

THE PRACTICE OF USING HOUSEHOLD SURVEYS FOR ESTIMATING UNDECLARED EMIGRATION¹

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Abstract. *In the modern world of globalization, emigration has become one of the most vital events that should be reflected in the population statistics due to its impact on the size and structure of the country's population. The importance of correct evaluation of emigration is very high because, by influencing the efficiency of government policy making, it can help to avoid the negative consequences of emigration. However, many national statistical institutions of different countries fail to provide accurate statistics on emigration because of various obstacles which arise in the usage of administrative data sources. Politicians, researchers and experts engaged in the analysis of demographic development and the migration phenomenon are especially not satisfied with the amount and quality of the current statistical information provided by the official statistics. One of the important tasks for every NSI is not only to reflect the stocks and flows of emigrants, but also to provide their demographic and socioeconomic characteristics for the in-depth analysis of the determinants and consequences of emigration. Unfortunately, administrative data sources are usually unable to provide reliable statistics on the volume of undeclared emigration as well as on the characteristics of emigrants. Thus, the article discusses the benefits of conducting household surveys for obtaining information about characteristics of emigrants and filling this gap.*

Key words: *undeclared emigration, data on population, estimation of emigration, characteristics of emigrants, household survey.*

Introduction

International migration is a significant phenomenon in today's globalization world. Due to the social and economic differences among countries, abolition of border control in certain areas (e.g., the Schengen area), improvements in transportation and communication technologies, the possibility to travel in search of a better job or with other agenda become easier and more enticing.

¹ The article is based on the authors' work results from the participation in one of the projects of Suitland Working Group named "Literature Review of Methodologies Used to Estimate Emigration". The primary objective of this Working Group is to improve the use of household surveys to measure migration. Authors are taking part in the project which concentrates on developing a single source, such as a handbook, describing methodologies used to estimate emigration, which could help statistical offices improve their own methodologies and estimates of emigration. Authors wish to thank Dalia Ambrozaitiene, Deputy Director General of Statistics Lithuania, and Prof. Habil. Dr. Vlada Stankuniene from the Demographic Research Center, Institute for Social Research, for their assistance in collecting information.

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In the recent years, migration within the European Union became more intensive because of the newly accepted members. Member states of the EU can be divided into two groups in terms of the migration process, i.e. countries of immigration (the so-called “old” member states of the EU with well developed economies and high living standards) and of emigration (new EU member states, especially Lithuania, Latvia, Poland, Romania and Bulgaria²).

The impacts of emigration on a sending country are of two types. The negative aspects refer to the decrease in the size of the population, a changed structure of the age and sex of the population, the lack of labour force and skilled workers, incomplete families, etc., whereas the positive aspects include a lower unemployment rate, a higher employment rate, higher wages and salaries, financial benefits for families, cultural exchange, etc. The consequences of emigration, such as gender misbalance, ageing population, mismatch of labour force and skills required, are seen today and may deepen in the future (Semeta, 2007).

A correct evaluation of emigration is highly significant because, by influencing the efficiency of government policy making, it can help to avoid negative consequences of emigration. However, many national statistical institutions (hereinafter referred to as NSIs) of different countries fail to provide accurate statistics on migration because of the various obstacles that arise with the usage of the administrative data sources.

This paper deals with the difficulties of emigration measurement through administrative data sources and provides a description of household surveys as a possible solution. *The purpose* of this article is to evaluate the methodologies of emigration estimation through household surveys used in Eastern Europe, Baltic States and Armenia. *The object* of the research is the phenomenon of undeclared emigration. The region of Eastern Europe and the Baltics was chosen due to the fact that emigration rates in most of the countries in this region are the highest in the EU. As the Republic of Armenia from the Caucasus region conducted a special household survey dedicated to migration, it was also included in the research.

Methodology. National statistical offices and other related institutions announce only results of their work, with a very brief mentioning of the methods they use, while scientists usually present descriptions of their methodologies in printed publications. Thus, in order to obtain the data, letters on behalf of Statistics Lithuania were sent to the NSIs, academics and other experts of the Eastern European countries, Baltic States and Armenia with an official request to provide information on emigration estimation. Contact people were asked to provide descriptions of the methodologies or forward the letter to their colleagues who may possess such information in Russian, Lithuanian or English languages. After acquiring and evaluating the information, descriptions of the methodologies, including their critical analysis, were prepared.

² EUROSTAT data on crude rates of net migration. Available at: <<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=0&language=en&pcode=tsdde230>>

Importance and difficulties of correct evaluation of emigration

In order to mitigate or avoid the negative consequences of emigration, it is very important to be able to measure its real volume. Together with the statistics on births and deaths, migration constitutes an important part of the accurate estimation of population, and the insufficiency of data on migration can strongly affect the estimated total number of population and its structure. This, in turn, can prevent making reliable population projections, which should constitute the basis for planning balanced social and economic development strategies.

Due to the intensity of emigration, some countries have to contend with tremendous losses in the population and in the labour force. In countries with a high proportion of immigrants or emigrants, the impact on the demographic structure might be essential. Changes in the composition of the population will lead to changed plans in public services. More precisely, the need for public services will influence activities such as childminding, education, the labour market and retirement systems (Tegsjo, 2005). Therefore, in order to maintain migration, social and economic policies as well as common policies on the labour market, it is very important to have good-quality information on migration. The improvement of the availability and quality of emigration statistics in order to reflect the real impact of emigration on the demographic structure of the population is very important for government in making effective decisions.

Despite its importance, migration remains a topic on which the available statistics are relatively weak (Thorogood, 2005). Analysis of the EU data on migration reveals that the available data meet neither the demands of policy-makers nor those of economists and scientists. This applies at both national and EU levels (Puckler, 2005). Given the clear importance of international migration, and despite the fact that a large fraction of migration is controlled, recorded and restricted, the statistical information actually available about migration can be remarkably limited. In population statistics, whereas births and deaths are almost perfectly recorded in Europe, significant gaps occur in the recording of migration statistics. Although the situation differs among countries, generally statistics on international migration is poorer than on other social and economic phenomena in terms of completeness and reliability (Thorogood, 2005).

Statistical observation of inflows and outflows is indeed problematic. One of the key difficulties arises from the legal status of movements. The multiplicity of legal statuses can create some problems. Inside the EU, for example, EU citizens coming from other member-states possess an “intermediate” status between national citizens and foreigners (defined as third-country nationals coming from outside the EU). As a consequence, migration flows of EU citizens are barely measured (Peixoto, 2005). Several EU member states do not currently produce statistics on migrant inflows and a larger number have no statistics on outflows (Thorogood, 2005).

Most countries collect information on international migration, using traditional data collection systems such as population censuses, population registers, border or admission statistics, administrative systems that control the admission and stay of foreigners (e.g., consulate procedures and naturalization requirements), systems of recording data on refugees and asylum-seekers, and work permit statistics. It should be noted that the data source is rarely specifically designed to produce migration statistics – often being either an administrative system that produces statistical data as a by-product, or a statistical system that is frequently primarily designed to produce data on the phenomena other than migration (Thorogood, 2005). Although all of these systems can gather some information relevant to the description of international migration stocks and flows, and occasionally on certain limited characteristics of migrants, such as age, sex, country of birth or previous residence (if immigrant) or country of destination (if emigrant), the information is too limited for in-depth analysis of both the causes and the consequences of international migration, even if data from person-records in these systems could be linked (Groenewold, Bilsborrow, 2004).

One of the key shortcomings of these systems is that they do not collect data on the situation of migrants prior to their migration. With such limited data, it is difficult to gain an accurate understanding of the causes or consequences of migration for the migrants, their households, and for non-migrants and the larger society (Groenewold, Bilsborrow, 2004).

Moreover, in the case of estimation of emigration, these administrative data collection systems often fail to provide accurate data. Various statistical sources are used to provide data on migration outflows and stocks of nationals living abroad, but their accuracy is in most cases unsatisfactory (Chudinovskikh, Anich, Bisogno, 2008). Unlike countries of immigration, the countries experiencing large-scale emigration face serious problems with the estimation of emigration flows. Large numbers of emigrants do not declare their emigration, and this undeclared emigration is much more difficult to estimate compared with the flows of immigrants (Semeta, 2007). For instance, a particular weakness of register-based migration statistics relates to emigrants. While an incoming migrant may be obliged to register as a resident in order to work or receive social security or healthcare benefits, there may be little incentive for a person to inform the authorities about his/her departure. Indeed, there may be strong reasons for persons not to inform the authorities about their departure, especially if they intend to return after several years. For example, surveys conducted in Lithuania show that only each second-third emigrant declares his/her departure from Lithuania³. There is a risk, therefore, that emigration

³ Data from Statistics Lithuania. Available at <<http://db1.stat.gov.lt/statbank/selectvarval/saveselections.asp?MainTable=M3020107&PLanguage=1&TableStyle=&Buttons=&PXSIId=6287&IQY=&TC=&ST=ST&rvar0=&rvar1=&rvar2=&rvar3=&rvar4=&rvar5=&rvar6=&rvar7=&rvar8=&rvar9=&rvar10=&rvar11=&rvar12=&rvar13=&rvar14=>>>

flow statistics based purely on registers will undercount migrant outflows (Thorogood, 2005). In addition, a population census, for example, enumerates the population living in households at the time of the census. Thus, it usually does not collect information about emigrants since they are not present at the time of the interviews. In 2011, all EU members are obliged to conduct a census of population, and some countries, including Lithuania, are going to introduce a module of questions on emigration during this census. For instance, Statistics Lithuania is going to collect data on the country of destination, the duration and reason for departure, the main reason for returning, etc. Still, even if the questions on emigrants are included for other household members to answer, censuses are very expensive and therefore usually conducted only every 10 years, creating a huge time lag between statistical data.

No single data source offers an ideal solution to the production of good emigration statistics; each of the sources offers particular strengths and weaknesses. Many countries estimate emigration based on data taken from several different available sources. Even where good information on the number of emigrants can be produced, it can be extremely difficult to obtain detailed information about their social and economic characteristics (Thorogood, 2005). The solution to such problem might be a regular conduction of household surveys which could help obtain data on characteristics of emigrants.

Emigration estimation through household surveys

Because of the limitations of administrative data collection systems for acquiring data on international migrants, specialized surveys of international migration constitute an invaluable complement to those systems (Bilsborrow, 2007). In recent years, surveys have been increasingly used to study various aspects of the migration process as they offer relevant opportunities to collect information not provided by administrative data sources (Giovannelli, 2005). Such surveys can contain questionnaires that are long enough to collect data for identifying international migrants on the basis of their place of birth, country of citizenship or previous place of residence. Moreover, they can include questions that allow obtaining detailed information on the situation of migrants and their households before and after migration, thus permitting the study of the causes or consequences of international migration. In addition, specific questions for acquiring data about emigrants from their household members as well as about former emigrants who have returned (re-emigrants) can be included in such surveys. Therefore, household surveys can provide not only an approximate number of emigrants, but also detailed information on their social, demographic and economic characteristics.

A survey does not cover the entire population; thus, in order to obtain representative data, it should have some way of selecting persons or households for the interview and an appropriate listing of the entire population of interest for them to be drawn upon. For migration surveys, the most commonly used sampling frame is a population census

because censuses are conducted in many countries and they provide a universal coverage of the population. Continuous population comprehensive registers, mainly in Europe, can also be an excellent source, as can registers of foreigners in the few countries with complete data. The above are sources of data on stocks of international migrants. The usual sources of data on international migration flows are border or admission statistics which are often incomplete, or population censuses when they include questions on the date of arrival (Bilsborrow, 2007).

A perfect data set for analysis of the determinants of emigration by individuals or households contains emigrants (or emigrant households) interviewed directly at the place of destination and equivalent individuals (or households) in the country of origin who did not emigrate in a certain time period. This means that surveys should be conducted in each country: those who emigrated should be interviewed in the country of their destination (where they become immigrants), and those who did not emigrate should be interviewed during a survey in the country of origin. These two groups, pooled together, provide a population for which the statistical factors determining why some persons (or entire households) emigrated and others did not can be estimated by multivariate analysis.

The above approach is ideal as the information is acquired directly from the persons making the decision to emigrate or not. However, it involves higher data collection costs since a survey must be carried out in two countries. An alternative is to conduct a survey only in the country of origin, in which households with and without emigrants are interviewed. In this case, a person who is the household head, the spouse of the head, or some other adult knowledgeable about the emigrant is asked to provide information about the emigrant from the household. Still, information obtained in this way is evidently less reliable than the information the emigrant could provide directly if interviewed in a destination country survey (Bilsborrow, 2007).

Another problem with conducting a survey only in one country is that if the entire household emigrates leaving no members behind, there is usually no one left to provide data about it. Therefore, the survey carried out only in the place of origin becomes less useful and fails to cover emigrants when more and more people emigrate as entire households. The solution to such situation could be interviewing neighbours of an emigrated household; however, they may not know answers to some questions, and the information provided by neighbours is rarely completely accurate. Thus, such data are not very reliable.

General-purpose surveys are potentially more useful sources of information as they may allow in-depth questioning on the characteristics and motivations of international migrants and include data on non-migrants as a comparison group. But a major drawback of such surveys is that sample sizes are too small to yield statistically reliable data on migrants, since they usually comprise a very small part of the population (Bilsborrow,

2007). Even if such survey is big enough, it is still very expensive to be conducted each year.

The least expensive option is to use, when possible, data from an existing household survey. The most suitable survey to provide data on an adequate number of recent migrants could be the labour force survey (hereinafter referred to as LFS). Such survey has the advantages of usually being carried out by NSIs more or less regularly, even in many developing countries, based on large sample sizes, and using questionnaires that include useful information for studying migration, including demographic characteristics, marital status, employment and wages, etc. (Bilsborrow, 2007). While the basic information about emigrants can be obtained through the regular questions of the LFS, the emigration-specific questions that can be added to the questionnaire are limited (because of the interview time limit, etc.) and thus restricting information about the causes or consequences of emigration. Furthermore, in some countries there is no recent or large-scale LFS.

Emigration estimation in Eastern Europe, Baltic States and Armenia

In order to find out which countries use household surveys to measure emigration, letters on behalf of Statistics Lithuania were sent to the NSIs, academics and other experts of the Eastern European countries, Baltic States and Armenia with an official request to provide information on emigration estimation. Unfortunately, as it turned out, most of the NSIs in these countries use only administrative data sources to collect information about emigrants. The National Statistical Committee of the Republic of Belarus uses data from the population censuses and information from bodies of internal affairs on registration of persons at the place of residence to assess population migration. Statistics on migration in the Czech Republic is also based only on administrative data sources, such as aliens' and population registers. The Romanian statistical system has no survey dedicated to the phenomenon of emigration, either. The LFS is the largest survey on population households in terms of the sample size in this country; however, data on emigration are significantly underestimated and consequently not reliable. Therefore, emigration is measured exclusively through administrative data sources. The demographic and migration statistics of the Slovak Republic is based on the principles of registered residence, and the Federal State Statistics Service of the Russian Federation, as a rule, uses statistics of countries of destination to estimate the real size of emigration flows and does not conduct surveys for this purpose. The Central Statistical Bureau of Latvia uses only administrative data for emigration assessment; nevertheless, University of Latvia has conducted a household survey dedicated to migration.

On the other hand, there are several countries in which NSIs, at least once in the last five years, have carried out a household survey to assess emigration. The National Statistical Service of the Republic of Armenia conducted a survey in 2007, the National

Bureau of Statistics of the Republic of Moldova and the State Statistics Committee of Ukraine and the Ukrainian Center for Social Reforms carried out surveys in 2008, Statistics Lithuania is conducting surveys each year since 2006. The Central Statistical Office of Poland conducts the LFS with additional questions on emigration; however, the size of its sample is relatively small and insufficient for the survey of international migration. The survey does not provide data on the size of international migration, but it rather well represents the trends and main directions of emigration. Statistics Estonia conducted a Household Module Survey in 2008, which was aimed at measuring labour force emigration; unfortunately, the methodological description is available only in the Estonian language and is not discussed further in this article.

Upon reviewing and summarizing the obtained information, descriptions of the Armenian, Latvian, Lithuanian, Moldavian and Ukrainian methodologies were prepared. Information for preparing reports on the methodologies of other countries was insufficient as these countries either do not use household surveys to estimate the volume of emigration, or the methodologies are described in the languages that are beyond the reviewers' knowledge.

An overview of the prepared methodological descriptions: similarities and differences, strengths and limitations

Most countries that try to measure emigration through household surveys usually employ existing surveys in order to save costs. The sample size should be big enough to yield statistically reliable data; therefore, Lithuania, Moldova and Poland use the LFS as it is the biggest survey conducted in these countries and is suitable for adding a module of questions about emigration. As most of the expenses of the LFS are already covered, supplementing additional questions does not cost much. The Ukrainian researchers added supplementary questionnaires even to two of the existing surveys (Population Economic Activity Survey and Household Living Conditions Survey). This allowed Ukrainians to widen the sample and acquire more data on emigrants. On the other hand, a survey designed especially for the purpose of deriving data on migration can provide more useful information on this topic than another existing survey with additional questions on emigration. Thus, Armenia conducts the Sample Survey on External and Internal Migration for acquiring information on migrants. Latvians in their research used a survey especially dedicated to migration issues as well.

Both ways of acquiring information have their strengths and weaknesses (see Table). Adding a section of questions about emigration to existing surveys is much cheaper than conducting a separate survey dedicated to migration; however, the supplemented section on migration can contain only a limited number of questions, as it is just an addition to an already existing questionnaire. Therefore, a special survey on migration provides much more detailed information concerning migration issues.

TABLE. Strengths and limitations of the reviewed methodologies

Country	Strengths	Limitations
Armenia	<ul style="list-style-type: none"> • The Sample Survey on External and Internal Migration is designed for the purpose of deriving data on migration; therefore, it can provide more useful information on this topic than another survey (e.g., the LFS) with additional questions on emigration. • This methodology allows estimating the main socio-demographic characteristics of migrants (age-sex composition, marital status, level of education, ethnical composition, nationality, economic activeness, directions of migration as well as migration plans). • This method can be used in any country able to conduct such survey. 	<ul style="list-style-type: none"> • Executing a survey dedicated to migration is more expensive than supplementing a section of questions on emigration to another survey. • Information about emigrants provided by the household members is less reliable than information an emigrant could provide directly if interviewed in the destination country. • Some questions of the survey are too difficult for the relatives of emigrants to answer⁴. • Households that emigrated leaving no members in Republic of Armenia are not considered. • The high non-response rate can complicate a correct evaluation. • The sample should be large enough to yield statistically reliable data.
Latvia	<ul style="list-style-type: none"> • The approximate number of emigrants can be obtained by adding questions about emigrated relatives to the survey without spending too much money on a separate research. • The method allows estimating such characteristics of emigrants as age group, duration of absence, the country they emigrated to, etc. 	<ul style="list-style-type: none"> • Calculations are based on too many assumptions, and this lowers the accuracy of derived data. • The demographic data obtained during the survey and derived using such method is too general (e.g., the age of emigrants is calculated approximately for four large age groups). • The method does not provide precise or interpretable information about the professional composition of the emigrants. • Information about emigrants provided by the relatives is less reliable than information an emigrant could provide directly if interviewed in the destination country. • Emigrants with no remaining relatives in Latvia are not considered.
Lithuania	<ul style="list-style-type: none"> • Adding to the LFS a section of questions about emigration is much cheaper than conducting a separate survey dedicated to migration. • This methodology allows estimating the main demographic and social characteristics of emigrants (new country of residence, how many years/months ago she/he left Lithuania; age, sex, education and occupation before leaving, current status (worker, student, other)). 	<ul style="list-style-type: none"> • The supplemented section on migration can contain only a limited number of questions, as it is an addition to the questionnaire of the LFS. • The high non-response rate⁵ can complicate a correct evaluation. • If the relative standard error exceeds 30%, estimates are deemed insufficiently accurate. • The sample should be large enough to yield statistically reliable data.

⁴ Approximately 4% to 10% of interviewees failed to respond to certain questions about their relatives abroad.

⁵ In the 1st quarter 2009, for various reasons, 16.2% of households sampled for the LFS survey did not answer the questions of the survey questionnaire (in 2008 – 25.2%).

	<ul style="list-style-type: none"> • Information about emigrants is obtained not only from their household members, but also from the neighbours in case no relatives live at a sampled address. Therefore, the non-response rate is lower. • This method can be used in any country able to conduct such survey. 	<ul style="list-style-type: none"> • Information about emigrants provided by the relatives and especially by the neighbours is less reliable than information an emigrant could provide directly if interviewed in the destination country.
Moldova	<ul style="list-style-type: none"> • Adding a section of questions about emigration to the LFS is much cheaper than conducting a separate survey dedicated to migration. • This methodology allows estimating the main demographic and social characteristics of emigrants (sex, age groups, citizenship, duration of absence, country of destination, the reason for leaving, ways to look for a job and work conditions, status of residence in the destination country, occupation and economic activity of the job, etc.) • This method can be used in any country able to conduct such survey. 	<ul style="list-style-type: none"> • Information about emigrants provided by other household members is less reliable than information an emigrant could provide directly if interviewed in the destination country. • Households that emigrated leaving none of their members in the Republic of Moldova are not considered. • The high non-response rate can complicate a correct evaluation. • The sample should be large enough to yield statistically reliable data.
Ukraine	<ul style="list-style-type: none"> • Adding a section of questions about emigration to already existing surveys⁶ is much cheaper than conducting a separate survey dedicated to migration. • The usage of several surveys widens the sample size and helps acquiring more data. • The methodology allows estimating the demographic, social and economic characteristics of emigrants (sex, age groups, marital status, level of education, directions of emigration, legal status in the country of migration, employment status, type of economic activity, etc). • This method can be used in any country able to conduct such surveys. 	<ul style="list-style-type: none"> • Information about emigrants provided by the relatives is less reliable than information an emigrant could provide directly if interviewed in the destination country. • Households that emigrated leaving none of their members in Ukraine are not considered. • The high non-response rate can complicate a correct evaluation. • Data from several surveys should be combined properly in order to get correct and representative results.

Source: prepared by authors on the basis of the information provided by the NSIs.

Another important aspect is the problem of acquiring information about emigrants, as they are not present in the country at the time of the interview. None of the analyzed countries interviews emigrants in the country of their destination as it is very expensive and time-consuming. Instead, data on emigrants are obtained by interviewing people who possess related information. In Armenia, Moldova, Poland and Ukraine, the information is obtained from household members who remained in the country. The drawback of such method is that households that emigrated leaving none of their members behind are not considered. Latvians in their research collected information from the relatives of

⁶ Survey of Population's Economic Activity and Survey of Household Living Conditions.

emigrants; however, the limitation of such approach is that emigrants with no remaining relatives in Latvia were not considered, either. This drawback could be avoided by interviewing neighbours of the emigrated household as is done in Lithuania. Information about emigrants is obtained not only from household members, but also from neighbours in case when no one lives at the sampled address; thus, the non-response rate is much lower. However, information provided by neighbours could be unreliable as they may not possess correct information about the emigrated household. All in all, interviewing household members, relatives and neighbours helps to obtain information on emigrants; however, the information (especially provided by neighbours) is less reliable than information the emigrants could provide directly if interviewed in the destination country. Moreover, both relatives and neighbours might fail to answer some questions at all because of the lack of their knowledge about the emigrant (for example, in the Armenian survey approximately 4% to 10% of interviewees failed to respond to certain questions about their relatives abroad).

The purpose of the household surveys is not only to estimate the emigration flows or stocks, but also to reveal the demographic, social and economic characteristics of migrants. As a rule, questions on such characteristics as age, sex, education, etc. are included in the main questionnaire of the LFS or other survey. The estimation of other characteristics depends on the supplemented questions on emigration. As mentioned before, the number of questions added to the questionnaire of an already existing survey is limited; therefore, the range of characteristics is not very broad. Besides age, sex and education, the Lithuanian survey reveals additional characteristics of emigrants such as occupation before leaving, current status (worker, student, other), the new country of residence, how many years/months ago the emigrant left Lithuania. Moldova adds more questions on emigrants in order to identify such parameters as citizenship, duration of absence and country of destination, the reason for leaving, ways to emigrate for labour, emigration costs, the ways to look for a job and the work conditions, status of residence in the destination country, occupation and economic activity of the job, the problems faced. Ukraine explores such characteristics as marital status, directions of emigration, legal status in the country of migration, employment status, type of economic activity, working conditions. Poland concentrates on the aspects such as country of residence, country of citizenship, relation of the emigrant to the head of the household, the period of absence, reason for absence (labour, education, other).

Armenia had a special survey dedicated to migration; therefore, it was able to derive a wider range of characteristics of emigrants than the countries mentioned above. The questions of the survey covered such aspects as marital status, ethnical composition, nationality, economic activeness, directions of migration, purpose of migration, social and economic status of the migrants, the area of their activity, their earnings, savings, future migration plans and destinations, etc. Although Latvia had also a survey dedicated

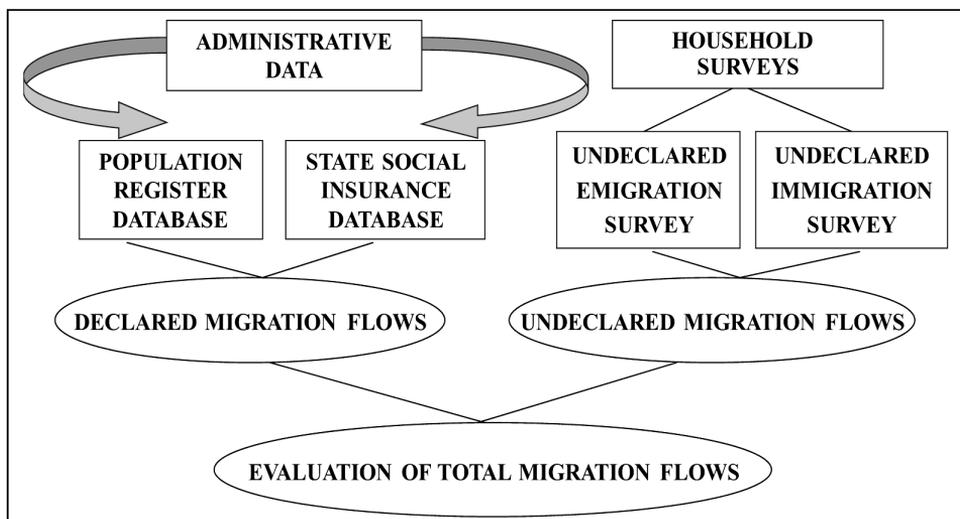


FIGURE. **International migration statistics. Statistics Lithuania** (Ambrozaitiene, 2008)

to migration, it was aimed rather at the evaluation of the geographic, international, domestic and everyday mobility of the labour force, also characterising the Latvian labour force and the labour force that has arrived in Latvia. Thus, the Latvian research cannot boast of a broad range of data on the characteristics of emigrants. It collected information about the country of destination, duration of absence, motivation for emigration, occupation before leaving, etc. Moreover, the Latvian methodology was based on a lot of assumptions, which complicates the accuracy of derived data.

Usually, data from different registers and databases was used as a sample frame. For instance, Lithuania selects survey population from the Residents' (Population) Register (see Figure).

Armenia used the database of addresses of all households within the Republic of Armenia, compiled on the basis of the population census conducted in 2001. The sampling method used in these surveys was usually either the random sampling method or stratified multistage sampling. In addition, in order to obtain representative data from the survey, it was adjusted by applying certain weights.

Analysis of the benefits and drawbacks of the methodologies of each country has shown that so far Statistics Lithuania has one of the best developed methods of estimating of undeclared emigration through the household survey. Moreover, its great advantage is that the LFS with an additional questionnaire on emigrants is organized each year (since 2006); therefore, the dynamics of emigration trends can be observed. Furthermore, a regular conduction of the survey provides Statistics Lithuania with the possibility to continuously develop and improve the methodology.

Suggestions for improvement

The countries that do not use household surveys should consider this method of obtaining data on emigrants as a possible solution for filling existing data gaps. In some countries, the statisticians and researchers encourage NSIs to develop methodologies and conduct household surveys. Thus, the NSIs should consider these suggestions because household surveys help solving the most complicated problems of emigration analysis.

One of the drawbacks of the surveys in the reviewed countries is that not all of them conduct such surveys regularly. In order to provide the public with timely and comparable statistical data, there is a great need to establish a continuous monitoring of emigration processes and to continue the surveys for the evaluation of undeclared emigration flows each year (as is being done in Lithuania).

In some countries, e.g., in Latvia, NSIs do not conduct surveys to collect data on undeclared emigration, while academic institutions such as universities organize researches in this field. Thus, a more intensive cooperation between official institutions and academic communities is needed. The NSIs could use the experience from academic studies, and an improved methodology of migration research could be adapted.

The improvement of current surveys with modules on emigration, such as the LFS or other surveys, should also be made by increasing the sample size or extending the scope of data collected. The sample of the survey should be as large as possible with the existing recourses.

Expansion and intensification of international co-operation, such as combining information of the surveys conducted by neighbouring countries, as well as surveys between migrant-sending and receiving countries, would help to get more accurate results. For example, it would be beneficial for Statistics Lithuania to exchange information derived from surveys with Ireland and the United Kingdom⁷ to which the outflows are the greatest. However, for collating the results of surveys carried out in different countries, the methodologies of such surveys must be harmonized.

When estimating migration flows, it is necessary to combine data obtained from the administrative sources with the household survey data. One of the biggest difficulties faced by the NSIs is the integration of estimated flows of undeclared emigration into the common emigration flows and demographic statistics (recalculation of composition by age, sex, territorial administrative units, etc.); therefore, improvements in this field are vital.

⁷ According to data provided by Statistics Lithuania, the main countries of destination of emigrants who declare their emigration are the United Kingdom and Ireland. Available at: <<http://db1.stat.gov.lt/statbank/selectvarval/saveselections.asp?MainTable=M3020104&PLanguage=0&TableStyle=&Buttons=&PXSID=6284&IQY=&TC=&ST=ST&rvar0=&rvar1=&rvar2=&rvar3=&rvar4=&rvar5=&rvar6=&rvar7=&rvar8=&rvar9=&rvar10=&rvar11=&rvar12=&rvar13=&rvar14=>>>

Every country modifies the methodology of the household survey to reflect its specific situation and national interests. The problem is that the results of such surveys with tailored methodologies often cannot be compared, and their content may be different in terms of information and definitions. Nevertheless, information from different countries on practices, experiences, achievements, encountered problems and their solutions should be spread around through conferences, workshops, seminars, special websites, handbooks, etc. Authors see a good perspective in the work of the Suitland Working Group, the primary objective of which is to improve the use of household surveys to measure migration. To achieve this objective, the Working Group will produce a series of products that will provide various agencies with practical guidance on how to best use household surveys and how to improve the methodologies and estimates of emigration.

Conclusions

Reliable emigration statistics are vital for the policy makers in order to make effective decisions and mitigate the negative consequences of emigration. This information serves the needs not only of the policy makers, but also of international organizations, individual countries' statistical agencies and researchers. However, it is impossible to derive correct data on emigrants from administrative data sources alone. People migrating inside the EU may have little incentive to inform the authorities of their departure to another country; thus, these sources are not able to provide reliable statistics on undeclared emigration. Moreover, the information derived from traditional data sources is too limited for the in-depth analysis of the causes and consequences of emigration because these sources usually fail to collect information on the detailed demographic, social and economic characteristics of emigrants.

Household surveys, on the other hand, are able to some extent solve this problem and fill the information gap. They can collect data on declared and undeclared emigrants by interviewing their household members or neighbours. However, estimation of undeclared emigration through household surveys is not an ideal solution, as this method has also some drawbacks. The information collected not directly from the emigrants, but from other persons is less reliable; the high non-response rate may complicate a correct evaluation; if the entire household emigrates, there is usually no one left to provide the needed information; the surveys dedicated to migration are quite expensive and time-consuming, whereas the number of questions on emigration, added to the survey of another purpose, is limited, etc.

Only several countries in Eastern Europe and the Baltic States use household surveys to evaluate emigration. Countries which do not use household surveys are now considering this method of deriving data on the characteristics of emigrants. Upon reviewing methodologies from Armenia, Latvia, Lithuania, Moldova and Ukraine, we came to several conclusions. One of the drawbacks of the surveys in the reviewed

countries is that not all of them conduct such surveys regularly. In order to provide timely and comparable statistical data, a continuous monitoring of emigration processes must be established and surveys must be carried out each year. Moreover, regular surveys can provide NSIs with the possibility to continuously develop and improve their methodologies. In addition, to obtain more reliable results, the sample size of the surveys should be increased and the scope of data collection should be expanded. Finally, to improve the current methodologies or develop new ones, a more intensive cooperation is needed on the national level between NSIs and academic institutions as well as on the international level among different countries.

It should be borne in mind that any particular data source not only provides benefits, but also presents limitations. Thus, there is no unique source of data ensuring the amount and quality of the necessary information. Therefore, improvements should be done in the field of combining data from household surveys with data from administrative sources.

REFERENCES

Ambrozaitiene, D. (2008). Selected methods to improve emigration estimates: Measuring undeclared migration and improvement of the international migration statistics by Statistics Lithuania – Joint UNECE/Eurostat Work Session on Migration Statistics, Geneva, pp. 2, 7–8. Available at: <<http://www.unece.org/stats/documents/ece/ces/ge.10/2008/wp.2.e.pdf>>

Bilsborrow, R.E.(2007). Surveys of international migration: Issues and tips – Sixth Coordination Meeting on International Migration United Nations, New York, pp. 1–5. Available at: <http://www.un.org/esa/population/meetings/sixthcoord2007/Bilsborrow_paper.pdf>

Chudinovskikh, O., Anich, R., Bisogno, E. (2008). Measuring emigration at the census: lessons learned from four country experiences – Joint UNECE/Eurostat Work Session on Migration Statistics, Geneva, pp. 1–4. Available at: <http://unstats.un.org/unsd/censuskb/attachments/2008UNECE_ECE2-GUIDb341be4e88a54ba394808100ce0aa20b.pdf>

Giovannelli, C. (2005). Italian statistics system on extra-EU labour migration: Potentialities for future developments. 28th CEIES Seminar: Migration Statistics – Social and Economic Impacts with Respect to Labour Market, Riga, pp. 96–98, 104–106.

Graf Puckler, B. (2005), Opening speech – 28th CEIES Seminar: Migration Statistics – Social and Economic Impacts with Respect to Labour Market, Riga, p. 10.

Groenewold, G., Bilsborrow, R.E. (2004). Design of Samples for International Migration Surveys: Methodological Considerations and Lessons Learned from a Multi-Country Study in Africa and Europe – Population Association of America, General Conference, Boston, Massachusetts, pp. 3–4.

National Bureau of Statistics of Republic Moldova (2009). Labour Force Migration in the Republic of Moldova, pp. 3–4. Available at <http://www.statistica.md/public/files/publicatii_electronice/migratia/Migratia_FM_en.pdf>

National Statistical Service of the Republic of Armenia (2008), Report on Sample Survey on external and internal migration in the Republic of Armenia. Yerevan, pp. 10–13. Available at <http://www.armstat.am/file/article/rep_migr_08e.pdf>

Nowak, L., Szałtys, D., Kostrzewa, Z., Witkowski, J. (2009). The concept of the international migration statistics system in Poland. 95th DGINS Conference, Malta, pp. 4–07.

Peixoto, J. (2005). Migration, mobility and integration: the long-term challenges to statistical observation of international migration. – 28th CEIES Seminar: Migration Statistics – Social and Economic Impacts with Respect to Labour Market, Riga, pp. 135–140.

Semeta, A. (2007). Migration flows and globalisation. 93rd DGINS Conference, Budapest, pp. 1–3, 9–11. Available at <http://epp.eurostat.ec.europa.eu/portal/page/portal/conferences/documents/93rd_dgins_conference/SESSION%20II%20DOC%201.PDF>

Statistics Estonia (2009). Migration. Tallinn, p. 21. Available at <http://www.stat.ee/publication-download-pdf?publication_id=15619&publication_title=Ränne.+2000-2007.+Migration&id=32392>

Statistikos departamentas prie Lietuvos Respublikos Vyriausybės (2006). Nedeklaruotos emigracijos srautų vertinimo, remiantis gyventojų užimtumo tyrimo duomenimis, metodika. Vilnius. Available at <http://www.stat.gov.lt/uploads/docs/Nedek_emig_%20met_2006_%20152.doc>

Suitland Working Group (2009). Using household surveys to measure migration and the size, distribution, and characteristics of migrant populations. Final Conference Report, Suitland, Maryland, pp. 1–5. Available at <<http://www.unece.org/stats/documents/ece/ces/ge.10/2009/zip.3.e.pdf>>

Tegsjo, B. (2005). Experience and proposals from a migration statistics project at Statistics Sweden. 28th CEIES Seminar: Migration Statistics – Social and Economic Impacts with Respect to Labour Market. Riga, pp. 123–124.

Thorogood, D. (2005). Migration statistics in Europe – the effects of differences in concepts and definitions. 28th CEIES Seminar: Migration Statistics – Social and Economic Impacts with Respect to Labour Market. Riga, pp. 14–24.

Ukrainian Center for Social Reforms, State Statistics Committee of Ukraine (2009). Ukraine External Labour Migration. Kyiv, pp. 7–21. Available at <http://www.ukrstat.gov.ua/druk/katalog/pracia/migr_engl.rar>

Unalan, T. (2005). Definition of household membership in international migration surveys. *Journal of Social Science*, Vol. 1 No. 4, p. 220. Available at: <<http://www.scipub.org/fulltext/jss/jss14220-225.pdf>>

University of Latvia (2007). The National Programme of European Union Structural Funds, Labour Market Research, The Project Welfare Ministry Research, No. VPD1/ESF/NVA/04/NP/ 3.1.5.1./0003; The Geographic Mobility of the Labour Force. Riga, pp. 63–85. Available at <http://www.lm.gov.lv/upload/darba_tirgus/darba_tirgus/petijumi/6_pet_en.pdf>