal; it accounts for unobserved heterogeneity; it satisfies the assumption that the level-1 variables should be uncorrelated with the random effects term; it allows for the introduction of level-2 variables; and finally, it permits statistical tests of cluster confounding. Finally, to account for dynamics in the panel data, I added within-cluster operationalization of the lagged dependent variable (i.e., voter turnout) at the municipality level. Arguably, it represents how, for a given country, past values of the dependent variable influence current values. Furthermore, the lagged dependent variable models are a statistical tool that helps to understand the dynamics of politics (Keele and Kelly, 2006).

## RESULTS

The results are presented in *Table 5*. The total number of observations has been reduced from 966 to 805 because of the creation of a lag variable for the past values of voter participation rates that eliminated one observation per municipality. First, one can see that the within-municipality lag of the vote exhibits a statistically significant effect: i.e., for a given municipality, higher voter turnout in the previous election implies 0.25% lower election participation in the subsequent one. Consequently, one can infer that the level of election participation in the earlier election damages current voter turnout. Thus, by choosing non-participation, voters express their dissatisfaction with the existing political situation or the current presidential candidates. By choosing not to cast their ballot, they send a message to the current political actors.

Moving on, remittances have an effect at a 0.05 alpha level both between municipalities and within a municipality. In the 'Absolute difference' column of the table, one can find the results for the test of cluster confounding, suggesting that the difference between these two effects is statistically significant. Because the within-municipality effect is greater, the results should be interpreted in the following way: for a given municipality, as the share of remittances in GDP increases over time by 1%, so voter turnout falls by 0.42%. Here, the opposite sign in both the between- and within-municipality (i.e., time-series association) requires more attention.

First, in order to provide more precise results, and since the coefficient of correlation is higher for the time-series analysis, one should interpret the results as a time-series association. One should not forget that a cross-section represents just a snapshot of a single point in time, which is useful for comparing and analysing the effect of different factors on one another; meanwhile, a time series involves repeated sampling of the same data over time and – unlike cross-sectional data, which provide essentially just a slice of a time series, – allows a researcher to make more credible causal assertions.

*Table 5: Results of a linear random-intercept model (maximum likelihood) of voter turnout (for the 2002, 2003, 2004, 2008, 2012 and 2017 elections)*

	Between-municipality effect			Within-municipality effect			Absolute difference (within-between)		
	Coef.	SE	p	Coef.	SE	p	Coef.	SE	p
Voter turnout (t-1)	–	–	–	–0.25	0.04	0.00	–	–	–
Share of remittances in GDP	0.31	0.09	0.002	–0.42	0.08	0.00	0.29	0.09	0.001
Unemployment rate	–0.01	0.12	0.93	0.16	0.16	0.30	0.13	0.19	0.48
Share of population temporarily abroad in total population	–0.43	0.06	0.00	–0.84	0.27	0.002	–0.17	0.25	0.49
Average age	0.05	0.17	0.78	0.70	0.49	0.15	–0.06	0.47	0.90
Share of people with higher education	–0.07	0.08	0.38	0.83	0.24	0.00	–0.54	0.22	0.013
Share of unmarried in the total population	–0.26	0.18	0.15	0.10	0.30	0.73	–0.006	0.32	0.98
Life expectancy at birth	0.43	0.38	0.24	0.03	0.33	0.92	0.40	0.49	0.41
The ethnic minority makes up the majority in the municipality	–3.15	1.21	0.009	.	.	.	.	.	.
Urban/rural division	–0.38	1.03	0.71	.	.	.	.	.	.
Regions:									
North (2)	7.30	2.17	0.001						
West (1)	1.73	1.01	0.09						
Number of observations		805							
Model ( $X^2$ )	469.30,	p<0.001							
Rho		0							

In *Table 6*, I present the correlation between voter turnout and remittances for every election year and region. Just a glance reveals that a positive (i.e. direct) correlation was recorded in the majority of election years.

*Table 6: Correlation between voter turnout and remittances inflow for every election year and region*

	Coef.	Robust SE	95% CI		p	t
			LL	UL		
Share of remittances in GDP						
2002	0.01	0.04	-0.08	0.10	0.84	0.20
2003	0.05	0.04	-0.03	0.15	0.25	1.16
2004	-0.11	0.04	-0.21	-0.02	0.01	-2.56
2008	0.08	0.07	-0.05	0.22	0.24	1.17
2012	0.34	0.09	0.15	0.53	0.00	3.62
2017	-0.06	0.10	-0.26	0.13	0.53	-0.62
Regions		2.55	69.10	69.10	69.10	80.22
South-East	-0.24	0.05	-0.36	-0.13	0.000	-4.26
West	-0.43	0.05	-0.55	-0.32	0.000	-7.65
North	-0.14	0.04	-0.23	-0.06	0.001	-3.46

Notes: CI = confidence interval; LL = lower limit; UL = upper limit.

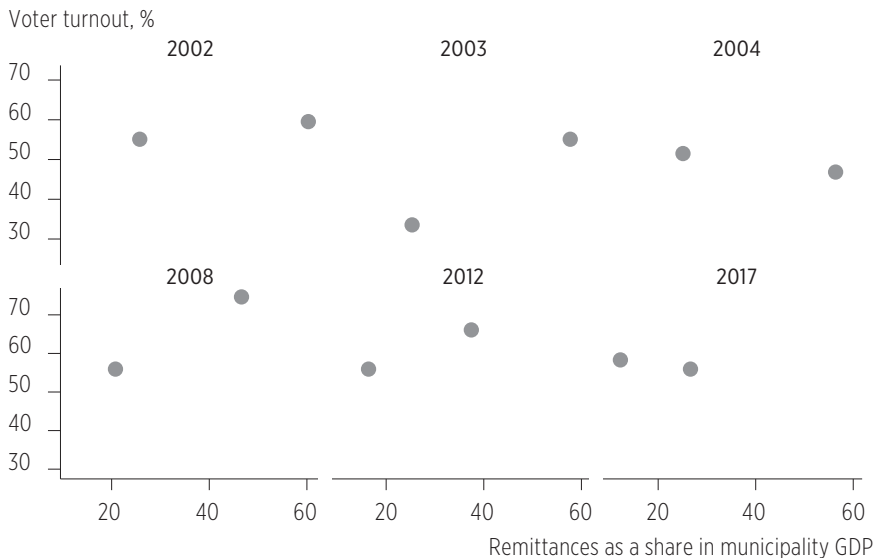
The correlation between the inflow of remittances and turnout was positive in the 2002, 2003, 2008 and 2012 Serb presidential elections, whereas in 2004 and 2017 the sign of the correlation across municipalities was negative. Although, the study records a negative association on the regional level for all periods, by separating the analysis for each election cycle, the paper is able to demonstrate a direct (i.e. positive) association between election participation and share of remittances in municipality GDP.

The positive sign of the cross-municipality association between voting and remittances is due to a combination of two elements. First, there are election-cycle effects, which in some years cause the participation of the electorate to be higher or lower. A good example is so-called voter fatigue – i.e. when those eligible to vote are asked to do so too often, which could be the reason for abstention (Germano, 2013). Four presidential elections were held in the Republic of Serbia between 2002 and 2008. Also, in the Serbian context, the maximum values – recorded in the 2008 and 2012 elections – are closely connected to the implementation of new methods of political campaigning, adopted by the marketing agencies, featuring extensive use of opinion polls and surveys. Last but not least, of some importance is the support for a particular presidential candidate that came from foreign political institutions or prominent figures in the election run-up to the elections (EU, US or Russian presidents, etc.).

Second, the magnitude of the positive association in 2012 is greater than the negative effects recorded in both 2004 and 2017. And the negative time-series association between voting and remittances is weaker for 2017 than for 2004 (Table 6). Importantly, the fact that the magnitude of the negative cross-municipality association between election participation and the share of remittances in GDP is falling is good news for politicians, since it reduces the effect of this exogenous factor (over which they have little or no control). Both elements jointly produce a positive sign in the cross-municipality association between voting and remittances, while for each region the association in the time dimension is negative.

As a graphical illustration, Figure 2 presents the correlation between voting and remittances for a municipality that belongs to a developed region labelled 'North' (id=1) and a municipality from the 'South' region (id=144), which is characterized by a higher share of remittances in the municipality GDP. One can easily see how, for 2002, 2003, 2008, and 2012, the higher values of remittances are associated with higher values of voting turnouts.

Figure 2: Voter turnout rates and share of remittances in municipality GDP for two selected municipalities, by election year



Source: Author's calculation.

Also, the share of the population temporarily abroad exhibits an effect both within and between municipalities at the conventional level of significance. Since

the time-series coefficient of association is almost twice as high as the cross-sectional coefficient, one can interpret the result in the following way: for a given municipality, as the share of the total population that is temporarily resident abroad increases over time by 1%, voter turnout decreases by 0.84% (see *Table 5*).

The next predictor to exhibit a statistically significant effect was the share of people with higher education. According to the results, for any given municipality, as the proportion of the total population with higher education increases over time by 1%, voter turnout also increases by 0.83% (see *Table 5*).

Of the two level-two variables whose inclusion allows the selected statistical model to be used, only the ethnic composition of the municipality shows an effect at the 0.05 alpha level: if ethnic groups other than Serbs make up a majority in the municipality, one can expect political participation in the presidential election to drop by 3.15% on average (see *Table 5*), compared to those municipalities where ethnic Serbs are the majority.

Finally, we added a categorical variable for regions in Serbia in order to check whether there is a difference between regions in terms of voting behaviour. The study separates the Republic of Serbia into three different regions. The first, labelled the 'North' region, is the most prosperous part of the country and includes the capital, Belgrade. The 'West' is the label for the Western region of Serbia, which is much less economically developed than the North. And 'South' indicates the South-East region, which is the least developed and has the greatest share of people living abroad temporarily and the highest percentage of financial remittances in GDP. Furthermore, the South-East region is selected as the base value, against which voter participation rates are compared, after controlling for the regions. According to the results presented in *Table 5* above, the North has a statistically different voter turnout rate that is 7.3% higher than in the South.

Regarding model fit, a small value for the likelihood ratio (LR) test ( $H_0$ : Level-2 Error=0.46930,  $p<0.001$ ) does not totally support specification of the random-intercept model over a completely pooled approach. Furthermore, rho is equal to 0, which indicates that there is no variation induced by between-municipality differences, so the municipality-level terms will be very close to one another; in OLS, they are required to be exactly equal, so there is little difference between using OLS and a linear random-intercept model. Although preferred by many researchers because of its simplicity, unfortunately, the nature of the OLS method means that the interpretation of the effects is not precise – i.e., one is not able to break down the effects on the 'between' and the 'within' components. Consequently, the superiority of the linear random-intercept model (maximum likelihood) with decomposed effects makes it the first choice for interpreting the results.



## DISCUSSION

The results of the linear random-intercept model (maximum likelihood) with decomposed effects for the entire period (2002–2017), as presented in this paper, showed that municipalities with a higher share of financial remittances in their GDP recorded a lower level of electoral participation. Furthermore, by including additional socio-demographic and socio-economic variables, the model results informed us of additional factors that shaped voting patterns in the Serbian presidential elections from 2002 until 2017.

Based on the results, one can accept the null hypothesis that remittances from abroad make those who have stayed behind more indifferent to political participation. This finding is in line with that of Burgess (2012), who suggested that the damaging effect of remittances on voter turnout is stronger where emigration practices are historically rooted in municipality development, because financial remittances make up the lion's share of GDP per capita and international migration provides the only possibility many households have to survive. Arguably, remittance recipients have less motivation to hold political leaders to account, because they no longer depend on state-provided assistance (Goodman and Hiskey, 2008; Germano, 2013; López García, 2018).

Importantly, the paper identified the fact that those municipalities where a higher proportion of the total population was temporarily resident abroad had a lower level of election participation. Here, the result tallies with Kostelka's (2016) argumentation that emigrants are less influenced by government policy in their country of origin (since they pay taxes abroad) and consequently feel less concerned about the outcome of the election; this, in turn, reduces the benefits and increases the costs of voting.

Furthermore, the analysis shows that the share of educated people had a significant effect on the level of voter turnout only within a municipality. Arguably, the positive sign for the correlation between voter turnout and level of education is in line with assumptions regarding the logic of development theory. Consequently, a high level of education promotes increased election participation (Kaplan and Venezky, 1995), since people with higher education are more engaged in political activities than are those with fewer years of schooling (Verba et al., 1995; Franklin, 2004; Schlozman et al., 2012).

The opposite sign of association was observed for the ethnic structure of the municipality's population. This is not surprising, if one is aware of the history of inter-ethnic relations in Serbia, especially in municipalities with an Albanian majority. One of the three municipalities where the Albanian ethnic group is

numerically dominant recorded the lowest ever turnouts: just 5.86% in 2004 and 7.68% in 2008.

## CONCLUSIONS

By employing a municipality-level research strategy, the study found that one consequence of the extensive out-migration – alongside population ageing – is that remittances affect the level of election participation in the Republic of Serbia. Given the strongly negative effects of both emigration and the proportion of ethnic minorities in a municipality on election participation, the paper offers additional value by enabling the identification of fresh avenues for future research into turnout fluctuations within multi-ethnic emigrant-sending countries.

The evidence corroborates arguments contained in previous literature that the existence of an additional household income may reduce the propensity of recipients to vote. The logic behind this – in the case of Serbia – is dictated by improvement in the economic situation (formulated in this research as GDP per capita). It is conceivable that, during the 2012 and 2017 presidential election cycles (i.e., after the 2007–2008 global financial crisis), GDP per capita increased and, consequently, reduced the median value of the share of remittances in GDP per capita from 47.01% to 31.73% since the previous period.

Subsequent studies should further investigate how the connection between remittances and voter turnout varies according to destination country (e.g. the West–East distinction; democratic and non-democratic states; geographical proximity to the homeland; etc.). They should also look at how low voter turnout could cast a shadow over the mandate of an elected candidate (Rosema, 2007) and open the door to democratic – but, more likely undemocratic – alternatives and solutions.

The evidence suggests that there is more to the remittance story than just the effects of development. While poverty reduction, an increase in everyday consumption and health benefits are certainly the main positive effects of these long-lasting financial remittances, researchers and policymakers should not neglect the negative aspects of cash inflows. Carl Schierup (1973) identified some of these negative effects in rural Serbia. For example, young people started to disdain both agriculture and jobs in the public sector, finding that such jobs did not pay enough to satisfy their new consumption needs and patterns. Even marriage behaviour altered, as girls started to prefer the sons of emigrants, who pos-

sessed Western goods (Schierup, 1973). These findings revealed the onion-like layers of transformations that remittances have on recipient societies, with their potential to polarize the social structure.

Finally, it needs to be said that it is too early to draw any firm conclusions, as Serbian democracy is still young. Generally, the study finds some evidence that financial remittances can alter recipients' electoral behaviour; but the whole story is likely to be far more complex than that. Remittances provide security to those who receive them, without the need for government support; but this gambling strategy requires open doors around the world (Brunnbauer, 2016).

## REFERENCES

- Abdih, Y., Chami, R., Dagher, J., and Montiel, P. (2012). Remittances and institutions: Are remittances a curse? *World Development*, 40(4), 657–666.
- Ahmadv, K. and Sasse, G. (2015). A voice despite exit: The role of assimilation, emigrant networks, and destination in emigrants' transnational political engagement. *Journal of Comparative Political Studies*, 49(1), 78–114.
- Ahmed, F. Z. (2012). The perils of unearned foreign income: Aid, remittances, and government survival. *American Political Science Review*, 106(1), 146–165.
- Ahmed, F. Z. (2017). Remittances and incumbency: Theory and evidence. *Economics and Politics*, 29(1), 22–47.
- Bartels, B. L. (2009). *Beyond "fixed versus random effects": A framework for improving substantive and statistical analysis of panel, time-series cross-sectional, and multilevel data*. Society for Political Methodology. <https://home.gwu.edu/~bartels/cluster.pdf>
- Batista, C., Seither, J. and Vicente, C. P. (2019). Do migrant social networks shape political attitudes and behaviour at home? *World Development*, 117, 328–343.
- Bauböck, R. (2003). Towards a political theory of migrant transnationalism. *International Migration Review*, 37(3), 700 – 723.
- Bobić, M. (2009). Diaspora as the economic and social capital of Serbia. *Sociological Review*, 43(3), 361–377
- Borjas, G. J. (1987). Self-selection and the earnings of immigrants. *The American Economic Review*, 77(4), 531–553.
- Brunnbauer, U. (2016). Migration and economic development in socialist Yugoslavia. *Ostblog*, 3 March. <https://ostblog.hypotheses.org/728> (Retrieved July 7 2020).
- Bukvić, R. (2016). Remittances: Between consumption and accumulation. *Serbian Science Today*, 1(1), 55–65.
- Burgess, K. (2012). Migrants, remittances, and politics: Loyalty and voice after exit. *Fletcher Forum of World Affairs*, 36(1), 43–74.
- Campello, D. and Zucco, C., Jr. (2016). Presidential success and the world economy. *The Journal of Politics*, 78(2), 589– 602
- Cebula, R. (2008). Does direct democracy increase voter turnout? Evidence from the 2004 general election. *American Journal of Economics and Sociology*, 67(4), 629–644.
- Cebula, R. (2017). Unemployment and voter turnout revisited: A brief note. *Electoral Studies*, 48, 149–152.
- Ciornei, I. and Østergaard-Nielsen, E. (2020). Transnational turnout. Determinants of emigrant voting in home country elections. *Political Geography*, 78, 102145.
- CNN EXIT POLL (2016). <https://edition.cnn.com/election/2016/results/exit-polls> (retrieved 16 September 2020).
- Córdova, A. and Hiskey, J. (2019). Development context and the political behavior of remittance recipients in Latin America and the Caribbean. *Political Behavior*, 43(3), 919–948.
- Denver, D. (2008). Another reason to support marriage? Turnout and the decline of marriage in Britain. *British Journal of Politics and International Relations*, 10(4), 666–680.
- Deonanan, R. and Williams, K. (2017). The effect of remittances on democratic institutions. *Applied Economics*, 49(5), 403–416.

- Dragutinovic Mitrovic, R. and Jovičić, M. (2006). *Macroeconomic analysis of causes and effects of remittances: A panel model of the SEE countries and a case study of Serbia*. Balkan Observatory Working Papers no. 63. Vienna: The Vienna Institute for International Economic Studies.
- Escribà-Folch, A., Meseguer, C. and Wright, J. (2015). Remittances and democratization. *International Studies Quarterly*, 59(3), 571–586.
- Eurostat (2020). Statistics explained: Personal remittances statistics. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Personal\\_remittances\\_statistics#:~:text=Inflows%20of%20personal%20remittances%20have,%E2%82%AC50.2%20billion%20in%202020](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Personal_remittances_statistics#:~:text=Inflows%20of%20personal%20remittances%20have,%E2%82%AC50.2%20billion%20in%202020)
- Franklin, M.N. (2004). *Voter turnout and the dynamics of electoral competition in established democracies since 1945*. Cambridge: Cambridge University Press
- Krawatzek, F. and Müller-Funk, L. (2019). Special issue: Political remittances and political transnationalism: Practices, narratives of belonging and the role of the state. *Journal of Ethnic and Migration Studies*
- Germano, R. (2013). Migrants' remittances and economic voting in the Mexican countryside. *Electoral Studies*, 32(4), 875–885.
- Gherghina, S. and Plopeanu, A. (2020). Who wishes to return? Ties to home country among the Romanian migrants. *Nationalities Papers*, 48, 876–890.
- Goerres, A. (2009). *The political participation of older people in Europe: The greying of our democracies*. Houndmills/New York: Palgrave Macmillan.
- Gonzalez-Ocantos, E., de Jonge, C. K. and Meseguer, C. (2018). Remittances and vote buying. *Latin American Research Review*, 53(4), 689–707.
- Goodman, G. L. and Hiskey, J. (2008). Exit without leaving: Political disengagement in high migration municipalities in Mexico. *Comparative Politics*, 40(2), 169–188
- Guarnizo, L. E., Portes, A. and Haller, W. (2003). Assimilation and transnationalism: Determinants of transnational political action among contemporary migrants. *American Journal of Sociology*, 108(6), 1211–1248.
- Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. London: Harvard University Press.
- Hirschman, A. O. (1993). Exit, voice, and the fate of the German Democratic Republic: An essay in conceptual history. *World Politics*, 45(2), 173–202.
- Hiskey, J. and Córdova, A. (2012). Measuring migration connections across Latin America. In: Cuécuecha A. (ed.): *Migration and remittances: Trends, impacts and new challenges*. Maryland: Lexington Books, 165–85.
- Kaplan, D. and Venezky, L. R. (1995). *Literacy and voting behaviour: A statistical analysis based on the 1985 young adult literacy survey*. National Center on Adult Literacy, NCAL technical report TR94-14.
- Keele, L. and Kelly, N. (2006). Dynamic models for dynamic theories: The ins and outs of lagged dependent variables. *Political Analysis*, 14(2), 186–205.
- Kostelka, F. (2016). Distant souls: Post-communist emigration and voter turnout. *Journal of Ethnic and Migration Studies*, 43(7), 1061–1083.
- Krawatzek, F. and Müller-Funk, L. (2019). Special issue: Political remittances and political transnationalism: Practices, narratives of belonging and the role of the state. *Journal of Ethnic and Migration Studies*
- Kramer, G. (1971). Short-term fluctuations in U.S. voting behavior, 1896–1964. *American Political Science Review*, 65(1), 131–143.

- Krilova, N. (2009). *Political effects of remittances: Political participation in developing countries*. Doctoral Thesis, Creighton University.
- Lerch, M., Dahinden, J. and Wanner, P. (2007). *Remittance behaviour of Serbian migrants living in Switzerland: A survey*. Swiss Forum for Migration and Population Studies.
- López García, A. I. (2018). Economic remittances, temporary migration and voter turnout in Mexico. *Migration Studies*, 6(1), 20–52.
- López García, A. I. and Maydom, B. (2019). Remittances, criminal violence and voter turnout. *Journal of Ethnic and Migration Studies*, 47(6), 1349–1374.
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A. and Taylor, J. E. (1993). Theories of international migration: A review and appraisal. *Population and Development Review*, 19(3), 431–466.
- Merkle, L. and Zimmermann, K. F. (1992). Savings, remittances, and return migration. *Economics Letters*, 38(1), 77–81.
- Meseguer, C. and Burgess, K. (2014). International migration and home country politics. *Studies in Comparative International Development*, 49 (1), 1–12.
- Meseguer, C., Lavezolo, S. and Aparicio, J. (2016). Financial remittances, trans-border conversations, and the state. *Comparative Migration Studies*, 4(1), 1–29.
- Montesinos, H., Connors, J. and Gwartney, J. (2020). The transportation-communication revolution: 50 years of dramatic change in economic development. *The Cato Journal*, 40, 153–198.
- O'Mahony, A. (2013). Political investment: Remittances and elections. *British Journal of Political Science*, 43(4), 799–820.
- Pacheco, J. and Fletcher, J. (2015). Incorporating health into studies of political behavior: Evidence for turnout and partisanship. *Political Research Quarterly*, 68(1), 104–116.
- Peković, D. I. (2017). *Impact of remittances on poverty reduction: The example of Serbia*. Doctoral Dissertation, University of Belgrade Faculty of Economics.
- Penev, G. and Predojević-Despić, J. (2012). Spatial aspects of emigration out of Serbia: Three 'hot' emigration zones. *Stanovništvo*.
- Petree, J. and Baruah, N. (2006). *A study of migrant-sending households in Serbia-Montenegro receiving remittances from Switzerland*. Geneva: International Organization for Migration.
- Pfütze, T. (2012). Does migration promote democratization? Evidence from the Mexican transition. *Journal of Comparative Economics*, 40(2), 159–175.
- Pfütze, T. (2014). Clientelism vs. social learning: The electoral effects of international migration. *International Studies Quarterly*, 58(2), 295–307.
- Roberts, A. (2008). Hyper accountability: Economic voting in Central and Eastern Europe. *Electoral Studies*, 27(3), 533–546.
- Rosema, M. (2007). Low turnout: Threat to democracy or blessing in disguise? Consequences of citizens' varying tendencies to vote. *Electoral Studies*, 26, 612–623.
- Schierup, C. (1973). *Houses, tractors, golden ducats: Prestige game and migration. A study of migrants to Denmark from a Yugoslav village. Field report*. Århus: Institut for Etnografiog Socialantropologi Moesgård, Århus University.
- Schlozman, K. L., Verba, S. and Brady, H. E. (2012). *The unheavenly chorus: Unequal political voice and the broken promise of American democracy*. Princeton, NJ: Princeton University Press.
- Silva, M. (2014). Geography of belonging: nostalgic attachment, transnational home and global mobility among Romanian immigrants in Spain, *Journal of Cultural Geography*, 31(3), 326–345.

- Sinatti, G. (2011). 'Mobile transmigrants' or 'unsettled returnees'? The myth of return and permanent resettlement among Senegalese migrants. *Population, Space and Place*, 17, 153–166.
- Stankovic, V. (2014). *Srbija u procesu spoljnih migracija* [Serbia in the Process of External Migration]. Belgrade: Statistički Zavod Srbije
- Statistical Office of the Republic of Serbia (2016). Regionalni bruto domaći proizvod: Regioni i oblasti Republike Srbije, 2014 (preliminarni rezultati) [Regional GDP: Regions and districts of the Republic of Serbia, 2014 (preliminary results)]. <http://publikacije.stat.gov.rs/G2016/Pdf/G201610093.pdf>
- Statistical Office of the Republic of Serbia (n.d.). Data on elections for the president of the Republic of Serbia. <https://www.stat.gov.rs/en-US/oblasti/izbori/predsednicki-izbori> (retrieved 25 June 2018).
- Statistical Office of the Republic of Serbia (n.d.). Census of population, households and dwellings. <https://www.stat.gov.rs/sr-Latn/oblasti/popis> (retrieved 22 June 2018).
- Tertychnaya, K., De Vries, C. E., Solaz, H. and Doyle, D. (2018). When the money stops: Fluctuations in financial remittances and incumbent approval in Central Eastern Europe, the Caucasus and Central Asia. *American Political Science Review*, 112(4), 758–774.
- Vanhuyssse, P. and Goerres, A. (eds.) (2011). *Ageing populations in post-industrial democracies: Comparative studies of policies and politics*. ECPR Studies in European Political Science. Abingdon: Routledge.
- Verba, S., Schlozman, K. L. and Brady, H. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.
- Vertovec, S. (2007). Migrant transnationalism and modes of transformation. In: A. Portes and J. De Wind (eds.), *Rethinking migration: New theoretical and empirical perspectives*. New York/Oxford: Berghahn Books.
- Vinski, I. (1972). Ljudski kapitali neto product savremene jugoslovenske emigracije [Human capital and net product of contemporary Yugoslav emigration]. *Ekonomskipregled*, 23, 3–4.
- Wolfinger, N. and Wolfinger, R. (2008). Family structure and voter turnout. *Social Forces*, 86(4), 1513–1528.
- Wooldridge, J. M. (2009). *Introductory econometrics: A modern approach* (4th ed.). Mason, OH: South-Western College Publishing.
- World Bank (2016). GDP (current US\$) – Serbia. <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=RS>
- World Bank (2019). Annual remittances data (updated as of April 2020). <https://www.worldbank.org/en/topic/labormarkets/brief/migration-and-remittances>
- World Bank (n.d.). GDP per country (current US\$). <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD> (retrieved 16 June 2018).
- World Bank (n.d.). Personal remittances received (% of GDP). <https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS> (retrieved 16 June 2018).