

# Remittances – First Results of a New Survey\*

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*With the surge in emigration, the level of support provided by Hungarians living and working abroad to the households remaining in the home country has come to the foreground both in Hungarian public discourse and scientific research. For the most part, the research focuses on the contribution of remittances to the economy of developing countries, and only a few studies address the role of these funds in the context of migration processes within the European Union. In the course of 2017, in cooperation with the Hungarian Central Statistical Office, the Magyar Nemzeti Bank conducted a survey on this subject under the title “Family Assistance”. For the first time, as a supplement to macrostatistics-based estimates this survey provides an opportunity to glean information about the underlying factors of remittances and about the characteristics of the senders as well as the receiving households. Initial results indicate, among other things, that around one fifth of emigrants and more than 65,000 households in Hungary are affected by the phenomenon, and support from abroad is an important source of income for a significant portion of households.*

**Journal of Economic Literature (JEL) codes:** F22, F24, J61, J68

**Keywords:** remittances, labour market flow, migration

## 1. Introduction

Research on remittances focuses primarily on the role of these funds in the economy of developing countries. Such transfers may entail a significant source of funds in times of an economic downturn in the recipient country, as the time profile of the volume of remittance-related capital inflows is far more balanced than for other sources, such as foreign direct investment. During the Eastern European enlargement of the European Union in 2004 and 2007, one of the main economic competitive advantages of the countries joining the Union was their cheap and relatively skilled workforce; consequently, with the free movement and employment of Eastern European workers, migration from this region to more developed Member States also intensified (*Blaskó – Gödri 2014*). Obviously, the motives of migration are not restricted solely to economic differences between

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\* The papers in this issue contain the views of the authors which are not necessarily the same as the official views of the Magyar Nemzeti Bank.

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The Hungarian manuscript was received on 21 February 2018.

DOI: <http://doi.org/10.25201/FER.17.3.85108>

the home and the host countries, but nor can the key role of these differences be debated. In particular, emigrants' intention to support their families at home with the higher wages earned abroad, i.e. to "remit home", may also be a major incentive.

It was not immediately after accession in 2004 that emigration from Hungary to Western European Member States and temporary employment began to surge. Although this process started relatively late compared to the rest of the countries in the region, with the migration surge observed in recent years the topic of the remittances of Hungarian citizens living and working abroad has gained increasing relevance. The assistance received may boost the standard of living and consumption of domestic households, which may somewhat offset the country's loss of human capital associated with migration. At the same time, with regard to remittances numerous problems may impede the understanding of the real situation. Indeed, the underlying basis of these problems, i.e. international migration, itself is a difficult-to-quantify socio-economic phenomenon involving various measurement problems, while due to the high percentage of informal capital flows and the data collection issues stemming from the sensitivity of such data, it is even harder to gain a clear understanding of the related flows of funds.

This study aims to facilitate a better understanding of the phenomenon of remittances by analysing the data of a detailed representative survey focusing specifically on remittances, which – to the best of our knowledge – is the first of its kind conducted in Hungary. Launched by the Magyar Nemzeti Bank (MNB) and conducted by the Hungarian Central Statistical Office (HCSO) in 2017, the "Family Assistance" survey collected empirical data to examine the sociodemographic features of the sender and the receiver sides as well as the characteristics of individual sending methods. The existing estimates relying on macro-level data can only provide aggregate information on the amount of remittances, while no data are available on the factors influencing the transfers. The research objective behind the survey was therefore to facilitate a better understanding of the underlying social processes. This study summarises the initial results of the survey. After providing an overview of the relevant international literature, we present the main trends and features identified in relation to remittances. This is followed by the data and estimates related to Hungarian migration and to the remittances of Hungarians living abroad. The third part is a brief description of the data content of the questionnaire-based survey forming the basis of the study, followed by a description of the characteristics of the receiving households and the senders. Finally, *Chapter 5* presents the conclusions drawn from the results.

## 2. Main features and trends of remittances

### 2.1. Remittances in the international literature

In most studies, the role of remittances is examined in relation to developing countries as this type of capital influx may play a considerable role in the economy of these countries. Among the positive features of remittances, the international literature notes that they represent a safe financial resource even when the economic performance of the home country deteriorates. Therefore, remittances also act as a stabilising force in economies that are more exposed to international impacts and exhibit much more volatile performance (*Mohapatra – Ratha 2010; World Bank 2016*). The surplus incomes provide the means for higher consumption among recipients compared to households not receiving remittances (*Juraev 2012*). In numerous countries, such as Mexico, the country's economy relies heavily on the support provided by citizens working abroad; in many cases, state programmes are launched to foster the more efficient utilisation of such transfers (*Soltész 2016*).

Among the migration theories, the new economics of labour migration is one of the most important concepts in relation to remittances (*Massey et al. 1998*). According to the theory, remittances should not be regarded merely as charity, but as a contractual arrangement between the emigrant and the non-migrating family members, in accordance with which the migrant compensates the initial migration costs covered by family assistance through remittances. This relationship can also be understood as a coinsurance between the two parties (migrants and non-migrants) (*Stark – Bloom 1985, Stark – Lucas 1988*). Numerous studies have also been published on the determinants of remittances. For example, the economic situation of the home and the host countries and the sender's disposable income (*Jiménez-Martin et al. 2007*), demographic factors such as the sender's gender or dependency ratios in the host and home country households, labour market characteristics, the sender's economic activity and occupation or, in the case of certain countries, features pertaining to the level of development of the cultural and payment infrastructure may influence the amount of the remittances. Relying on data from a nationwide, representative, questionnaire-based survey conducted in Mexico, a study by *Airola (2005)* suggests that the income of the receiving households was below the national average; in their case, household heads were more likely to be women, or elderly or less educated persons. Using the results of a representative, questionnaire-based survey, *Lopez et al. (2009)* found that among Latino households in the United States the likelihood of sending remittances is independent of the sender's disposable income, which only affects the amount of the remittances: Hispanic migrants tend to send (any amount of) money abroad at nearly the same rate whether they are high earners or low earners. According to a study analysing data from 14 remittance-specific, questionnaire-based household surveys covering 11 destination countries, more educated migrants are more likely

to remit (Bollard *et al.* 2009). Based on a survey processing the data of 60 countries (including Hungary), Issahaku *et al.* (2017) concluded that efficiently functioning bond markets subdue remittances in developed countries but promote them in developing countries.

With respect to Europe, it should be noted that the level of development of the payment infrastructure and European directives regulating cross-border payments help enable migrants working in Western Europe to send money home faster and cheaper (Pemberton – Scullion 2012). By contrast, in the case of payment flows from Russia to the post-Soviet republics, a substantial part of electronic payments is executed via cash transfer instead of bank transfer and accordingly, the transaction fees on cash transfer affect the remittance amounts significantly (Kakhkharov *et al.* 2017). Providing assistance to the households remaining in the home country has become increasingly important in Eastern European countries as well. This is partly because migration was typically only able to begin in earnest after the collapse of the socialist regime, from the early 1990s. In some cases, this subsequently intensified further following accession to the European Union and the free movement of labour afforded by the EU membership across Western Europe. This increased importance, i.e. the exponentially increasing economic role of remittances and the “dependency” of receiving countries, is presented in Böröcz (2014) with respect to post-socialist states. The author emphasises that the phenomenon of remittances cannot be explained merely by global inequalities in income levels in accordance with the classical “push-pull” migration theory, as remittance strategies and trajectories can differ in numerous regards even between states with approximately identical levels of per capita GDP. Examining macro data from Eastern European countries, Schrooten (2005) found that remittances are strongly influenced by the unemployment rate and the insufficiency of retail lending in the country of the receiving household. In their study examining six Eastern European states, Meyer – Shera (2016) observed a positive relationship between remittance flows and economic growth. In addition, as confirmed by Polish examples (Krzyszowski – Mucha 2014), remittances play a crucial role in taking care of older parents in “transnational” households. Moreover, drawing on data collected in a questionnaire-based survey in Moldova, Pinger (2009) noted that temporary migrants remit around 30 per cent more than their permanent counterparts. According to their research conducted in Macedonia, Roberts *et al.* (2008) found that the vast majority of remittance-receiving households have only one person from the family working abroad. 56 per cent of the senders are blue-collar workers, and more than 40 per cent transport the funds home physically in cash.

Drawing on household surveys to examine remittances raises a variety of special questions. For example, should we consider financial transfers only or other, non-financial assistance as well? Does the survey cover instances where several family

members make remittances? Can the data distinguish between temporary and permanent migrants? The way in which these questions are addressed may alter the results significantly (*Brown et al. 2014*).

## 2.2. Remittances and the current account

The clarification and precise definition of the concept of “remittances” are also required for the interpretation of the results of this survey. Firstly, it is important to clarify the concept of “resident” in the context of remittances and the current account. In statistical terms, “the resident status of an economic unit in a given country depends on the existence of the centre of predominant economic interest rather than on citizenship or nationality” (*MNB 2014:7*). From the perspective of the balance of payments, the sender’s migration status is insignificant. The residence of the sender is basically determined by the duration of his stay abroad: being present for one year or more in a territory is sufficient to qualify as being a resident of that economy, whereas short trips to other economies – for work or other purposes – do not lead to a change of residence and the person continues to belong to the country of his previous household (*IMF 2009:276*). The concept of remittances as defined by *IMF (2009)* include cash and non-cash items irrespective of whether they flow through formal channels, such as via electronic wire, or through informal channels, such as being carried across borders personally to the receiving household.

In the balance of payments, there are essentially two items which are linked to remittances. The income of workers living abroad temporarily (compensation of employees) is recorded on the primary income account. This item includes the gross income of short-term workers, i.e. in addition to remittances, taxes and social contributions and the sender’s costs of subsistence are also presented here. The remittances of long-term workers<sup>1</sup> are considered secondary income; in other words, they entail a relationship between a resident and a non-resident. However, personal transfers embody a broader concept, irrespective of whether the income originated from work or from another source. The two categories, supplemented by household-to-household capital transfers, constitute personal remittances (*IMF 2009:274*).

There was a need to clarify the above because, on the one hand, various surveys often use different categories and definitions. On the other hand, information can be gleaned from the “Family Assistance” survey for all sub-categories, i.e. senders can be distinguished according to the countries in which they are residents, transfers in cash and in kind can be separated, and the channel through which cash transfers flow can be identified. In addition, the survey presents remittances in net terms: in other words, as regards the incomes of workers living temporarily abroad, there is no need to make separate estimates for wage costs and the amount sent. This

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<sup>1</sup> Personal transfers, which replaced the “workers remittances” line of BPM5.

provides the means for comparability between the survey results and the data presented in the individual lines of the balance of payments. The remittance-related concepts included in balance of payments statistics (e.g. compensation of employees, transfers) and recent developments therein were presented in detail by *Csortos – Kóczyán (2017)*.

### 2.3. Migration and remittances in the case of Hungary

As a consequence of the Eastern European enlargement of the European Union, emigration from Eastern European countries to Western Europe gradually intensified as barriers to employment abroad were removed in the host countries. Hungary joined this process relatively late, and the emigration of Hungarian citizens only started in earnest after the opening of the German and Austrian labour markets from 2011. As a result of the increasing labour absorption capacity of the destination countries and the 2008 crisis, around 100,000 Hungarian citizens may have emigrated annually based on mirror statistics. It should be noted, however, that the same data indicate a significant degree of remigration: in the case of Austria and Germany around one half of the migrants are shown as persons returning to the home country. Migrants often neglect to register their departure from the home country with the authorities and accordingly, official statistics are often biased. Using the immigration statistics of destination countries – i.e. mirror statistics – may yield more realistic data. Eurostat data supplemented with census data indicate that around 330,000 Hungarians lived abroad in 2014 (*Blaskó – Gödri 2014*).

Based on the 2011 Population Census, 143,000 persons reported to have lived abroad for at least one year; 70,000 reported to have stayed abroad for less than a year and another 27,000 persons commuted daily to their foreign employment from their Hungarian residence. The vast majority of the latter (22,500) found employment in Austria (*HCSO 2015*). It is important to remember, however, that the census cannot provide any data in cases where the entire household emigrated abroad.

Numerous research projects have attempted to estimate the number of emigrants, such as *Kapitány – Rohr (2014)*, where the authors estimated the number of Hungarian citizens living abroad at 335,000 based on the data of “The Turning Points of the Life Course” survey. Similarly, according to the estimate of the “Hungarians Abroad” research of the SEEMIG project<sup>2</sup> which focuses on the migration processes of the Eastern European region, around 350,000 persons lived abroad at the beginning of 2013 (*HCSO – SEEMIG 2014*). Based on the latter survey’s representative data on emigrants, the young, 20–39 age group is significantly over-represented among the Hungarians living abroad relative to the Hungarian resident population; moreover, the number of persons with higher education is significantly

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<sup>2</sup> SEEMIG – Managing Migration in South East Europe transnational cooperation project.

higher in this age group. As regards destination countries, the United Kingdom is primarily hosting unmarried young persons with university or college degrees, whereas the most predominant immigrant group in Germany primarily comprises skilled male workers (*Blaskó – Gödri 2014*). Research by *Bodnár – Szabó (2014)* on Hungarian cross-border commuters found that commuters tend to be younger relative to the Hungarian population. They mainly comprise persons with secondary qualifications; however, they typically find employment in positions that require lower qualifications than what they hold.

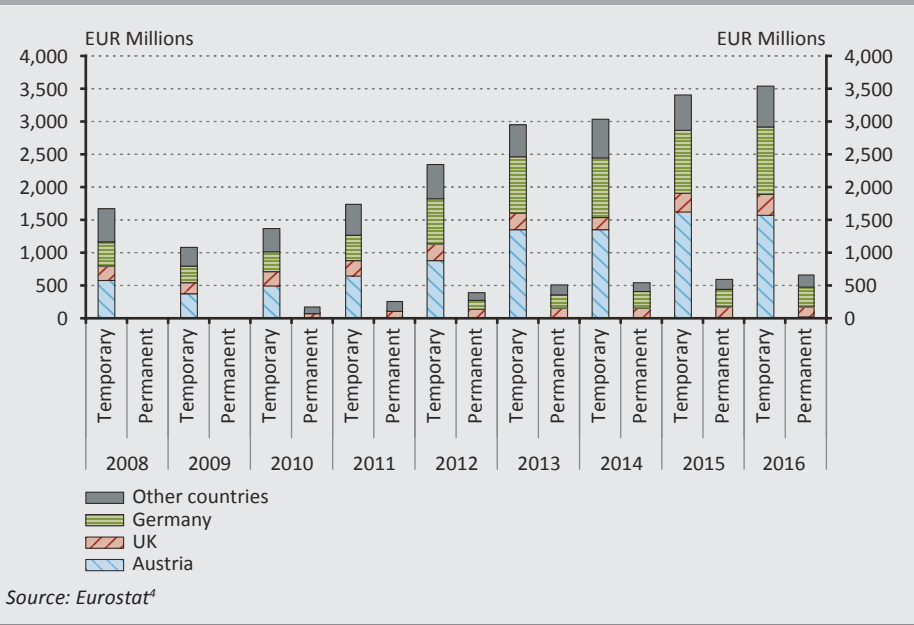
The methodology of the compilation of macrostatistics on workers' remittances to Hungary from income earned abroad as presented in the balance of payments was described in detail in a study by *Bujnóczki (2017)*. As regards the number of Hungarian residents working temporarily abroad, the data of the Hungarian LFS<sup>3</sup> are used. Next, gross average earnings are defined based on Eurostat data – in the case of Austria, the United Kingdom, Germany and Italy by economic sectors – and, multiplied by the number of employees for the estimation of the total sum of wage amounts. These figures are then adjusted by a 0.9 multiplier, assuming that Hungarian employees earn less than the average wages prevailing in the given countries. In order to estimate the personal transfers of Hungarian employees working abroad on a long-term basis, Eurostat employee numbers (number of Hungarian citizens in the population data of foreign countries) are utilised, from which the LFS's figures on short-term employment abroad are deducted. For each country reviewed, first the estimated tax and contribution payments and then the EU-wide average consumption expenditures are deducted from the gross average wage data calculated as described above. Half of the resulting per capita savings are considered as remittances, and this amount is then multiplied by the number of employees. In summary, the amounts shown in the relevant lines of the balance of payments refer to the amounts available to remit (for example, employees working temporarily abroad do not necessarily send their entire earnings home), whereas respondents of the Family Assistance Survey provided information on the specific amounts sent home as remittances.

Based on the balance of payments data on incomes transferred by Hungarian citizens living abroad, in the case of temporary workers ("Compensation of employees for workers in temporary employment abroad") the two most important destination countries are Austria and Germany (*Figure 1*): these countries accounted for nearly three fourths of the total amount of around EUR 3.5 billion (approximately HUF 1,050 billion) in 2016. The transfers of employees working permanently abroad have increased continuously since the crisis and by 2016 they amounted to EUR 700 million (around HUF 210 billion) (*Csortos – Kóczian 2017*).

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<sup>3</sup> Labour Force Survey, the most extensive ongoing household survey conducted by the HCSO.

**Figure 1**  
**Compensation of employees for Hungarians in temporary employment abroad and personal transfers of employees working permanently abroad according to the balance of payments, 2008–2016**



### 3. Data applied

The MNB signed a contract with the HCSO in 2017 to conduct a questionnaire-based survey entitled “Family Assistance” on the subject of remittances, in the framework of which 3,029 households were contacted for data collection. Data collection lasted from 1 May to 6 June 2017; the base period was the year 2016. Random sampling was applied using the HCSO’s address register for statistical purposes, and a stratified, multi-step sampling procedure was used for the data collection. The survey is nationally representative of private households; the observation unit was the range of Hungarian private households. After the questionnaire had been designed, the questions and the wording of the questions were finetuned further in the framework of five cognitive tests. The main topics covered by the questionnaire included, in essence, the key features of the receiving households and household heads, the amount and method of the remittances, and the sociodemographic characteristics and living conditions of the senders.<sup>4</sup>

By 12 May 2017 at the latest, the enumerators notified the affected households, in the context of which households were requested to participate in the survey,

<sup>4</sup> *Personal transfers and compensation of employees*, Eurostat. [http://ec.europa.eu/eurostat/web/products-datasets/-/bop\\_rem6](http://ec.europa.eu/eurostat/web/products-datasets/-/bop_rem6). Downloaded: 13 December 2017.



received an information sheet on the option of filling out the questionnaire online, and received the contact information of the enumerators. After the initial notification the respondent households had an opportunity to complete the questionnaire in the first two weeks of May 2017 using the online portal developed specifically for this purpose (CAWI). If the allotted time had passed without appreciable responses, the enumerators either visited the households for a personal interview (CAPI), or collected the data over the phone (CATI) by no later than 6 June. Finally, during the data collection 1,325 households reported to be recipients of assistance from abroad. With respect to the individual data collection methodologies it was observed that the vast majority of successful answers (1,223) were collected during personal interviews. Only 39 households opted for completing the questionnaire online, and 63 interviews were conducted over the phone. Although face-to-face interviews are more resource-intensive, presumably, they contributed greatly to the fact that a relatively high percentage of the respondents replied even to questions involving fairly sensitive (e.g. income) data. Moreover, the improvement observed in data quality can be partly attributed to the special advance training of the enumerators and the helpful advice they could thus provide to respondents during the completion of the questionnaires.

## 4. Results

### 4.1. Characteristics of receiving households

Extrapolating the survey data, we find that assistance from abroad reached a total of 67,548 Hungarian households; in other words, at least 1.6 per cent of the 4 million households<sup>5</sup> recorded in Hungary is affected (if the entire household is residing abroad even for a period of less than a year, contacting them may become problematic, which may lead to a slight bias – underestimation – in the results).<sup>6</sup> Two-person households represented the greatest share (34.5%) in receiving households, but the percentage of single-person and three-person households was also considerable (24.1% and 22.1%, respectively). A comparison between the number of household members and the data of the 2016 Microcensus (*HCSO 2017*) reveals that there is no significant difference between the data on receiving households and the data on the households encompassing the entire Hungarian population. Of all receiving households 4,453 households reported to have also received assistance from a second person, whereas only 239 households indicated a third sender as well. Half of the households (33,736 cases) received assistance solely from Hungarian

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<sup>5</sup> Number of households, characteristics of persons by income-earning activity, age group and educational attainment of reference person and by age structure of household members. HCSO Statdat 2.2.3.7. [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_eves/i\\_zhc024a.html](http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_zhc024a.html). Downloaded: 1 December 2017.

<sup>6</sup> For the purposes of the data collection the HCSO applied – in full compliance with data protection rules – targeted sampling; consequently, it achieved a high response rate of over 40 per cent. Therefore, even though the percentage of those indicating remittances in the sample is high, projected to the total population this results in a lower ratio.

residents; i.e. persons only temporarily staying abroad, while in the rest of the cases at least one person among the senders stayed permanently abroad.

The data collection also yielded detailed information on household heads. According to the survey, regarding the age composition and the role played within the household, household heads are predominantly members of the older generation. 50 per cent of all household heads are above 55 compared to the 34.8 per cent share observed in this age group within all Hungarian households.<sup>7</sup> As regards their roles within the household, half of the household heads (50.58 per cent) are either married or have common law partners, while 30 per cent of them are single. With respect to the latter category, the difference observed between the number of single-person households and the number of single household heads (16,286 vs 20,149) can be basically attributed to the differences in their definitions: a person may consider himself single, but the sender of the assistance is a Hungarian resident, i.e. he/she is taken into account as a member of the household in addition to the household head. The age composition leads us to conclude that the more mobile, young and middle-aged children are more likely to support their elderly parents, and this will also be confirmed by the additional data presented below. Half of the household heads (50.28%) are male, and this proportion does not change materially with age. Moreover, nearly all of them (99.6%) are Hungarian citizens. The percentage of persons with primary, secondary and tertiary education (14%, 60% and 26%, respectively) corresponds to the proportions observed with respect to all Hungarian households.<sup>8</sup>

The graphic examination of the per capita income of households shows that a strongly right-skewed, nearly lognormal distribution can be hypothesised (*Annex, Figure 7*); the average is HUF 100,000 and due to the low non-response rate (total answers regarding income: n=1,291) the results can be considered sufficiently robust. Compared to data pertaining to the total Hungarian population,<sup>9</sup> no significant difference can be observed between per capita net incomes by the age group and education of household heads among receiving households.

#### 4.2. Characteristics of remittances

Remittances from abroad were separated in the questionnaire, according to the method of assistance: financial, other (non-cash) or both (*Figure 2*). Respondents were asked to indicate any low or high-value material assistance among non-cash items (e.g. electronic devices, food, automobile) or any services used in Hungary but paid by the person living abroad (e.g. travel, training). According to the method

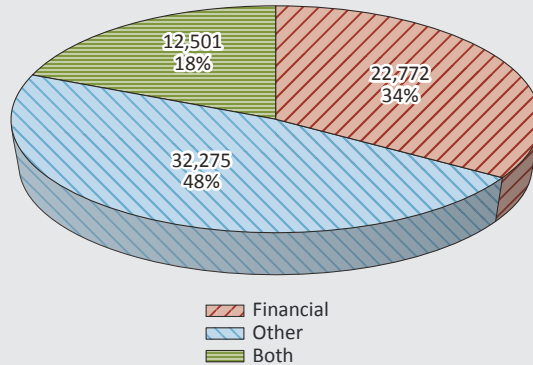
<sup>7</sup> Data of total households by age group and educational attainment of reference person and by age structure of household members (2010–) HCSO Statat 2.2.1.2, 2015. [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_eves/i\\_zhc015a.html](http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_zhc015a.html). Downloaded: 1 December 2017.

<sup>8</sup> Data of total households by age group and educational attainment of reference person and by age structure of household members (2010–) HCSO Statat 2.2.1.2, 2015. [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_eves/i\\_zhc015a.html](http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_zhc015a.html). Downloaded: 1 December 2017.

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of assistance, almost 48 per cent of the senders send non-cash items only, while around one-third support non-migrant family members exclusively with cash. In general, household members living abroad are somewhat more likely to support their non-migrant family members through material donations or services purchased.

**Figure 2**  
Number of items received by receiving households according to assistance method

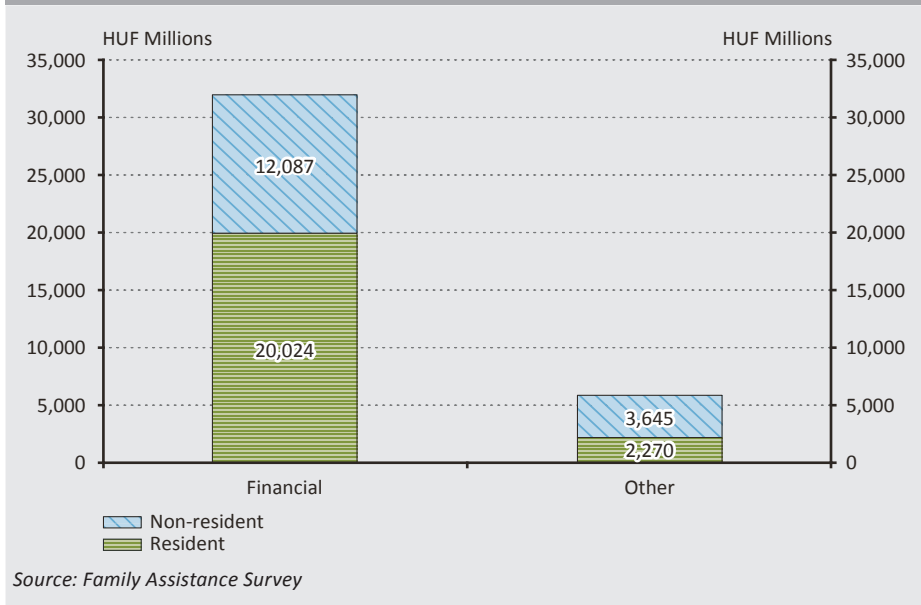


Source: Family Assistance Survey

For a variety of reasons, in the residency breakdown we considered the duration of the first sender's stay in a foreign country. Firstly, this was because the ratio of second and third senders is extremely low. Secondly, according to the instructions of the questionnaire, households were asked to identify the person sending the largest assistance as the first sender. Moreover, the amounts received by the household were not broken down by sender in the structure of the questionnaire. There are no considerable differences according to residency (i.e. number of resident or non-resident remittance senders) – the proportion of senders living temporarily or permanently abroad is roughly 50–50%.

However, once we examine the question according to the amount received, the result is considerably different: more than 84 per cent of the HUF 38 billion total assistance amount is financial-type support. In summary, as regards the method of the assistance, household members living abroad are more likely to send low-value objects (e.g. food), but when it comes to financial assistance, they allocate significantly larger amounts for this purpose. This can be explained by a variety of reasons: for example, it is more difficult and costly to send physical objects home; in addition, receiving households also favour cash, which can be used flexibly for many different purposes. This means (*Figure 3*) that, while the distribution of senders by residency was roughly half-and-half, according to the amount sent the proportion of the remittances sent by Hungarian residents (i.e. persons living abroad only temporarily) is more than 58 per cent (HUF 22 billion).

**Figure 3**  
**Amount of assistance received by receiving households by assistance method and the residency of the first sender, HUF millions**



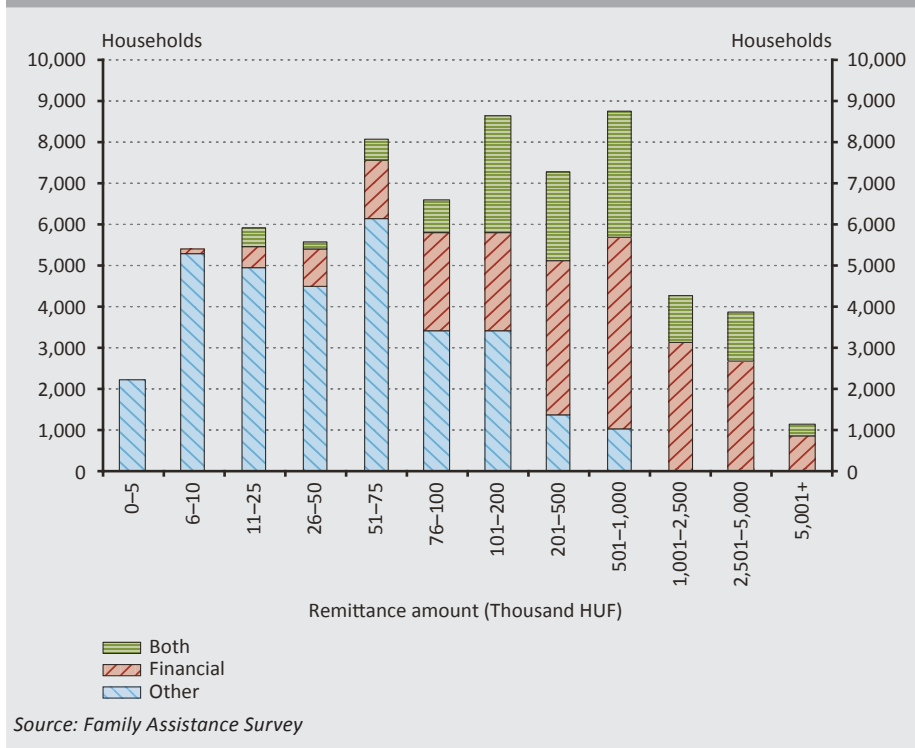
13.1 per cent of the households receiving other non-cash assistance (nearly 5,900 households) were given infocommunications devices. In the case of 7,031 households, the person(s) living abroad paid for some service, such as travel or schooling. The share of high-value material assistance – e.g. purchase of cars or real estate for non-migrant family members – was, as expected, extremely low (around 2.5 per cent). 85 per cent of the households receiving other non-cash assistance reported to receive primarily clothing or food. The structure of the questionnaire did not permit the breakdown of the material assistance categories by the amount sent as more than one answer could be selected for the type of non-cash assistance.

In summary, based on the Family Assistance Survey, the magnitude of total remittances – HUF 38 billion – significantly differs from that of the incomes available to remit – HUF 1,260 billion – as calculated from the lines of the balance of payments. It is important to see, however, that this may also be the result of definition differences, as the relevant lines of the balance of payments do not exclusively contain the actual assistance sent home. On the other hand, some respondent bias may also arise from the sensitivity of the data on personal finances and from the nature of the questionnaire-based survey. Nonetheless, examining the difference could be the subject of further analysis.

As shown by *Figure 4*, the distribution of the remittance amounts is right-skewed, close to lognormal. The average remittance amount was HUF 563,000 during a period

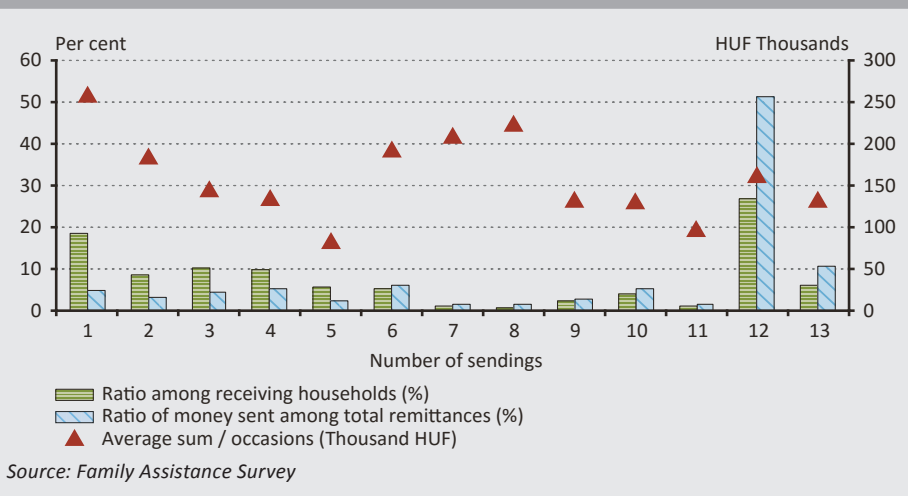
of 1 year; in the case of cash transfers, the amount was higher (HUF 910,000) and in the case of other non-cash transfers it was lower (HUF 132,000). Nearly three fourths of the cash remittances (73.7 per cent) were sent by persons who support the Hungarian household exclusively in this form, while in the case of one fourth of

**Figure 4**  
Distribution of remittance amounts by assistance method



the amount the remittance was supplemented with other, non-cash assistance forms. In the case of cash transfers, the survey also included a question on the frequency of transfers (*Figure 5*). One fourth of the receiving households (about 27 per cent) received monthly transfers. In terms of the amount, these transfers accounted for more than a half of the remittances (51 per cent). This is an important piece of information, indicating that a large number of households (around 9,400) received regular transfers, i.e. they could expect a predictable source of income when preparing the family budget. Nearly one half of the households (47.4 per cent), however, received transfers four times or less – in their case, the transfers represented a one-off occasion and the households concerned received only 17 per cent of the total remittance amount sent to Hungary. The average amount sent on individual occasions typically ranged between HUF 100,000 and HUF 200,000. The highest figures were reported by Hungarian households that received only one transfer per year.

**Figure 5**  
**Distribution of the frequency and amount of cash transfers and average amounts remitted per occasion by number of transfer events**



Examining the number of transfer events, no appreciable difference can be observed between short-term and long-term workers; monthly transfers are predominant in both groups. Similarly, based on the frequency of the transfers, no significant difference can be detected between senders supporting the household only through financial or other non-cash transfers from abroad.

Comparing the remittance amounts (financial and other non-cash together) to the total income of the respective households, we found that the contribution of remittances to the income of households, as expected, is smaller among households in better income positions (i.e. higher per capita income). Remittances account for around 15–20 per cent of the household's income in the case of households with a per capita monthly income of HUF 90,000, which characterises about a half of the households. This is consistent with the results of the Macedonian survey presented by *Roberts et al. (2008)*, which indicated that remittances accounted for maximum 30 per cent of the household's income for 43 per cent of the recipient households. It is also clear, however, that remittances are presumably important contributors in the finances of the poorest households. Indeed, according to the results of the survey, the income originating from such transfers may reach or even exceed the incomes originating from other sources (e.g. work or social assistance).

#### 4.3. Characteristics of remittance senders

We have constructed a separate database for characterising the range of senders, where each person represents an independent record; accordingly, instead of 1,325 cases we examined 1,427 records. After extrapolation, this implies 72,240 senders; in other words, assuming that the number of Hungarians living abroad is around 340,000, more than one out of five persons working abroad sends remittances. As

regards gender distribution, almost 62 per cent of the senders are male, although this percentage is somewhat lower (56.7 per cent) among non-resident senders. The ratio of women to the total population average is higher among second and third senders (58.7 and 48.1 per cent, respectively). In terms of age distribution, the ratio of ages 25–44 is significant; two thirds of the senders belong to this category. This confirms the hypothesis arising based on the age distribution of household heads; namely, that the typical senders are representatives of the younger generation, providing financial support to their elderly parents in the home country. This is also consistent with the sender’s link to the given household: 65 per cent of the respondents chose “child” from the possible options, and only 17.6 per cent indicated “spouse” or “common-law partner”. It is also important that non-relative senders represent only 1.8 per cent; that is, based on the survey, the phenomenon of remittances is linked almost exclusively to intra-household transfers.

In terms of education, the overwhelming majority of the senders have secondary education; 32.5 per cent of them are skilled workers and 27.3 per cent hold a secondary school leaving certificate. This is consistent with the results presented by *Bodnár – Szabó (2014)* in the case of cross-border commuters. Among non-residents (i.e. persons living abroad on a more permanent basis), the proportion of blue-collar workers is somewhat lower (27.2 per cent), and the ratio of persons with college or university degrees is higher. 28.9 per cent belong to the latter group compared to 19 per cent among the persons living abroad on a temporary basis. In line with preliminary expectations, the group of senders is fairly homogeneous in terms of economic activity: 94 per cent of them work abroad, while unemployed or retired persons, students and those classified as “other” represent less than 6 per cent. The composition of the senders according to main HSCO<sup>10</sup> occupational groups (*Table 1*) reveals that the group of persons working in construction and industry is predominant (21.9%), followed by the group of persons working in the trade and services sectors (18.4%) and the group comprising unskilled workers (13.7%). In more detail, the most important categories according to HSCO groups are the following:

HSCO group	Frequency (person)	Share (%)
Commerce and catering	10,447	14.5
Construction	7,438	10.3
Simple service, transport	4,587	6.3
Drivers and mobile machinery operators	4,368	6.0
Metal and electrical industry	4,305	6.0
Cleaners and helpers	3,512	4.9
Food industry	3,338	4.6
Technical, IT and science-related professionals	2,982	4.1
Other commercial occupations	2,877	4.0

*Source: Family Assistance Survey*

<sup>10</sup> The Hungarian Standard Classification of Occupation: <https://www.ksh.hu/docs/szolgaltatasok/hun/feor08/feorlista.html>. This is the Hungarian version of International Standard Classification of Occupations (ISCO).

Around one half of the senders replied to questions about their income. In order to achieve a higher response rate, they were allowed to choose between currency, annual or monthly frequency, and gross or net income. We converted the data into forints wherever another currency was chosen and for gross data we applied a multiplier of 0.67 to calculate net incomes. Obviously, this conceals the differences between the taxes and contributions payable in individual countries; however, in our opinion this is consistent with the HCSO methodology currently applied for calculating remittances and does not result in a material bias (*Bujnóczki 2017*). Annual and monthly salaries were recalculated for the months spent abroad in 2016 in order to receive net monthly incomes received during the period spent abroad. Examination of the income distribution thus received points to a lognormal distribution (*Annex, Figure 8*).

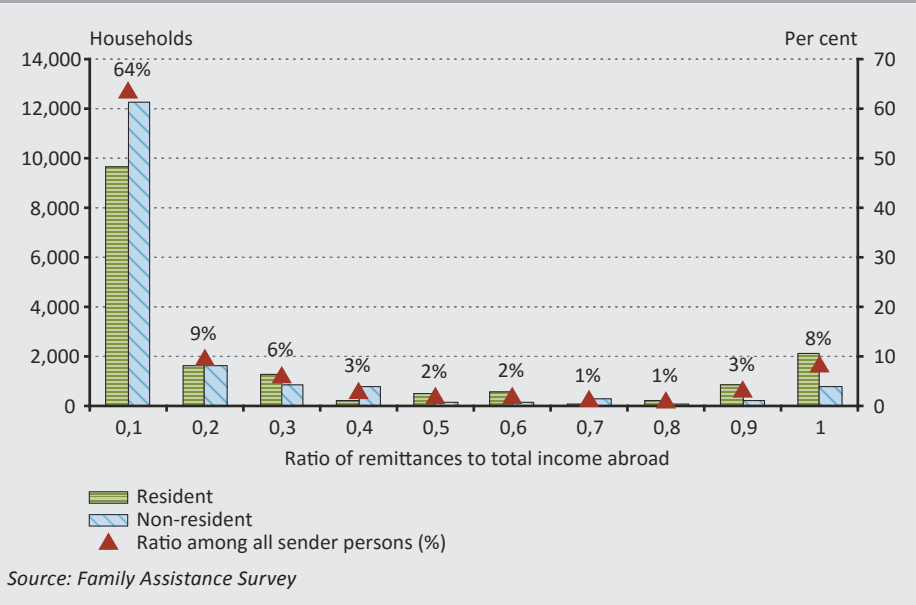
The ratio of the remitted amounts to the income earned by the sender during his stay abroad is also worth examining (*Figure 6*). For purpose of this exercise, the senders' respective incomes were consolidated wherever more than one sender was indicated, and the amount thus received was compared to the transfers received by the household. We found that nearly 64 per cent of the senders transfer only 10 per cent of their income at most to the Hungarian household, and around 80 per cent of the senders remit less than 30 per cent. In general, therefore, we can conclude that those working abroad remit only a small fraction of their income to their Hungarian households. According to the residency of the first person as the predominant sender, long-term (i.e. non-resident) workers are more likely to allocate only a small portion of their income to support their non-migrant family members: in this group, the proportion of persons remitting no more than 10 per cent of their income is more than 71 per cent (more than 12,000 senders), compared to 56 per cent among persons working abroad but maintaining their residency in Hungary (9,657 senders). From the other perspective, 17 per cent of the persons working temporarily abroad remit more than 80 per cent of their income, compared to 6 per cent among persons in long-term employment abroad.<sup>11</sup>

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<sup>11</sup> An employee can bring home his entire income or nearly 100 per cent of it if he seeks only short-term employment abroad, and his travel and accommodation expenses, as well as meals are covered by the employer; in other words, if he does not necessarily need to spend any part of the income earned on consumption abroad.



**Figure 6**  
**Distribution of households according to ratio of remittances to net income earned abroad**



The survey also inquired about the method of the transfer, which may provide information about the percentage of remittances received informally in the form of cash. Although 37,000 senders indicated the method of the transfers, since they could select more than one answer, the remittances could not be broken down by amount. More than half of the respondents (55 per cent) reported cash remittances, while 40 per cent of the senders marked wire transfer, which is consistent with the Macedonian results (Roberts *et al.* 2008). The ratio of money transfer services was only 4 per cent.

#### 4.4. Differences by country

It is also worth examining the differences observed with regard to remittances in terms of the sender's country and residency (Annex, Table 2). One third of all senders (72,240 persons in total) resided temporarily or permanently in Germany, while 21 per cent stayed in the United Kingdom and 15 per cent in Austria. The percentage of those working in other countries was below 5 per cent. The proportions of the main countries are consistent with the findings of Blaskó – Gödri (2014) on Hungarians living abroad, i.e. the ratio of senders to the number of immigrants does not show material differences in individual countries. Likewise, in terms of education, the same patterns are seen among the senders as those observed in Hungary's total immigrant population: while most senders in Austria and Germany are skilled workers (42 and 45 per cent, respectively), 32 per cent of

those remitting from the United Kingdom hold a college or university degree. At the same time, a significant portion of the persons employed in the United Kingdom found occupations below their qualifications: the most typical occupations reported in this group include waiters, kitchen helpers, storage labourers and cleaners.

In terms of the remittance amounts, the dominance of Germany, which can be considered the main source in this regard, is even stronger (45 per cent). Workers employed in Austria account for 22 per cent of the remittances; accordingly, they support households in the home country at a greater rate than warranted by their number, although this ratio falls short of the percentage indicated by macro data (38 per cent). The share of remittances received from workers employed in the United Kingdom (7 per cent) is far smaller; in other words, they are far less inclined to remit than would be suggested by their number. Only 3 per cent of the transfers arrived from countries outside of Europe, but this ratio is 7 per cent in the case of persons permanently residing abroad (non-residents).

In line with the above, an examination of the three major migration destination countries reveals that Austria and Germany essentially reflect – obviously in part due to their physical proximity – the habits of resident employees. In the case of the United Kingdom, however, the share of those remitting less than 10 per cent of their income is 81 per cent, and 92 per cent remit no more than 20 per cent of their income; in other words, senders within this group support their non-migrant households to a lesser degree than what they could afford.

## 5. Summary and conclusions

Our study sums up the main results of the first Hungarian representative household survey conducted on the subject of family assistance – remittances – received from abroad. However, one of the main results of the survey – the substantial difference between remittances calculated on the basis of the questionnaire-based survey and the figures estimated from macrostatistics (*Bujnóczki 2017*) – requires further analysis. On the one hand, a certain bias is inevitable due to the data collection methodology of sampling, especially in the case of a survey that involves sensitive income data such as this. Although all available tools were used in the survey – from several rounds of questionnaire testing through the training of the enumerators to the provision of various data supply channels – to gain the most precise data possible, some respondent bias cannot be ruled out. On the other hand, it would be useful to identify possible ways of finetuning the macrostatistics-based estimation procedure based on the current survey and by utilising other data sources. It is also important to note that to a significant degree discrepancies between the macro and micro data can be attributed to definition differences; for instance, while we considered net incomes in the results of the present survey in all cases, the balance of payments uses gross incomes in the case of temporary employment abroad.

At the same time, since this survey provides the first detailed data source on this subject, numerous new results can already be observed regarding the underlying socio-economic features of remittances. The data demonstrate that remittances to Hungary are primarily sent by young emigrants to their elderly parents in Hungary, which is consistent with the Polish example presented by *Krzyzowski – Mucha (2014)*. We may conclude then that the phenomenon affects almost exclusively family members and that support for spouses and children left behind in the home country is less typical.

With respect to receiving households, it should be emphasised that remittances are such an important source of income for the poorest families that they may even exceed the incomes earned by other means. A considerable concentration can be observed among households in terms of the frequency of the remittances: a significant part of households receive relatively smaller amounts on an annual basis, whereas nearly a third of the households are the recipients of larger, regular (monthly or even more frequent) transfers, the total amount of which accounts for two thirds of all remittances.

Low-value non-financial support is more frequent; there is no difference between employees working abroad temporarily or permanently in this regard, whereas in terms of value, financial support is the predominant form of assistance, and more than 60 per cent of such transfers originate from short-term workers. While this percentage falls short of the 80 per cent ratio indicated by macro data, the difference could also be attributed to the fact that the balance of payments define compensations of employees instead of the remittances sent from these compensations. At the same time, it is consistent with the result of the Moldovan household survey presented by *Pinger (2009)*.

The survey also yields information on numerous features of the senders. We found that in general, senders have secondary education and work in the industry and services sectors, but the percentage of senders with higher education qualifications is somewhat higher among those employed abroad on a permanent basis. Two thirds of the senders remit no more than 10 per cent of their income, and this ratio is somewhat lower among those residing abroad over the long term. In addition, differences can be observed also in terms of destination countries: while the number of senders reflects migration data and does not demonstrate appreciable differences, in terms of the amount remitted Austria is over-represented and the United Kingdom is under-represented.

A possible direction of research could be the formulation of a more accurate estimation procedure; moreover, a more detailed examination of the determinants of remittances may also be the subject of future research. This study was intended to serve as a basis for such subsequent analyses.

## References

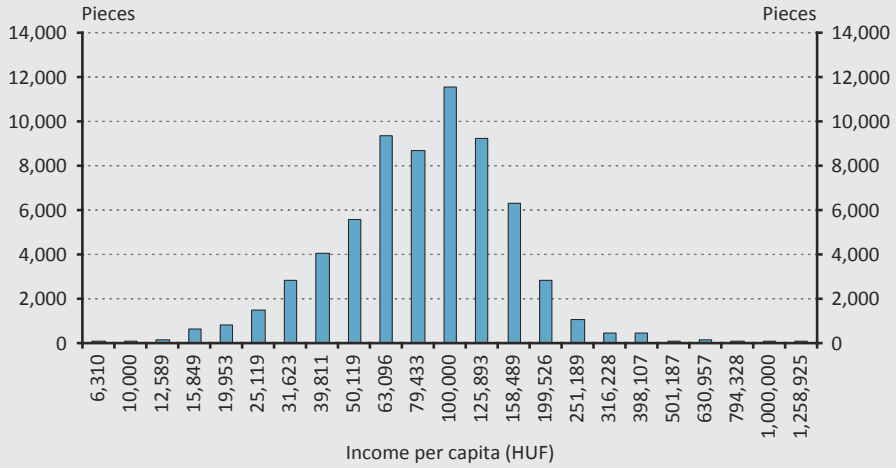
- Airola, J. (2005): *Labor Supply in Response to Remittance Income: The Case of Mexico*. Defense Resources Management Institute, Working Paper Series 2005/09.
- Blaskó, Zs. – Gödri, I. (2014): *Kivándorlás Magyarországról: Szelekció és céország-választás az „új migránsok” körében (Emigration from the labour market of Hungary – Selection and choice of target country among the “new migrants”)*. *Demográfia*, 57(4): 271–307.
- Bodnár, K. – Szabó, L.T. (2014): *The effect of emigration on the Hungarian labour market*. MNB Occasional Papers No. 114.
- Bollard, A. – Morten, M. – Rapoport, H. (2009): *Remittances and the brain drain revisited: The microdata show that more educated migrants remit more*. Bar-Ilan University, Department of Economics, Working Papers No. 26.
- Böröcz, J. (2014): *Regimes of remittance dependency: Global structures and trajectories of the former soviet “bloc”*. *Demográfia*, English Edition, 57(5): 5–37.
- Brown, R.P.C. – Carling, J. – Fransen, S. – Siegel, M. (2014): *Measuring remittances through surveys: Methodological and conceptual issues for survey designers and data analysts*. *Demographic Research*, Volume 31, Article 41: 1243–1274. <https://doi.org/10.4054/DemRes.2014.31.41>
- Bujnóczki, A. (2017): *A külföldi munkavállalói jövedelem és a munkavállalói hazautalás statisztikai számbavétele (Statistical processing of income earned abroad and workers' remittances)*. *Statisztikai Szemle*, 95(6): 599–620. <https://doi.org/10.20311/stat2017.06.hu0599>
- Csortos, O. – Kóczián, B. (2017): *An analysis of the incomes and current personal transfers of Hungarians living abroad*. *Financial and Economic Review*, 16(2): 5–27. <http://doi.org/10.25201/FER.16.2.527>
- HCSO – SEEMIG (2014): *Helyzetkép a magyarországi elvándorlásról (Emigration status report of Hungary)*. SEEMIG – Managing Migration in South East Europe – transnational cooperation project. Press copy. <http://seemig.eu/downloads/pressroom/SEEMIGpressmaterialBudapest15October2014.pdf>. Downloaded: 1 December 2017.
- HCSO (2015): *Ingázás a határ mentén (Cross-border commuting)*. Hungarian Central Statistical Office.
- HCSO (2017): *Microcensus 2016 – 2. Characteristics of the population and dwellings*. Hungarian Central Statistical Office.
- IMF (2009): *Balance of Payments and International Investment Position Manual – 6th edition*. International Monetary Fund, Washington D.C.

- Issahaku, H. – Abor, J.Y. – Harvey, S.K. (2017): *Remittances, banks and stock markets: Panel evidence from developing countries*. Accepted manuscript, Research in International Business and Finance. <https://doi.org/10.1016/j.ribaf.2017.07.080>
- Jiménez-Martin, S. – Jorgensen, N. – Labeaga, J.M. (2007): *The volume and geography of remittances from the EU*. European Commission. Online: [http://ec.europa.eu/economy\\_finance/publications/pages/publication10089\\_en.pdf](http://ec.europa.eu/economy_finance/publications/pages/publication10089_en.pdf). Downloaded: 1 December 2017.
- Juraev, A. (2012): *Labor migration from Uzbekistan: Social and economic impacts on local development*. Doctoral Thesis. University of Trento, Italy.
- Kakhkharov, J. – Akimov, A. – Rohde, N. (2017): *Transaction costs and recorded remittances in the post-Soviet economies: Evidence from a new dataset on bilateral flows*. Economic Modelling, 60 (January): 98–107. <https://doi.org/10.1016/j.econmod.2016.09.011>
- Kapitány, B. – Rohr, A. (2014): *Kivándorlás Magyarországról – egy új becslési eljárás eredményei (Emigration from Hungary – Results of a new estimation method)*. Demográfia, 2014(02): 67–85.
- Krzyzowski, L. – Mucha, J. (2014): *Transnational caregiving in turbulent times: Polish migrants in Iceland and their elderly parents in Poland*. International Sociology, 29(1): 22–37. <https://doi.org/10.1177/0268580913515287>
- Lopez, H.M. – Livingston, G. – Kochar, R. (2009): *Hispanics and the Economic Downturn: Housing Woes and Remittance Cuts*. Washington D.C., Pew Hispanic Center.
- Massey, D. – Arango, J. – Hugo, G. – Kouaouci, A. – Pellegrino, A. – Taylor, J.E. (1998): *Worlds in motion. Understanding international migration at the end of the Millennium*. Oxford University Press.
- Meyer, D. – Shera, A (2016): *The impact of remittances on economic growth: An econometric model*. *EconomiA*, 18(2): 147–155. <https://doi.org/10.1016/j.econ.2016.06.001>
- MNB (2014): *Balance of payments and international investment position of Hungary*. Magyar Nemzeti Bank.
- Mohapatra, S. – Ratha, D. (2010): *The Impact of the Global Financial Crisis on Migration and Remittances*. In: Canuto, O. – Giugale, M. (eds.): *The day after tomorrow. A handbook on the future of economic policy in the developing world*. World Bank, Washington D.C., pp. 297–320.
- Pemberton, S. – Scullion, L. (2012): *Remittances and Evolving Migration Flows from Central and Eastern Europe to the United Kingdom*. In: Sirkeci, I. – Cohen, J.H. – Ratha, D. (eds.): *Migration and Remittances during the Global Financial Crisis and Beyond*. World Bank, Washington D.C., pp. 227–236.

- Pinger, P. (2009): *Come back or stay? Spend here or there? Return and remittances: The case of Moldova*. *International Migration*, 48(5): 142–173. <https://doi.org/10.1111/j.1468-2435.2009.00562.x>
- Roberts, B. – Markiewitz, M. – Nikolov, M. – Stojkov, A. (2008): *A study on determinants and trends in remittance flows in Macedonia*. *CEA Journal of Economics*, 3(1): 41–61.
- Schrooten, M. (2005): *Bringing home the money: what determines worker's remittances to transition countries?* Discussion Paper Series A, No. 466. The Institute of Economic Research, Hitotsubashi University.
- Soltész, B. (2016): *Migration and diaspora policies for development in Latin America*. Corvinus University of Budapest, Institute for International Studies, PhD Thesis.
- Stark, O. – Bloom, D.E. (1985): *The new economics of labor migration*. *The American Economic Review*, 75(2). Papers and Proceedings of the Ninety-Seventh Annual Meeting of the American Economic Association, pp. 173–178
- Stark, O. – Lucas, R.E.B. (1988): *Migration, remittances, and the family*. *Economic Development and Cultural Change*, 36(3): 465–481. <https://doi.org/10.1086/451670>
- World Bank (2016): *Migration and remittances factbook 2016*. World Bank, Washington D.C.

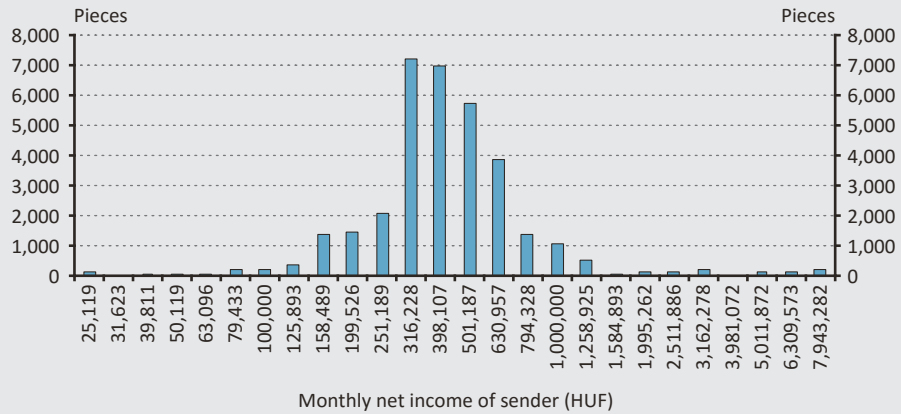
Annexes

**Figure 7**  
Distribution of the per capita income of receiving households



Source: Family Assistance Survey

**Figure 8**  
Distribution of senders' net monthly HUF-denominated income for the period spent abroad in 2016



Source: Family Assistance Survey

**Table 2**  
**Remittances by the country and residency of the sender, 2016**

	HUF millions			%		
	resident	non-resident	total	resident	non-resident	total
DE	10,886	6,343	17,229	48.8	40.3	45.3
AT	5,737	2,741	8,479	25.7	17.4	22.3
UK	1,548	1,253	2,801	6.9	8.0	7.4
NL	1,600	141	1,741	7.2	0.9	4.6
IT	296	958	1,254	1.3	6.1	3.3
FR	286	603	889	1.3	3.8	2.3
CH	246	445	691	1.1	2.8	1.8
SE	94	401	495	0.4	2.5	1.3
NO	66	352	419	0.3	2.2	1.1
IE	64	270	334	0.3	1.7	0.9
BE	34	19	53	0.2	0.1	0.1
DK	20	20	40	0.1	0.1	0.1
ES	18	209	227	0.1	1.3	0.6
<b>Europe</b>	<b>20,897</b>	<b>13,756</b>	<b>34,653</b>	<b>93.7</b>	<b>87.4</b>	<b>91.1</b>
CA	72	13	85	0.3	0.1	0.2
US	54	1,033	1,087	0.2	6.6	2.9
AU	7	47	54	0.0	0.3	0.1
<b>Countries outside of Europe</b>	<b>133</b>	<b>1,093</b>	<b>1,226</b>	<b>0.6</b>	<b>6.9</b>	<b>3.2</b>
Other countries	1,152	877	2,029	5.2	5.6	5.3
No response	112	6	118	0.5	0.0	0.3
<b>Total</b>	<b>22,294</b>	<b>15,732</b>	<b>38,026</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Family Assistance Survey