

## UKRAINIAN LABOUR MIGRATION AND REMITTANCES IN THE EUROPEAN UNION

Wadim Strielkowski<sup>1</sup> and Lenka Šperková<sup>2</sup>

<sup>1</sup>University of Cambridge and <sup>2</sup>Charles University in Prague

**Abstract.** The remittances or money transfers set by migrants to the country of origin are considered to be one of the welfare channels with a potential to influence macroeconomics indicators. The aim of our paper is to analyse migration and remittance behaviour of Ukrainian migrants in the context of the EU. Our study is based on the questionnaire survey inspired by similar projects in Latin America and Mexico. The paper's main contribution and value-added is in the detailed analysis of the topic that distinguishes different forms of remittances using the statistical summary of the data. According to our findings, the probability and amount remitted are determined by demographic factors and the direction of effects differs in the case of regular and one-time payments. Altruism and business financing come through as the primary motives to remit. Ukrainian remittances appear to be transferred by informal channels into the productive forms of consumption. A procurement of skilled position is positively influenced by human capital factors but is also reflected in the labour market situation in the destination country.

**Keywords:** international migration, remittances, labour market, Mexican Migration Project, Latin American Migration Project, Ukraine, European Union

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### 1. Introduction

International migration has become one of the most discussed and analysed topics of the 20th century. Military turmoil, political orientation and general economic climate have all impacted its nature and brought about new waves and streams of migration while increasing the public interest in this topic. Mass inflows and outflows of migrants have shaped labour markets and performance of policies. Therefore, researchers started studying potential determinants of migration and impacts of the migration on the source and destination countries that would also contribute to developing regulatory measures and international legal framework of this phenomenon.

Since the 1950s, the situation in the Europe has been significantly influenced by the introduction of “Four freedoms” and the development of the European Integration process that has brought freedom of movement of people and workers and series of employment opportunities not only to the European Union (EU) States but also to non-EU member countries. Within Europe, the East-West stream of migration belongs to the second largest stream of the world after Latin America (sometimes Mexico)-US stream. A number of European countries play an important role in this concept as transition and destination countries for both intra-EU and international migration flows. Ukraine has a unique position in this system. It is the country simultaneously sending and receiving migrants but also the transition country on the migration way to the EU. Also, proximity to the EU borders has made Ukraine an attractive country for the study of socio-economic impacts of migration.

An interest in migration aspects has been noted among researches who strived to determine the majority of economic factors and implications for all participants. The key factor of empirical study has become data, their analysis and phenomenon observed. Remittances are one of the consequences accompanying migration that can be easily interpreted as quantitative measure. Remittance as money transfers are one of the most important channels of the wealth distribution influencing countries on both sides. The socio-economic effects and determinants can be analysed from macro and microeconomic perspective. The result of such analysis often depends on the reliability of data source and explanatory power. The advantage of macroeconomic data originating from the international institutions such as IMF, Eurostat or the World Bank is their availability. On the other side, those highly aggregated datasets derive remittance from balance of payments which captures only a formal form of remittances. The majority of remittances sent to the source country are transferred via formal and informal channels. In view of the high number of illegal or undocumented migrants, official statistics usually underestimate volume of both migration and remittances (the fact that has been acknowledged also by IMF). An alternative approach that allows capturing all channels of transfer is microeconomic research conducted on individual basis. Although listing all related publications would take up several pages of this paper, some relevant ones, e.g. Massey et al. (1997), Massey et al. (2002), Massey (2004), Donato et al. (2005), or Durand and Massey (2010) can be used as examples of this type of research on the study of migration behaviour in Mexico and Latin America (Mexican Migration Project (MMP) and Latin American Migration Project (LAMP)). Douglas Massey and his colleagues provided methodology with aspirations to capture global migration flows.

## **2. Literature review**

In recent decades the scope of interest in migration topic has changed in many ways in methodology, topic and results. Unlike the researchers in the 1970s and

their specific approach, has been an expansion of the area of interest and a shift from rural-urban migration to global migration flow models with the stress on mutual connection to development (Clemens et al. 2014). The reason reflects international development which has brought the phenomenon of globalization along with political and demographical changes together with shaping the state of migration.

Current demographic projections confirm the continual issue of aging. By 2020, the increase 17% (OECD 2014) is estimated in the retired class compared to productive population. The existence of population gap highlights the sustainability of current European public pension and social systems with increasing fiscal burden imposed on the younger generation. International migration is to be seen as a possibility to alleviate an increasing tax burden for future generation. Kirdar and Murat (2008) investigated the impact of immigration on German social system and discovered that immigrants are net contributors to the system regardless of country of origin or structure. Hung-Ju Chen, I-Hsiang Fang (2013) went further with a construction of dynamic model investigating a long-term impact on economic development. Results showed evidences of positive effects of migration on reduction of tax burden in social security area. Calibration on US data also confirmed a long-run positive impact on GDP per worker compared to closed economy. Nevertheless, there have been continuous concerns about a possible dependency of immigrants on the social system (Razin and Sadka 2000) and a negative effect on domestic labour market.

Multilateral migration's impact on economy has not been restricted to consequences in social systems. Economic theory strives to peruse the majority of possible aspects within which welfare effects, economic growth and expected impacts on labour market stand out. However, results of accomplished theoretical and empirical studies diverge both in magnitude and a direction of resulting impact. The number of dimensions of international migration is examined in Kerr (2011) where the authors provide a deep investigation of major immigration aspects including a distinct effect on host and origin countries, self-selection, assimilation of migrants and labour markets. The empirical analysis of many aspects have been studied in a number of empirical researches that differ in methodology and sample structure. Due to heterogeneity it is extremely difficult to identify "true" direction within each area. To the most complex achievements belongs the meta-analysis by Longhi et al. (2008) who compared 45 studies focusing on wages, unemployment and labour force participation. Research synthesis comprising two preceding analysis showed negligible effect on the labour market accompanied with estimations including insignificant coefficients. Acknowledging the broadness of conclusion and possible macro-level implications, the authors remark that there are limits in the case of specific market conditions, especially in the availability of detailed longitudinal data. Nevertheless, robust findings showed a strongly negative effect of recent migrants on wages of their predecessors which confirmed high substitution elasticity between them. Another stream of research strives to attain a deeper insight into factors affecting the destination country's

labour market. Firstly, there is the question of complementarity of foreign-born workers towards domestic labour supply. Another dimension of the problem includes a division of effect between highly skilled and low-skilled workers, white- and blue-collar workers. Orrenius and Zavodny (2006) investigated an impact of immigration on the level of wages among highly skilled and low-skilled workers in the U.S. Their results showed a negative impact of foreign born workers' inflow on the level of wages within the same category. Nevertheless, there was no statistically significant impact on the wage of skilled labour. Also, the impact on the wage increases with the length of the stay (considering no or very little impact of newcomers) which implies fast assimilation of immigrants and closer substitution to domestic labour force. Similar approach was adopted by Borjas (2003) with an assumption of perfect substitutes of workers within the same experience or education category. The results confirmed adverse effect on the wage. Evidences from the U.S. labour market tend to be confronted with those from the EU market. Ortega and Verdugo (2014) endeavoured to explain the disparity by comparison to the French labour market. Positive correlation found in the French case was explained by labour market specifications (and structural changes within the studied period) along with different substitutability among immigrants and domestic labour force. However, even within the EU we found diverse effects. The study of immigration into West Germany (D'Amuri et al. 2010) showed a small adverse effect on wages. The validity of the results tended to be conforming to the time period. The transition period in Central and Eastern Europe has proven to play an important role in this development. Zimmermann and Winter-Ebmer (1998) confirmed its importance in a study which showed no evidence of adverse effect in Germany compared to Austria experiencing adverse effect both in wages and unemployment. UK is to be seen as another common choice as a destination country. According to Baas and Brückner (2012), this holds true even for emigrants from Austria and Germany. EU enlargement in 2004 yielded a rather positive impact on the UK labour market rather than on Germany which is in line with conclusions of Lemos and Portes (2008) who found no evidence of adverse effect in the UK labour market. Despite possible heterogeneity of markers, comparative studies strive to discover similarities which might set a basis for further broader researches. Massey et al. (2011) challenged this task by presenting one of the first quantitative studies between Moroccans in Spain and Mexicans in the USA. Their analysis focused on the probability of getting skilled employment, the level of wage and occupational attainment based on an assessment of the level of education, age, language skills, etc. Different countries shared resemblance in the impact of the length of stay in the host country but Mexicans indicated a higher level of employment. Other findings were not distinctive and disparities intervened.

The multilateral nature of possible international migration impacts made this field of study to consider not only personal characteristics of migrants but also the macro-level implication. Links between them compose sets of non-trivial tasks including a full understanding of labour market implications. Therefore, the listed

examples of literature should serve as an overview of major fields of interest which set basis for more complex studies which might interconnect heterogeneous results into the firm unit.

### **3. Characteristics and development of the Ukrainian migration**

In order to objectively describe migration flows of Ukraine, it is crucial to introduce facts of economic development that contributed to the current state of the economy and that would help to enlighten background for migration behaviour (“push factor”).

From the economic point of view, Ukraine has undergone a long journey of economic transformation since the 1990s, which is not generally acknowledged as a finished process. The current economic state of the country is facing economic problems, unstable political environment and high energetic dependency on Russia. The recent military conflict has interrupted attempts to solve long-term problems and again hampered Ukraine’s endeavours to become a candidate state for the EU membership.

Ukraine belonged to the most economically significant countries of the former USSR. Exports to the Eastern countries consisted not only of the agricultural products, but also of diverse heavy industry. Agricultural products effectively covered almost 25% of the USSR demand. After the fall of the USSR, the Newly Independent States (NIS) emerged from the former member states of the Soviet bloc. In 1990, the transformation of economies from central planning to the “market-oriented” model began. Each of the new economies faced a dilemma with two possibilities of transformation approach. The first attitude constituted the “shock therapy” where reforms were implemented at once, followed by an adjustment period. The second approach was formed by a gradual adoption and implementation of reforms (gradualism) which required (in contrast to the first approach) a longer period of time (Westernhagen, 2002). In 1992, the Ukrainian government prepared a framework for privatization scheme and liberalization of prices. Nevertheless, the implementation of reforms was hampered by resistance and disputes within the party which resulted in the steep economic decline and drop of GDP growth for the next 3 years (Figure 1). Due to the economic downturn and political situation, two years after joining the IMF Ukraine began to cooperate with IMF on the solution in the form of assistance. Four major programs consisting of the set of reforms were accompanied by financial support. Cooperation was realized between years 1994 and 2002 and resulted in the economy recovery and uninterrupted GDP growth.

In 2004, dissatisfaction with subsequent political and economic development resulted in the Orange Revolution that again changed intra- and international political orientation of Ukraine. Nevertheless, thanks to strong consumption power, the financial and economic crisis was delayed to 2009 but it was not sufficiently strong to prevent it.

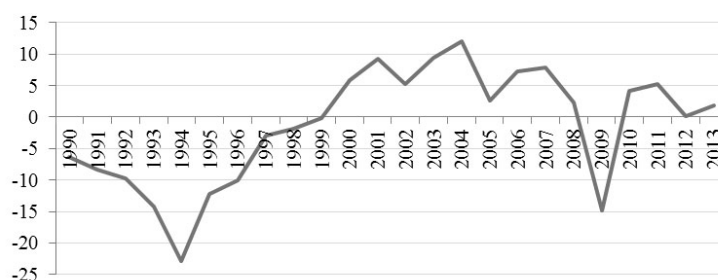


Figure 1. GDP growth in Ukraine (in %).  
Source: World Bank (2014).

The general economic situation got worse also after Russian gas supplies were reduced due to unpaid debt in the same year. International reaction of the EU and other institutions generated pressure for the government to implement necessary reforms. Since 2012 Ukraine has experienced another economic downturn caused by insufficient endeavour to implement IMF reforms.

Ukraine is an economy with an unfinished process of transformation that is facing economic and political problems. Macroeconomic indicators show very high level of unemployment that slowed down after economic crisis, but still remains high. Unfavourable economic environment did not generate enough opportunities for the skilled and highly educated labour force and business environment continues to suffer from the high corruption level and political instability. Together with regional specific problems within Ukraine, the basis for the push factor of brain drain and migration outflow was created. Subsequent development of Ukraine until 2015 also has not provided sufficient background for the situation improvement.

Not only the economic but also migration aspects have undergone development during the last 20 years that have changed their shape depending on the socio-economic, political and demographic conditions of Ukraine. After the fall of the Soviet bloc Ukraine has become the key transition country for migration flows between East and West Europe. If we include Russia into the stream, this region creates the second largest migration corridor in the world.

Ukraine has a very specific position as a migration country with significant both inward and outward migration. Description of both streams would provide exhaustive analysis which would require additional data collection.

#### 4. Methodology of the survey questionnaire

Our analysis which follows is based on the unique dataset collected in Transcarpathia district (Zakarpattya). Transcarpathia region is situated in the West corner of Ukraine and shares borders with Poland, Hungary and Romania – 3 member states of the EU. Historical development comprising Hungarian, Czechoslovak,

Slovak, Soviet and Ukrainian governments together with rich national diversification of population resulted in its proximity facilitating national movement.

The survey was carried out in April 2012 which allowed some time distance from the immediate (eventually most severe) impacts of financial crisis in 2008 and would provide perspective in the change of migration behaviour in comparison to researches carried out prior to this period. Acknowledging drawbacks of the time period which does not include panel dataset until 2014 that might present interesting results implied by 2014 Ukrainian crisis and the following conflict, a space for further research extension is thus created.

The necessity to attain reliable and detailed observations required the adoption of micro-level approach involving detailed information about households. Therefore, the informal and reliable nature of a semi-structured interview has to be adopted. For this purpose, data collection was conducted by local inhabitants who are able to adjust to the form of interview to minimize rejection rate.

The design of survey comprises ethnosurvey attitude used in MMP, LAMP, PMP and UMP projects. Size and conceptual adjustment had to be made because of survey and country differences. As opposed to LAMP and MMP projects, encompassing thousands of households originating from various regions, this survey focuses on a single region with a statistically and historically high probability of emigration. The geographical position of Latin American countries has made them prone to migration into economically stronger regions, USA and North America. Although we might find the most common destination country for Ukrainian migrants, higher objectivity and reliability of study is attained when considering the whole EU region as one area of interest. Ukraine belongs to the broadly discussed East-West stream of migration which a logical extension including the area of EU as a destination “country”.

The questionnaires were divided into subsections dedicated to a specific area of interest of the migrant or his/her family. The first part contains information about the household composition and family members (age, sex, number and age of children, marital status and years of education). The second part describes marital history of the household head. The history of migration experience within and outside Ukraine including wage provides sections three and four. Further, these sections seek information about the legal status of each household member. Labour history and the history of business ownership is followed by information about relatives and friends with migratory experience. Household equipment and vehicle and capital ownership and usage of financial service at home and abroad belong to the next section. Last but not least, there is a part dedicated to financial affairs during the last trip abroad which contains remitted amount, spending and saving structure etc. In view of heterogeneity and randomness of samples it was not possible to obtain all stated information in full length and therefore we had to account for rejection rate as well as a right not to give all information asked by the questioner. For those purposes we have focused on the key factors regarding determinants of remittances and spending structure.

## 5. Data description and summary statistics

The scope of the questionnaire design enabled us, for the purposes of this analysis, to make an insight into the detailed demographic and professional attributes of migrants which might affect their behaviour in the context of migration and willingness to send remittances. In order to find out the representativeness of selected sample, the major factor will be confronted with formal macroeconomic data survey (representing the formal stream of data). Therefore, the exhaustive content of the questionnaire is divided into relevant subsections enabling total summary of the data sample.

### 5.1. Lifecycle characteristics and human capital factors

Our survey provided a comprehensive description of demographic and personal characteristics. This section represents the main summary of descriptive statistics stemming from the collected data survey (for specifics see Appendix A).

Table 1 displays the summary statistics stemming from the initial part of the survey. The predominant majority of respondents (81%) are men. Age structure varies between 24 and 82 years. Nevertheless, considering family members and adding people living within the same household, the range expands to 2–87 years. Mean age within relevant sample is 45.43 years, median age 44 years and the highest density is between 37 and 56 years.

Contrary to LAMP and MMP projects, there is a significant difference in definition concerning years of school attendance both in theory and actual statistics in the case of EU. In order to attain universality of collected data sample we have considered ISCED classification for the duration of each stage of education attainment which is acknowledged on international level. Within data

**Table 1. Summary statistics of demographic and human capital characteristics**

	Value	Unit of measure
Personal characteristics		
Males	82	%
Females	18	%
Age	45.43	mean (years)
Single	5.5	%
Married	75.5	%
Divorced	8	%
Household (HH) size	3.42	mean (members per HH)
Human capital		
English language	74.5	%
Education	14.3	mean (years)
Secondary education	60	%
Tertiary education	40	%

Source: Own results.



**Table 2. Gender statistics**

Variable	Female	Male	Unit
Single	6.7	4.1	%
Married	75.5	75.3	%
Divorced	5.6	10.3	%
English language	76.5	72.2	%
Education	13.0	14.2	%
Secondary education	64.7	54.6	%
Tertiary education	35.3	48.7	%

Source: Own results.

sample, all respondents reached at least secondary education and 60% attained this level. The second largest group comprises respondents with university degree (tertiary education) reaching 40%.

Despite this anticipated shift in comparison with EU levels of 29.9% and 77.8% corresponding to the economic and social disparity there are 27% of migrants representing the level above master's degree (PhD or higher). With regard to knowledge of a foreign language, almost 75% of responders are able to understand English.

Family status analysis shows that 94.5% of migrants are not "single" and 75.5% are married. The minority of migrants (8%) are divorced. An average household consists of 3.42 members and almost 50% (49.5%) has more than 4 members.

**Table 3. Division of economic activities of migrants**

Primary sector	
	1-Agriculture, forestry and fishing
Secondary sector	
	2-Mining and quarrying
	3-Manufacturing
	4-Electricity, gas and air-conditioning supply
	5-Water supply
	6-Construction
Tertiary sector	
	7-Wholesale and retail trade
	8-Transportation and storage
	9-Accommodation and food service activities
	10-Information and communication
	11-Financial and insurance activities
	12-Real estate activities
	13-Professional, scientific and technical activities
	14-Administrative and support service activities
	15-Public administration and defence
	16-Education
	17-Human health and social work activities
	18-Arts and entertainment
	19-Activities of household as employers
	20-Other services

Source: Own results.

Gender division enables to discover differences in marital status. As opposed to married status which is similar for both genders and overall statistic, there is a higher proportion of single women (6.7%). We can also find a significantly higher proportion of divorced men (10.3%) than women (5.6%). With respect to education, men tend to spend almost one year more in school than women. Despite this fact, 64.7% of women finish secondary school compared to 54.6% of men. On the tertiary level statistics, the reverse situation appears with 35.3% women going to school. The general ability to speak English differs moderately with a higher proportion of women (76.5%).

The scope of research focuses on employment status and category both before and during migration. Figure 2 shows the distribution between economic sectors within the sample where we also include the category “other” including students, unemployed and retired people. The inclusion of migrants’ employment in destination countries shows that the division changes towards the domination of secondary sector followed by tertiary sector and seasonal work. An interpretation of distribution might indicate that migrants tend to choose less qualified positions than those in their former occupations. This fact is also supported by the proportion of 30% of migrants who had to change the type of job during the migration period. Unexpected developments are seasonal activities which were expected to be a more common form of employment in destination country (in comparison with similar studies).

Division into specified economic activities is presented in Figure 3 and it shows that the construction sector belongs to the most common type of employment. Seasonal activities take the second place. Destination country economic activities show an increase in construction, manufacturing sector and seasonal activities. Accommodation and gastronomy also indicated a moderate increase. Nevertheless, among the most common professions within the sample is less qualified work (especially housekeeping services and waiters).

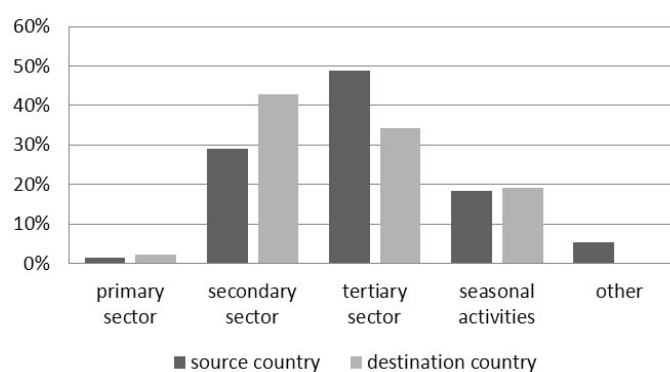


Figure 2. Sectors participation in the source and destination country.  
Source: Own results.

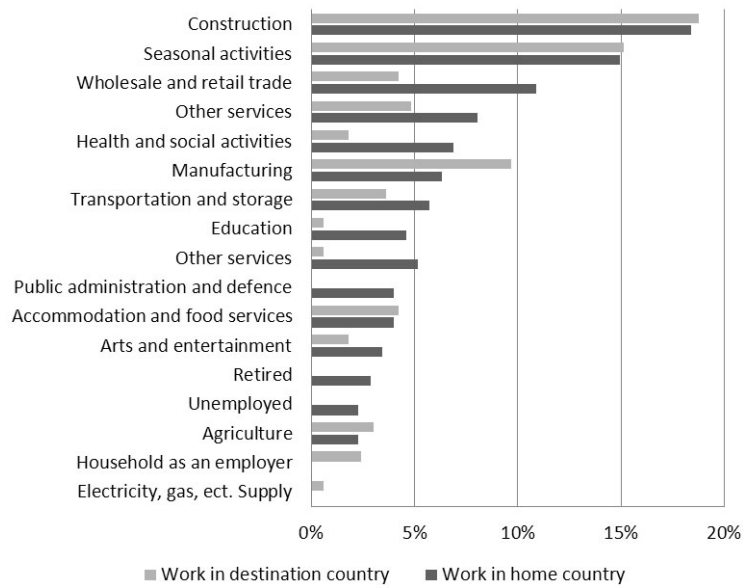


Figure 3. Economic activities in home and destination country.

### 5.2. Remittances

The Western regions in Ukraine belong to the areas with the highest proportion of both national and cross-border migrants in the state. Regional approach might bring, in this case, disparity between macroeconomic (aggregate) and microeconomic approaches. Therefore, we might expect a shift in ranking among the most common destination countries corresponding to the geographical specification of the region. Moreover, comparison of differences and their subsequent argumentation might serve as a supporting indicator of representativeness of our data sample.

Observing the range of countries in Table 4, we see that it corresponds with macroeconomic statistics, where Russia, Poland, Italy and Germany dominate.

Table 4. Destination countries for Ukrainian migrants (national and regional comparison)

National statistics		Regional statistics	
Russia	50%	Czech Republic	56%
Poland	12%	Russia	15%
Italy	8%	Slovakia	5%
Germany	6%	Poland	5%
Czech Republic	5%	Italy	5%
Greece	3%	Portugal	3%
Spain	3%	Hungary	3%
USA	2%	Germany	3%
UK	1%	Spain	2%
Portugal	1%	USA	1%
Israel	0%	Slovenia	1%
UEA	0%	UK	1%

Source: Own results.

However, the Table also shows visible shift in ranking corresponding with the proximity to the EU borders (and favouring EU member states). The Czech Republic belongs to the most common option within the sample. The fact corresponds with A series of analysis focusing on migrants' performance and interaction between those two countries (Strielkowski, 2012). The comparison of presented statistics with other analysis and similarities observed both on the micro and macro levels supports diversity and representative power of data – a sufficient variety of migrants considering destination country choice.

Regardless of the choice of destination country, almost 66% of respondents tend to migrate (Table 4). Also only 41.98% of migrants choose to send regular transfers back to source country (on the monthly basis). Based on our literature review, altruism and “consumption smoothing hypothesis” (an economic concept used to express the desire of people to have a stable path of consumption) belong to the most common motives of short- term migration. Therefore, it is surprising that our sample does not tend to show this pattern. The cause of this deviation might be explained in different form of remittance behaviour which does not assign regular pattern. Since 21.8% of migrants return with money (savings) back to the source country, the mean percentage amount covering all forms of remittances increases to 51.88%. Considering gender differentiation, 67.3% of men migrate as contrasted with 62.9% of women. The head of the family is usually responsible for providing the major income for the family which might influence his decision to migrate with altruistic, insurance or other motive to remit. The male member of the family is usually stated as the head of the family which corresponds with survey involving only 17.5% of families with a woman as the head. Previous studies (Strielkowski et al. (2012) observed higher amounts remitted by male. In the case of families with the male as the head, an average monthly remitted amount reaches 460.67 USD compared to 406.25 for female as the head, which consistently confirms previous conclusions.

If we enrich statistics by including occupational and financial spheres (Table 5) one can see that the mean of hourly wage reaches 6.63 USD. Unlike women who get a significantly lower amount (6.07 USD), men earn exactly the mean hourly wage. In average, migrants work almost 44 hours per week which exceeds the labour norm 40 hours only slightly. Nevertheless, the number of hours reaches from 1 to almost 90 hours with 25% of population exceeding 60 hours.

**Table 5. Summary statistics for Ukrainian migrants: trip characteristics**

Variable	Total	Female	Male	Unit	
Migrate	66.6	62.9	67.3	%	Proportion
Remit	41.98	54.5	39.5	%	Proportion
Hourly wage	6.63	6.07	6.64	USD	mean
Hours worked per week	43.9	41.21	43.84	hours	mean
Remittances	448.74	406.25	460.67	USD	mean
Savings (per month)	482.21	498.4	477.45	USD	mean
Amount brought back	8786.82	7976.67	9029.87	USD	mean

Source: Own results.

Money transfers also show an interesting pattern. An average amount sent per month is almost 450 USD, but differs with respect to gender. The mean amount per month sent by men is more than 50 USD higher than that by women. Similar pattern is observed in transfers brought back. However, savings are higher for women (almost 500 USD) than for men (477 USD).

Considering the answering structure of the survey, two major types of money flows which might be categorized as remittances are recognized. With respect to the previous paragraph some migrants send either regularly or irregularly smaller amounts of money on the monthly basis to the source country. However, we observe that migrants might bring a single amount at return journey. This money amount is significantly higher than regular transfers. Incorporation into the groups is not exclusive and we observe migrants pertaining to both categories. In view of this duplicity, literature stream is not uniform or does not differentiate among them. Massey et al. (2013) suggests re-consideration of remittances and money remitted or saved during the migration trip. Intended or unintended division or merger between groups might lead to a different estimation of statistical results and later misleading policy recommendation.

Another dimension of remittances represents consideration of destination country choice. Research literature acknowledges a number of studies showing the amount of remittances sent and received between EU and third countries (Kupets, 2012).

However, very little attention has been paid to the actual proportion of income remitted to the source country. In Figure 4 we show an overview of the most common destination countries among respondents and respective percentage of income sent back to Ukraine as remittances. The indicator was constructed by determination of income of migrants (in 2012 prices in USD) and subsequent multiplication of hourly wage and average number of hours spent in work. For those purposes only regularly sent money transfers were considered.

The major question discussed is whether there are significantly different patterns between the East and West stream of migration. In order to objectively compare each country, the cost of living index is considered where Ukraine

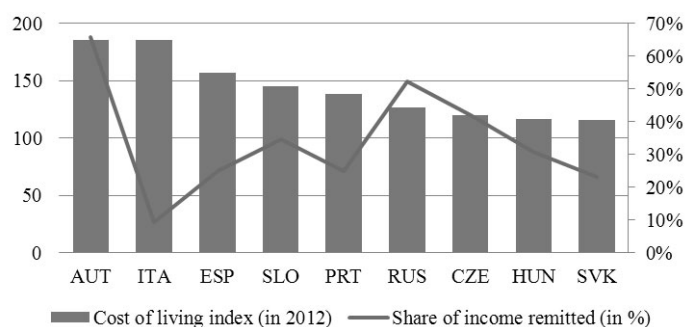


Figure 4. Proportion of income sent as remittances.

Source: Own results.

represent level 100 and all destination countries indexes are derived from this level. The anticipated outcome would suggest that countries with a high cost of living index would generate a smaller percentage of remittances than countries with a lower cost.

The highest share (66%) was sent from Austria, followed by Russia, Czech Republic and Slovakia (Figure 5). A negligible proportion was sent from Southern EU countries such as Spain and Italy and Portugal. The division between East and West stream of migration does not appear to show any difference. After the inclusion of the cost of living index there is no sign of inverse relationship between two variables. For example, Austria with the highest level of index generates also the highest proportion of remittances (66%). Further in Italy with a similar level of cost index, migrants sent very low share of income (9%). In the case of other countries, no visible pattern is observed.

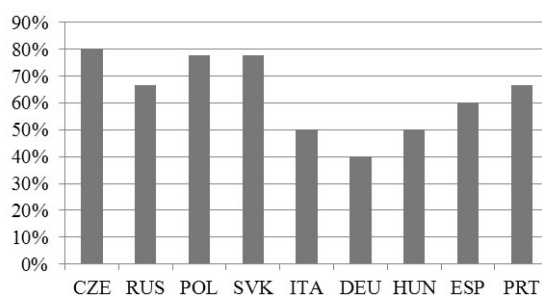


Figure 5. Percentage of wages paid in cash form.  
Source: Own results.

### 5.3. Financial and material background and health aspects

Migrants are using a wide range of both formal and informal channels to transfer remitted money into the source country. The choice among them is not negligible with respect to impact on international and national statistics which mostly comprise from the more formal form of transfers. The division of each category contains bank transfers, transfer companies, postal services, friends and relatives or by the migrant himself. Despite the high development of financial system in destination countries, only 2.5% of respondents own a bank account in foreign currency. In average, 67% of migrants receive their wages in cash. Decomposition into the destination countries is showed in Figure 5.

There is no difference observed between the East and West stream of migration and both assign a high proportion of cash form. However, Germany belongs to the single country with a percentage below 50%. This might be explained by a stricter form of regulation regarding wage payments and a lower proportion of informal forms of employment. The reasons for the high percentage of wages paid in cash form might include a high proportion of undocumented migration.

Also, the majority of respondents consist of seasonal and secondary sector workers which do not choose to use this channel. This fact supports preference of informal channels used for remittance transfer.

## **6. Conclusions and policy implications**

The aim of this paper was to analyse Ukrainian remittance behaviour in the context of the EU as a destination region. Literature stream acknowledges a number of studies focusing on the topic of migration and remittances. The scope of their interest includes the determination of impacts on the source and destination country and identification of migrants' characteristics. Despite a wide range of geographical coverage of the studies we find contradictory effects that differ on both macro and microeconomic level. Inconsistent results provide space for further research that would detect a statistical significant direction and magnitude of effects.

A non-negligible role in the development of the European migration has been played by the integration process that during the last 60 years implemented a series of freedoms and restrictions that shaped the form of migration into the current state. The main scope of the EU migration policy was focused both on intra-EU migration and enhancement of freedom of movement and on non-EU countries where visa agreements and programs participation dominates. Central and Eastern European regions include countries with an intensive frequency of migration. Ukraine has a special a position among those countries as a state sending and receiving a high number of migrants who have a significant impact on the EU labour market – the relationship that has been determined both economically and historically.

Our findings confirm that the probability to remit is determined by demographic factors. However, there is a difference between remittances regularly sent and savings with which migrants return. There is also a difference in the types of migrants. The probability of regular remittances increases in the case of older and less educated migrants with a larger family that might have an undocumented status. A negative sign in "ownership" variables suggests that remittances are not motivated by business financing. Based on the sign of coefficients and their magnitude, results speak in favour of altruistic motives of regular remittances.

Further, savings brought back to Ukraine at return journey show a different type of effect. The probability of this type of behaviour increases with young migrants with small or no family and with a finished secondary education. However, there is also a small impact of income tax withhold suggesting that there exists an undocumented form of employment. Variable signs and magnitude also showed that businesses in the source country are more likely to be financed from this form of transfer (with statistically significant results).

Concerning the amount of remittances sent, the results confirmed above described an effect agreeing with remittance types. The results are mostly con-

sistent with previous findings of Massey et al. (2013), but there is also an interesting effect of income suggesting that a higher income increases the amount of money brought back but not regularly sent remittances. Although the result of the model did not show a statistically significant effect.

A policy implication should highlight the remittances typology. Results confirm that despite the highly developed financial system, informal channels are preferred for money transfer. The reason might be an illegal or undocumented form of employment as a seasonal worker.

Some studies suggest that migrants tend to channel remittances into short-term consumption for food and into stabilizing their long-term consumption. Nevertheless, contradicting findings question the validity of the statement. The result of the second hypothesis testing shows that both forms of remittances are mainly invested either as a business investment or an investment into education (productive spending). The statistical significance of these variables supported by control factors therefore confirms the validity of stated hypothesis, i.e. remittances channelled to the source country are invested into productive forms of consumption.

Generally, we may say that the outcome of the models supports microeconomic and individual level point of view. Diversity among different subtypes of the variable confirms that the aggregated macroeconomic dataset might omit important details that after extraction generate contradicting effects. For example: reverse economic effects of remittances on the source country may simply be a combination of regular and occasional form with a different weight. Therefore, migration policy development should not neglect microeconomic effects that have a potential to solve aggregate level problems.

The realization of the survey in the Zakarpattya district in Ukraine has tested dimensions of the questionnaire under European conditions. Despite the high explanatory power of the questions, we believe that the questionnaire includes a high number of open questions that might demotivate respondents to answer. A shift of the type of answers to the numeric values and a choice of the possibilities would simplify data processing and increase the unified form of the data sample without deteriorating “ethnosurvey” principles.

Addresses:

Wadim Strielkowski  
Judge Business School  
University of Cambridge  
13 Trumpington Street  
CB2 1AG Cambridge  
United Kingdom

E-mail: w.strielkowski@jbs.cam.ac.uk

Lenka Šperková  
Charles University in Prague  
Faculty of Social Sciences  
Smetanovo nám. 6, 110 01 Praha 1  
Czech Republic

E-mail: lenka.sperkova@post.cz



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## APPENDIX A

**Questionnaire design (Ukrainian Migration Project):  
summary of the main sections**

- A. Information on members of the household and other children of the household head not living in the household
- B. Marital history of the household head
- C. Number of children from the spouse
- D. Detailed information about each person with migration experience within Ukraine and to EU
- E. Information on each person in Table A who has applied for legal residence or citizenship in the EU
- F. History of businesses, companies, or other investment-related activities of the household head or the spouse.
- G. Labour history of household head since he/she began to work
- H. EU migratory experience of household head's family of origin
- I. Information on the household head's relatives and friends with migratory experience to the EU
- J. Information on current residence and history of other properties owned by household head and spouse
- K. Household amenities
- L. Vehicles currently owned
- M. Remittances
- N. Information about undocumented crossings
- O. Information about household head's experience in the EU
- P. Information about financial affairs of the head and the spouse during the last trip to the EU
- Q. Information about the use of public services in the EU
- R. History of household head's current and former agricultural properties
- S. Information on cultivation tasks in current land parcels
- T. Health of household head & spouse and other migrants