

Dist.
GENERAL

8 January 2007
ENGLISH ONLY

Working paper 6

**UNITED NATIONS STATISTICAL COMMISSION and
ECONOMIC COMMISSION FOR EUROPE
CONFERENCE OF EUROPEAN STATISTICIANS**

**UNITED STATES CENSUS
BUREAU
WORLD BANK**

Joint UNECE/World Bank/US Census Bureau Expert Group Meeting on the Contribution of
Household Surveys to Measuring Remittances
Suitland (United States), 14-15 January, 2008

Session III

**THE MEASUREMENT OF REMITTANCES IN INDUSTRIALIZED COUNTRIES – OR
HOW TO LIMIT MULTIPLE BIASES?***

Background paper

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Abbreviations

BEA	Bureau of Economic Analysis
BOP	Balance of Payments
BPM	Balance of Payments Manual
EMIF	Encuesta sobre Migration en la Frontera Norte de Mexico
GATS	General Agreement on Trade in Services
NSL	National Survey of Latinos
SNA	System of National Accounts
SNB	Swiss National Bank
TSG	United Nations Technical Subgroup on the Movement of Natural Persons

Introduction

1. According to the United Nations, Migration has increased since the end of World War II, and about 200 million people presently live in a country other than their country of birth (UN 2006). This increase has had a direct impact on remittances, which were estimated to have reached US\$ 226 billion in 2004 (World Bank 2006). Migration, however, remains a statistically rare event worldwide, as only about 1 in 35 people ever migrates. Sending money abroad is also a rare phenomenon, since those most likely to remit are migrants, who represent a small proportion of the population of most countries. For this reason, it is rather difficult to measure accurately total remittances and remittance behavior using population-based surveys (of individuals or households). Moreover, both migration and remittances are defined differently in each survey undertaken, and their estimates therefore require standardized measures. In this context, this paper aims at comparing the approaches used in industrialized countries and at suggesting recommendations for further surveys and estimation procedures of remittances.

2. Even if the phenomenon of remittances has always accompanied migration, it is only rather recently that it has reappeared on the scientific agenda and in political discussions. Until lately, the effect of remittances on the development of countries in particular has been underestimated, even though during the past few decades remittance flow has increased significantly in both scale and impact. Given this growing interest for the subject there is a need for harmonized definitions and concepts, as well as for new strategies and tools for data collection. Such questions are still a subject of discussion among experts, because the evaluation of money transfers between individuals and private households is not only uncommon but also subject to a wide range of methodological limitations.

3. There is a general consensus that both a good estimate of total remittances and better data on the characteristics of those who remit is needed. The stability of remittance flows when compared to other financial flows makes them an important source of income for recipient countries. This is especially the case during periods of economic crisis, when investments and development aid available from industrialized countries tend to decrease.

4. Remittances could also be considered as an indicator of “GATS mode 4” supply of services in the framework of the General Agreement on Trade and Service (OECD 2007). Precise knowledge about these financial flows could also promote an improved integration of migration and development policies. Moreover, knowledge about remittances is also urgently required in order to decrease the costs of money transfers.

5. The volume of remittance flows has yet to be accurately measured, and while attempts have been made in many countries, the results often provide conflicting information because of the concepts and methodologies used. An accurate measurement of remittance flows was therefore considered to be a priority by the G8 Heads of State (2004, Meeting of Sea Island – Brown 2004), and for this purpose an ad hoc group was established, led by the World Bank (UN 2006).

6. However, efforts made in the Balance of Payments framework, the current measuring system, are not sufficient. To monitor migration-related money transfers and to validate existing estimates, surveys focusing specifically on remittances or on the economic behavior of migrants should be developed and fielded as independent surveys or incorporated into existing household surveys. Unfortunately, a diagnosis of the limitations of household surveys has already been discussed (Coates 2005): the fact emerges that surveys are not always a good vehicle for collecting remittance data.

7. The present report is structured as follows. First, remittances will be defined according to the Balance of Payments framework. An overview of current practices in the macroeconomic estimation of remittances will stress the importance of population-based surveys, either for the direct estimation of flows or for the calibration of econometric models. In order to understand the challenges faced when surveying remittances, the meaning of “migrant”, as defined by the United Nations, will also be introduced. As will be discussed, only part of the UN definition is useful for surveys since there are major disconnects between the phenomenon being studied (i.e. migration) and the information on hand for identifying the relevant risk population¹ (i.e. migrants who remit).

8. Second, the principal aim of the report is to summarize current practices regarding remittances surveys. There is no international framework nor are there any systematic recommendations for the collection of data on remittances from surveys (as seen from the point of view of sender countries). In general, recent efforts to collect data on remittances can be categorized as falling into two broad types. First, surveys focusing specifically on remittances dominate the field. A selection of surveys fielded since 2000, representing a diversity of national contexts, will be presented in the Appendix. Second, several household surveys also include questions on remittances and they too will be described in this report. While the design of these surveys does provide opportunities for collecting data on remittances, they also present some major limitations that will be explained.

9. Based on this overview, the key issues in surveying remittances will be synthesized and the major advantages of or problems arising from different survey designs will be emphasized. Finally, we will conclude this paper with some general recommendations.

¹ Here and henceforth to be understood as the population, which might remit.

1. Concepts, Definitions, and Current Practices

1.1 Towards an Operational Definition of Remittances

10. To understand the challenges faced when measuring remittances, it is necessary to define precisely the concepts that are used. In the framework of the fifth edition of the Balance of Payments Manual (BPM5), remittances are defined as the sum of three accounts: (1) *compensation of employees* for nonresident workers (wages, salaries, and other benefits paid to short term migrants and border workers); (2) *workers' remittances* (which are the only transfers registered between residents and nonresidents); and (3) *migrant transfers recorded at the time of remigration* (assets and capital brought back when leaving).

11. The definition of workers' remittances is, according to various authors, restrictive (see, for instance, Alfieri et al. 2005). Firstly, it is linked to the UN definition of long-term *migrant* (residents for 12 months or more), which excludes some sectors of the population of foreign origin (for instance the second generation of migrants). Secondly, this definition excludes transfers other than those initiated by *working migrants*. Furthermore, even for working migrants, recorded transfers are often limited to those between the migrants and their families. All other transfers to their countries of origin are recorded with other types of capital transfers under the entry "other current transfers".

12. The "Luxembourg Group", an informal working group of practitioners, has been created to recommend an improved definition of workers' remittances that should enable the production of a compilation guide for statistics which can be implemented in the sixth edition of the Balance of Payments Manual (BPM6). The United Nations Technical Subgroup on the Movement of Natural Persons (TSG) agreed on a new definition encompassing the following elements (Alfieri et al. 2006):

Personal transfers: The definition of personal transfers is in line with the 1993 System of National Accounts' (SNA) definition of current transfers between households², encompassing all *transfers from residents to nonresidents*, whatever the source of income, the relationship between them, and the purpose of the transfer.

² SNA 1993 definition of current transfers (Art. 10.133.): "A current transfer reduces the income and consumption possibilities of the first party and increases the income and consumption possibilities of the second party. Current transfers are therefore not linked to, or conditional, on the acquisition or disposal of a tangible fixed asset or assets by one or both parties to the transaction. Some cash transfers may be regarded as capital by one party to the transfer but as current by the other. For example, the payment of an inheritance tax may be regarded as the transfer of capital by the taxpayer but be regarded as a current receipt by government because it receives many such transfers. Similarly, a large country that makes investment grants to a number of smaller countries may regard the grants as current transfers even though they are specifically intended to finance the acquisition of capital assets. In an integrated system of accounts, such as the SNA, it is not feasible, however, to classify the same transaction differently in different parts of the System. Accordingly, a transfer should be classified as capital for both parties even if it involves the acquisition or disposal of an asset, or assets, by only one of the parties." (Source: <http://unstats.un.org/unsd/sna1993/toclev8.asp?L1=10&L2=6>)

Personal remittances: Personal remittances encompass *net compensation of employees* (after deduction of social contributions), *personal transfers* as defined above, and *capital transfers* between households.

Total remittances: Total remittances are obtained by summing personal remittances, social benefits (defined as "disposable income from abroad"), and current transfers to nonprofit institutions serving households (or institutional remittances).

13. The concept of *migrant* is clearly absent from these new definitions. Instead, the new definitions are based on the concept of *residence*, a much broader concept that takes into account more of the total migration process. For example, whereas second-generation and naturalized people are excluded from the BPM5 definition, they could be included in the revised one. However, practical problems in identifying certain populations, such as the second generation, using survey data often prevent their inclusion in analyses. An aggregation of the incomes of short-term migrants and border workers is, however, still problematic, since the latter term often relates to migrants working in an industrialized country and living in another industrialized country; this is, for example, the case in Luxembourg, Switzerland, and other small countries. Such international financial flows have only a limited impact on the economic growth of lesser developed countries.

14. Furthermore, the new definitions regard the compensation of employees as remittances, which in turn suggests that all the earnings of short-term workers are sent or brought back to the country of origin. This is usually not the case.

15. Despite major improvements to the definition of workers' remittances, the compilation of data on remittances using the Balance of Payments (BOP) framework therefore still remains problematic.

1.2 The Current Limitations of Macroeconomic Data

16. In an ad hoc survey conducted by the European Commission in 2004 (European Commission 2004), a questionnaire was sent to Member States to estimate the volume, the transfer channels, and the transfer costs of remittances. Most members mentioned that they had serious reservations about the quality of data they could provide by means of the balance of payments statistics for two primary reasons: first, remittances are often sent through informal channels and are not recorded in formal statistics; and, second, remittances and tourist expenditure could not always be disaggregated (Hussain 2005).

17. In 2005, a second wave of the European Commission survey extended the scope by requesting a geographical breakdown of flows channeled to Eastern Europe, the Mediterranean,

Latin America, and the Caribbean³. However, many of the same data limitations reoccurred. In particular, the data collected by the second survey revealed unexpected variations in the sum of remittances over the same period of observation (year 2003), as indicated in Table 1. Italy, the United Kingdom, and the Netherlands dramatically decreased their estimates of remittances while Cyprus, Belgium, and Portugal increased them. Such discrepancies were explained by the use of new sources and new methods of estimation, as well as by problems regarding the quality of the data. Specifically, it seems that individual transactions of less than 12,500 € are not registered within the EU (EU 2004).

Table 1: Workers' remittances reported by country of origin (€ Million)

Country	Second Survey	First Survey	Differences
Italy	784.3	3,800.0	-3,015.7
UK	2,485.6	3,902.0	-1,416.4
Netherlands	428.8	1,000.0	-571.2
France	1,409.0	1,503.0	-94.0
Spain	2,793.2	2,818.0	-24.8
Germany	1,949.0	1,953.0	-4.0
Hungary	7.6	8.0	-0.4
Estonia	1.1	1.0	0.1
Cyprus	27.7	23.0	4.7
Portugal	401.8	370.0	31.8
Belgium	265.9	220.0	45.9

Source: See footnote 2.

18. Even when asked to focus on money which is sent through official channels, European countries, with the exception of the United Kingdom and Spain, are not able to provide information on the channels that are used. In addition, money sent through informal channels is, by definition, not recorded. As of now we have only rough estimates concerning the use of informal remittance channels.

19. In fact, given the problems associated with the compilation of data using the BOP framework, workers' remittances in sender countries are often estimated by means of econometric models. Such models never, however, provide exact figures on total remittances or on the characteristics of remitting migrants. This will be explained through the following illustrative examples.

20. The Swiss National Bank (SNB) uses a simple extrapolation model. The number of legally employed foreign workers – a number obtained by considering the residence permits granted (short-term permit, one-year permit, or permanent permit) – is multiplied by the mean

³ Results of this survey can be consulted on the EU website:
http://ec.europa.eu/economy_finance/publications/internationaleconomicissues/survey2006_en.pdf

wage, estimated using data from the structural earnings survey and employment statistics⁴. Basing its calculations on this estimate of the total volume of income among migrants, the SNB assumes that an arbitrary fixed proportion of the average wage is sent abroad by these three subgroups of foreigners (25%, 12%, and 5%). In the case of border workers it is estimated that 100% of the earnings are transferred as compensation for employees. This model does not use parameters such as country of origin, type of migration (e.g., family or individual), duration of stay (except indirectly through the type of permit), age, or the economic situation of migrants, etc., to determine the total amount of money that leaves the country as remittances each year.

21. The underlying hypothesis, therefore, is that a migrant from Turkey exhibits the same remittance behavior as a migrant from Germany, or that a 20 year-old single worker sends abroad the same proportion of his wages as a 50 year-old married worker living with his or her entire family in Switzerland. The reason for this oversimplification lies in the absence of data on remittance behavior for migrants in Switzerland according to their citizenship, their family structure, and their age. In Russia, the outflow of workers' remittances is calculated in a rather similar way, using data provided since 2004 by Remittances market participants and special banks (CBRF 2005).

22. In the United States the Bureau of Economic Analysis (BEA) uses a more differentiated method, which was updated in 2005. This method is based on estimates of the foreign-born population and family income drawn from the 2000 Census and the annual American Community Survey (GAO 2006: 12). The Census/ACS collects data on all foreign born. Since it does not address the question of legal status, unauthorized immigrants are included. The model takes into account the foreigners' population characteristics (e.g., gender, duration of residence, presence of children) and macro data on the recipient countries (e.g., per capita income and geographic proximity to the United States). The propensity to remit and the proportion of income that is sent abroad are defined by the BEA on the basis of various recent academic studies (1995-2004) and also of governmental surveys distinguishing between residents from developing and developed countries.

23. The World Bank applies another methodology when establishing its estimations of bilateral remittance flows (Ratha and Shaw 2007). Total remittances received by each country are allocated among the countries of destination in proportion to the number of citizens living abroad. The allocation is based on a model using migration stock data for 212 countries that was developed by the University of Sussex (Parsons et al. 2005), and on the level of income in the countries of origin and destination. This method is useful for countries, such as the United Kingdom, which estimate remittance outflows by using information on remittances received by the countries of origin of their immigrant communities.

24. It should be mentioned, however, that survey data is now more commonly used in estimates of remittance flows using the BOP approach. For instance, the Inter-American

⁴ Data published in the national "Employment Statistics" and the "Schweizerischen Lohstrukturerhebung" (LSE)

Development Bank estimates bilateral remittance flows between the United States and Latin American countries basing its estimations on surveys of migrants.

25. Macroeconomic models are sensitive to both the underlying assumptions and the quality of available data. The aforementioned Swiss example illustrates how the absence of the right kind of information can lead to oversimplified models and less-than-accurate estimates. In this context, survey data prove to be extremely valuable because of the potential contribution they can make to the improvement of macroeconomic models.

1.3 Defining the Risk Population

26. All surveys designed to measure remittances should clearly define the so-called "risk population" - the population which is to be included in the measurement of remittances. Unfortunately, even given the improvements offered by the new definition of remittances, major complications arise when defining the population concerned. Generally, the populations included in migrant surveys do not correspond to the population that remits, but usually match the United Nations definition of migrants.

27. According to the United Nations, international migrant flows are defined according to the (intended) duration of stay of the individuals. An international migrant is any person who stays in a country other than the country of *usual residence*, "that is to say, the country in which the person has a place to live where he or she normally spends the daily period of rest" (UN 1998). For the definition of long-term migrants, a 12-month threshold was proposed and is usually applied in censuses and surveys. Short-term migrants are people who move to a country other than that of their usual residence for a period of at least 3 months but for less than a year (12 months). Foreign border workers and diplomats and consular personnel as well as their employees and dependents are excluded (UN 1998).

28. Surveys of migrants traditionally include people belonging to the "immigrant stock", i.e. migrants who have spent at least one year of their life in a country other than the one in which they live at the time that the data are collected (UN 1998). In most cases, this population is identified according to *place of birth* or *citizenship*, as in the UN Demographic Yearbook data collection system. As a criterion for identification, place of birth is, however, preferable to citizenship, which depends on naturalization policies.

29. Nowadays, more and more migrants remain definitively in the same country. In this context of the stabilization of migration flows, a *definition restricted to the mobile population* proves to be problematic, especially if one would like to measure the broader concept of remittances mentioned in chapter 1.1 and identify its long-term trends. Owing to a lack of data, the operational definition of "immigrant population" often excludes natives of foreign origin (the so-called second generation) and naturalized persons, whose remittances should be recorded,

according to the new BOP definition⁵. Even when surveys exploit a self-declaration of ethnicity, as is the case in the United States or the United Kingdom, a selection effect may occur. These problems are significant for the reason that members of immigrant communities who are not defined as migrants themselves can nevertheless represent, in some contexts, a considerable proportion of those communities. Such is the case in countries with a lengthy and substantial colonial history, for example France or the Netherlands.

30. This limitation could have a major impact on the estimates of remittances which can be gleaned from surveys since the individuals who are excluded, such as the second generation, may be more fully integrated into society and may have stronger ties to the labor market; this suggests that they would have the resources to remit if they still maintain strong links with their country of origin.

31. Therefore, the appropriate risk population is the *population of foreign origin*: foreign born people (naturalized or not) as well as their direct descendants (whatever the citizenship or place of birth).

⁵ While native-born foreigners can to a degree be identified by their nationality, information about naturalization is often lacking. If information is available, only naturalized foreign born can be identified. In Switzerland, for example, 40% of the naturalized population is native born (Wanner and D'Amato 2005).

2. Which Information Can Population-Based Surveys Provide?

32. There is increasing evidence that *personal*, and to a lesser extent, *capital transfers* between households can be assessed using surveys, even if the respondent's estimates are to be treated with caution, since it is difficult to evaluate with precision the amounts that are sent abroad.

33. Employee compensation for border workers and transfers from short-term migrants are more difficult to survey, because the risk population is mobile. However, specific sampling methods, such as surveys conducted at intercept points (see Section 3.2) may provide some estimates of this component of total remittances. Institutional remittances (current transfers to nonprofit institutions serving households) are more difficult to survey, as they are sometimes too diffuse.

34. Surveys do not only provide estimates of the amount of money transferred between households. They also generate knowledge about the determinants of personal remittances, information which is necessary for the calibration of econometric estimation models.

35. They also offer valuable qualitative information on remittance behavior: the frequency of transfers, the way in which remittances were sent, the relationship between members of the sender and recipient households, the impact of either migration history or the integration process on the amount and frequency of remittances, and, finally, the effects of remittances on the quality of life of the beneficiaries.

2.1 Collecting Data on Remittance Behavior Using Surveys: Some General Limitations

36. Remittances comprise money or goods, sent regularly or sporadically, by means of formal or informal channels. The only way to estimate their magnitude is by contacting directly either the remitting or the beneficiary household. However, when collecting data on remittances using population-based surveys, there are several limitations that must be considered:

- Questions concerning household income and the availability of funds (e.g., transfers) are generally sensitive topics. In order to obtain reliable information, it is essential to develop a sense of trust between the interviewer and the respondent. The quality of the response received strongly depends on the legal status of the members of the household (legal, unauthorized, mixed), on the kind of remittances sent, and on the channel used (formal or not). There is also evidence that suggests that responses vary according to the member of the household who is questioned, with what can be described as a "gender effect". In particular, there is sometimes a lack of transparency between partners in a couple regarding the money that is sent to family members abroad (Lerch et al. 2007).
- The amounts transferred and the frequency of remittances sent may be influenced by seasonal events as well as by economic cycles, and it is thus difficult to gather accurate information on the total amount that was sent during the previous 12 months.
- The duration of stay in the host country and a migrant's intention to return to his country of origin strongly affect both the frequency and the amount of remittances (Dustmann 1997). For this reason, surveys probably underestimate the amount remitted, especially in

countries with a high proportion of short-term migrants. These migrants may not send money regularly during their stay, but may instead carry or send their savings at the end of their stay in the foreign country.

- The value of goods and gifts that are sent to the family is often difficult to estimate with accuracy.

2.2 A Review of Specific Surveys

37. It is becoming increasingly common for countries around the world to field surveys focusing specifically on remittances. While the United States gained some experience in surveying remittances during the late 1980s (GAO 2006), this practice is rather new in other parts of the world. Surveys on remittances generally focus on specific groups, rather than attempting to describe the general situation of a country. However, there is considerable diversity to be seen in the conceptual and methodological approaches used. These are influenced by the national context as well as by the migration flows under consideration, as can be observed from the comparison of existing surveys that are described in Appendix I. The main issues are discussed in Section 3.

2.3 Adding Remittance Questions to Established Household Surveys

38. Through the encouragement and support of international organizations such as Eurostat, some of the most "traditional" surveys have been progressively standardized in Europe. This includes the Labor Force Surveys and the Household budget surveys. Other harmonized surveys are organized on an international level, such as the Household Panels, etc. In some countries, these surveys offer a possible vehicle for the evaluation of remittances.

39. When trying to determine the capacity of these national surveys to measure remittances, there are several factors which need to be borne in mind. First of all, these surveys are not specifically devoted to migrant populations. Some labor force surveys in Europe, for instance, do not include enough foreigners to allow for the computation of precise estimates of remittances or for the analysis of the characteristics of remittance behavior, and most of them are not adapted to include irregular migrants. This is especially true in countries with a low proportion of migrants in their total populations.

40. Second, can these surveys measure adequately the flows of money between the sender and the recipient countries? Questions relating to income and to financial resources questions often touch upon sensitive issues and reliable data may prove difficult to collect in standardized surveys. Migrants may be hesitant to provide interviewers with personal information, especially if they fear that the data gathered by statistical offices may be passed to government enforcement agencies. In these instances, outreach to migrant or ethnic associations may improve response rates.

41. Furthermore, some additional questions regarding migration should be added to standard questionnaires. While some surveys fail to include basic questions about migrant characteristics (e.g., citizenship, place of birth), others lack questions regarding the important determinants of remittances (e.g., year of arrival, length of stay).

42. Therefore, standardized household surveys have until now rarely been used for the description of remittances. The ILO developed for the Labor Force Surveys in recipient countries a module specific to remittances that includes about 200 questions. The module was tested in Armenia and Thailand. No attempt has been made to include these questions in the equivalent Labor Force Surveys fielded in remittance sender countries

43. Eurostat recently developed an ad hoc module for the European Union Labor Force Survey in order to identify migrants and their immediate descendants⁶ (Eurostat 2006). However, no questions on household transfers were included. Given that the maximum number of questions has not yet been reached, some additional questions referring to remittance transfers could be introduced in future modules.

44. However, four recent examples of other household surveys may guide future practice (Appendix II).

3. Issues Regarding Population-Based Surveys on Remittances

45. Surveys are subject to different biases. For any survey, a careful definition of the population to be sampled is crucial, and this is especially true in the case of surveys that focus on migrant populations. Since respondents are often reluctant to answer questions on financial transfers, the way in which interviews are conducted (e.g., over the phone, in person, self administered, etc.) can also affect the reliability of the survey results and their extrapolation to the total population. Attention has also to be given to the concept and definition of personal transfer. Finally, the importance of research that analyzes the characteristics of remitting migrants and their households for the calibration of econometric models is discussed and the value of qualitative information emphasized.

3.1 Sampling Frame

46. One of the greatest challenges for surveys focusing specifically on remittances is that of the inclusion into the population being sampled of potential remitters (the so-called risk population), as defined by the BOP framework. In many of the surveys fielded in the last ten years, there have been three/four broad approaches used to define the sampling frame.

⁶ The ad hoc module contains four identification variables: year of citizenship acquisition, the father's country of birth, the mother's country of birth, total number of years of residence in the host country in addition to the five variables in the core module (country of birth, nationality, number of years of residence, country, and region of residence one year earlier).

47. Census data is the best data resource available for developing sampling frames because of its exhaustive coverage of the total population. If the census includes questions on, for example, place of birth, nationality, and citizenship, it may prove possible to define the population of potential remitters.

48. For example, because the new definition of *personal transfers* refers to the concept of residents rather than migrants, it is preferable to use the broader definition of *population of foreign origin* (see Section 1.3). This means that questions such as country of birth, length of stay, nationality, and, if possible, naturalization status, and parents' country of birth must be available.

49. However, this is not always the case: information on the parents' country of birth and naturalization status is available in only a few censuses in industrialized countries. Therefore, samples constructed according to censuses do not always correspond to the precise definition of potential remitters. This is why most surveys sampled on a census base bring into play the concept of foreign-born.

50. One major problem arising from the use of census data as the sampling frame consists in the periodicity of censuses. Most countries field censuses every 5 to 10 years, and hence annual data is not available. However, record linkage procedures could be used to update regularly data concerning immigrant stock with information from administrative records of migrant flows (if such records exist). In some countries, administrative data (where population coverage is high) can also provide a good sample base for legal migrants

51. One major disadvantage of census and administrative data is that of coverage bias, especially in the case of irregular migrants. However, as is demonstrated from the experience of the Los Angeles survey (see Appendix I), in areas where unauthorized immigrants are to be found in high concentration, there is a high probability that household samples will include undocumented migrants.

52. Telephone number lists associated with names may also constitute a valuable alternative to censuses and administrative registers. The probability of including informal migrants is high, as the U.S. surveys illustrate. However, the quality of the sampling frame depends on the ability of computer programs to use names to identify correctly members of a particular immigrant group. The Serbian survey illustrate this issue. In some countries, no information is available regarding the owners of mobile phones, which leads to some problems. Also, biases cannot be ignored. In particular, economically vulnerable populations, and especially undocumented migrants, may not possess a phone line. However, some research has shown that, even if a substantial proportion of undocumented migrants do not have phones in their homes, their socioeconomic characteristics are not different from those who do (Berk et al. 1998): thus, biases are likely to be limited.

53. Another problem with using phone lists as a sampling frame concerns the unit of observation: does each phone number refer to a household (i.e., one phone per household) or to a person? Decisions about what is assumed (i.e., one household or one person) can lead to biases that must be addressed.

54. Surveys at borders or airports concern a population that is mobile and that is defined geographically and temporarily as a migrant population. This population does not necessarily represent the total population of migrants, as migration is sometimes definitive and not followed by a return to the country of origin. The periodic EMIF survey (see Appendix I) reflects this problem. However, the costs of these kinds of surveys are generally low and they are easy to administer when it is possible to identify migration corridors that are representative of international movements. For surveys which aim to investigate behavior regarding remittances rather than to provide estimates about the volume of remittances, these sample bases might represent a good compromise.

3.2 Sampling Method

55. According to the review of surveys, the use of random samples combined with additional available data on undocumented migrants is appropriate whenever possible. Further methodological choices depend on available information in the sampling frame as well as on the interview methods used.

56. In many countries, migrants are geographically dispersed and can represent a very low proportion of the total population at various geographic levels. Given the possibility of low proportions of migrants per territorial unit, a stratified random sampling as applied in most surveys is the most appropriate method. However, if additional data on the individual characteristics of the population were to be available, samples could be stratified according to socio-economic characteristics or major remittance determinants such as length of stay, country of origin, etc.

57. Convenience sampling, for example snowball sampling, is probably less appropriate for studying remittances, but may be one alternative for the generation of samples of undocumented migrants. Indeed, the population of respondents might be strongly selected, given that the probability of inclusion depends on whether or not irregular migrants can be contacted. However, respondent-driven sampling, a variant of snowball sampling, can convert chain-referral into a probability sampling method (Heckathorn 1997).

58. Sometimes, a combination of sampling methods can be used to provide information on the accuracy of surveys, as was proved during the British BME survey (see Appendix I). One can also imagine separate surveys for documented and undocumented migrants using the most relevant methods. Probability surveys based on exhaustive sampling frames, could be used to estimate accurately remittances and their determinants for households with at least one legal immigrant. The interviews conducted could provide an initial list of contacts for a snowball

sample focusing on households with undocumented migrants. Based on this second sample, additional, albeit less reliable, estimates of remittances could then be used to supplement the results from the initial probability survey, as upper confidence intervals.

3.3 Survey Method

59. Bearing in mind the fact that legal and financial topics are sensitive matters, face-to-face interviews seem to be the most appropriate way to measure remittances correctly and to limit biases resulting from voluntary omissions. Several surveys suggest that the best results are obtained if the migrant respondent is interviewed in his native language by a member of the same community. Community outreach and collaboration with recognized immigrant organizations can thus increase response rates.

60. However, experience gained from surveys conducted in the United States has shown that telephone surveys not only provide rather good results but are moreover less expensive. What can certainly help in such situations is that the survey's organizers should have an established reputation among migrant populations. Even so, the declarations of the respondents should probably be considered with more caution.

61. Furthermore, recall biases might also occur with migrants who remit infrequently and may also be influenced by the period during which the interview takes place.

3.4 The Concept of Remittances that Is Used and the Selection of Respondents

62. The new concepts of *personal and capital transfers* need to be recorded at the household level. However, this methodological choice may produce observational errors due to the respondent's partial knowledge either of transfers sent from other members in the household or, even more difficult to estimate, of their value. Therefore, in surveying household remittance behavior, either the most informed person or, alternatively, all remitters should be selected within the household, as can be seen, for example, in the Word Bank's survey (see Appendix I).

63. The formulation of the question is a delicate matter. Most of the surveys gather information about transfers "sent" to the country of origin. But, if migration flows occur between countries which are geographically close to one another, money is often brought back by the sender himself during his visits to the country of origin. It is therefore worthwhile to extend the question and to ask about "money *sent or brought on your own*", as was the case in the Survey on the Serbian community carried out in Switzerland.

64. An additional point should be mentioned with respect to the harmonization of the survey design with the definition of remittances. The majority of recent surveys implicitly sample households but record individual remittances (as in the US Bendixen and Associates survey), or vice versa (as in the Serbian survey). The extrapolation of individual remittances from a sample of households produces an underestimation of the remittance flow. Inversely, the extrapolation of household transfers from a sample of individuals overestimates remittance figures. These

inconsistencies between the sampling unit and the concept of remittances often prevail⁷; thus, for reasons of data scarcity, the results should be weighted according to the number of sample units (individuals or phone lines) recorded during the interview.

65. Finally, the definitions of remittances in surveys focus almost exclusively on money transfers. In-kind remittances or capital transfers are often omitted or not estimated, and no survey compiles data concerning the compensation of employees drawn from short-term migrants (net border crossers).

3.5 Eligible Populations

66. Household surveys should make eligible for interview all households containing at least one individual of *foreign origin* (as defined in Section 1.3) in order to compile data on *personal and capital transfers*.

67. However, in some surveys, eligibility is limited to remittance senders only. The design of the BME survey is a good example of surveys which focalize on senders (see Appendix I). According to this approach based on household samples, the propensity to remit could be computed by using the ratio between the number of interviewed remitting households and the total number of households of foreign origin sampled. Such a design reduces significantly the cost of the survey. Moreover, the accuracy of remittance estimates is increased and sampling errors are consequently reduced since the number of remitters surveyed is greater than in the traditional approach.

3.6 Contributions of Qualitative Research to Data Collection

68. In addition to rough figures regarding the volume of remittances, surveys also provide information regarding the general behavior of migrants. The type of transfer channels (formal or informal) that are used or the relationships between social integration or transnationalism and remittances illustrate the nature of the qualitative information that is provided by surveys. Such information is necessary for the implementation of certain policies in the field of migration and development.

69. This information can be gathered either as a by-product in probability samples or by means of specific non-representative surveys in which there is a greater emphasis on the comprehension of dynamics and processes.

70. Specifically, knowledge on both past and future trends in remittances is scarce. The current context of restrictive immigration and the integration process of established communities raise questions about the future evolution of remittance practices. Longitudinal surveys, such as the U.S. New Immigrant Survey and the Longitudinal Survey of Immigrants to Canada may therefore overcome the biases of cross-sectional data.

⁷ The choice of the sampling unit is often determined by the sampling base: list of phone numbers in the Bendixen and Associates' survey as opposed to individual administrative records for the Serbian survey.

71. The design of the U.S. New Immigrant Survey is not specifically adapted to remittance issues, given its strong focus on integration topics. This survey records individual financial assistance given to someone not living with the respondent rather than household transfers. No distinction is made between internal and international transfers.

72. The Canadian survey plans only three waves during the first four years of migration. Even if this time frame restricts our comprehension of remittance behavior, this longitudinal survey provides information which is useful for understanding the relationship between remittances and the length of stay.

4. Recommendations

73. As has been shown throughout this paper, a survey of remittances represents a challenge. This is not only because of the various problems which limit the measurement of the volume of remittances, but also because it is a rather new approach which needs to be more precisely defined. Recommendations for obtaining accurate estimates of *personal and capital transfers* can be formulated.

74. A first, **general, recommendation** regarding the unit of recording as well as the type of transfer considered applies to any survey of remittances:

- Record monetary and non-monetary transfers at the household level (sum of all transfers made by household members).
- Ask about money and goods "sent *or* brought on your own" to the country of origin.
- Also record in-kind and capital transfers even if the estimation of their value is subject to caution.

75. Remittance behavior is a **sensitive topic** and therefore special attention should be paid to establishing a relationship of confidence between the interviewer and the respondent. The following recommendations may increase the participation rate of immigrants in the survey, and consequently increase both the response rate and the reliability of the responses obtained:

- Record transfers by interviewing either the head of household or all persons who sent money and goods abroad.
- Involve interviewers of foreign origin.
- Suggest that the interview could be conducted in the interviewee's mother tongue.
- Circulate information about the survey and its aims among the migrant diaspora via recognized immigrant associations, community newspapers, etc.
- Carefully select the most appropriate timeframe for the survey.

76. Recommended survey designs depend on the immigration context as well as on their final objectives.

77. In countries where the population of foreign origin constitutes a significant proportion, **standardized household surveys** may provide a rough estimate of the **total outflows and inflows**. The following recommendations can be formulated:

- Implement specific survey modules including migration history, which is necessary as a means of accurately identifying the population of potential remitters. The following information should be collected: place of birth, nationality, naturalization, second (or former) nationality, length of stay, and geographical location of family members.
- For each household transfer recorded, ask for the country of residence of the recipient.

- Additional estimations of remittances sent by undocumented migrants might prove to be necessary.

78. Remittance behavior is determined not only by individual or household characteristics but also by the country of origin. However, standardized surveys cannot provide precise information on the behavior patterns of specific groups of migrants. At the very least, transfers to industrialized countries should be distinguished from transfers to developing countries. Owing to the sample design of household surveys, which are not representative of specific groups, specific remittance flows (corridors) cannot be extrapolated.

79. Financial flows through specific **remittance corridors** are best estimated **on the basis of specific surveys**. In countries with low proportions of immigrant population this is the only means of obtaining information on remittances.

80. The definition of an appropriate **target population** remains a crucial point. An accurate definition of the documented risk population, which may remit, is rendered more probable if the following recommendations are observed:

- Include all the *population of foreign origin* (as defined in Section 1.3) rather than considering only the foreign-born or foreign citizens as constituting the reference population.
- Survey remittances after a census in order to benefit from the extensive information thereby gained in order to define precisely the population to be studied.
- Maintain or update a comprehensive database of the immigrant population on the basis of record linkage techniques linking census and administrative records for later surveys.
- If the migration flow is largely irregular, rely on respondent-driven sampling or probabilistic selection of intercept points.

81. Accurate estimations require **standardized survey designs**:

- Randomly sample households, integrating undocumented migrants during the fieldwork.
- Adjust recorded remittances to the sample unit by weighting (i.e. household remittances weighted by number of household members if data gathered by means of a sample of individuals).
- If an extensive database exists for the definition of the risk population, use this information and focus the survey on remitters only.
- During face-to-face interviews, recruit a quota of irregular migrant households for the generation of a snowball samples. The group interviewed will be less referral-biased than if entirely recruited by researchers. An additional, albeit less reliable, estimate could supplement the results from the initial probability survey.

82. If the remittance **survey** aims principally **at calibrating econometric models**, the following issues should be considered:

- Update information by means of periodic surveys in order to provide data for econometric models.
- Survey a selection of immigrant groups that are representative of the overall diversity of immigration to the country in terms of immigrants' origin, their length of stay, their

socio-economic characteristics, and the importance of the irregular flows of immigrant populations.

- Define the survey's reference population in accordance with available and updated population figures used for the modeling.
- Use respondent-driven or intercept-point sampling for the estimation of undocumented migrants' remittances behavior.
- Use special estimates for short term workers (net border crossers)

83. In conclusion, population-based surveys provide opportunities to survey remittance outflows. This approach offers several important advantages as regards direct estimations. First, it measures the phenomenon at its source and allows for a better understanding of the processes and determinants. Second, it is able to record not only formal money transfers, but also informal and in-kind transfers that are not included in the Balance of Payments statistics. Surveys can not, however, be implemented by all countries of immigration. A major prerequisite is the availability of updated records concerning the population of foreign origin which ensure a concrete sampling frame. For some countries, econometric models are therefore the only way to estimate remittances. However, the quality of their assumptions can be strongly improved by periodic surveys. A significant improvement in remittance estimates can be achieved by periodically updating the information available.

References

- Alfieri, Alessandra, Ivo Havinga and Vette Hvidsten (2005), Definition of Remittances and Relevant BPM5 Flows, Meeting of the Technical Subgroup of the Task Force on International Trade in Services, Movement of Natural Persons – Mode 4 Paris, 31 January-February 2005, United Nations.
(<http://unstats.un.org/unsd/tradeserv/TSGdocuments/issuePaper1.pdf>, consulted on November 2007)
- Alfieri, Alessandra, Ivo Havinga and Vette Hvidsten (2006), Issue Paper: Definition of Remittances, Meeting of the United Nations Technical Subgroup on Movement of Persons – Mode 4, New York, 22 – 24 February 2006, United Nations.
(<http://unstats.un.org/unsd/tradeserv/TSG3-Feb06/tsg0602-14.pdf>, consulted on November 2007)
- Amuedo-Dorantes, Catalina and Suzan Pozo (2006), "Remittances as Insurance: Evidence from Mexican Immigrants", *Journal of Population Economics*, vol. 19, pp 227-254.
- Amuedo-Dorantes, Catalina and Suzan Pozo (2006), "On the Use of Differing Money Transmission Methods by Mexican Immigrants", *International Migration Review*, vol. 39(3), pp 554-576.
- Bauer, Thomas K. and Mathias Sinning (2005): "The Savings Behavior of Temporary and Permanent Migrants in Germany", *IZA Discussion Papers*, 1632, 1- 37.
- Berk, Marc, Cynthia Good and Martin Frankel, "Phone Coverage Among Undocumented Immigrants: The Project HOPE Hispanic Immigrant Survey," presented at the Annual Meeting of the American Statistical Association, August 1998, Dallas, Texas.
- Brown, Stuart (2004): Statistics on Remittances, BOPCOM-04/39.
(<http://www.imf.org/external/pubs/ft/bop/2004/04-39.pdf>, consulted on November 2007).
- Buck N, Jenkins S. P., and Laurie H. (2006), The British Household Panel Study and the proposed UK Longitudinal Household Study: topic coverage, question replication and data enhancement. ISER, University of Sussex (not published,
http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/FINAL%20REPORT_%20The%20British%20Household%20Panel%20Study_%20topic%20coverage,%20question%20replication%20and%20data%20enhancement_tcm6-16604.pdf consulted on November 2007).
- CBRF (2005): Cross Border Remittances: Russian Experience, Central Bank of The Russian Federation, Moscow 2005.
- Coates, Kenneth (2005), Measurement Problems in Household International Remittances. IFC Bulletin No 25, 101-114.
- Dustmann, Christian (1997), "Return Migration, Uncertainty and Precautionary Savings", *Journal of Development Economics*, vol. 52, pp 295-316.
- European Commission (2004), EU Survey on workers' remittances from the EU to third countries. Summary Report. Brussels: European Commission, 28 April 2004.
- European Commission (2006), Second EU survey on workers' remittances from the EU to third countries. Summary Report. Brussels: European Commission, 02 October 2006.
- Eurostat (2006): The 2008 Ad Hoc Module of the EU-LFS: Describing and analysing migrants, opportunities and limitations, Working paper 12, Joint UNECE/Eurostat Work Session on Migration Statistics, Edinburgh, Scotland, 20-22 November 2006.
(<http://www.unece.org/stats/documents/ece/ces/ge.10/2006/wp.12.e.pdf>, consulted on November 2007).

- Haug, Werner (2006), Challenges to Measure Remittances and Emigration, in UNECE/EUROSTAT Work Session on Migration Statistics, 20-22 November 2006.
- Holst, Elke and Mechtschild Schrooten (2006), Sending Money Abroad. What Determines Migrants' Remittances? Discussion Paper no 9, Universität Flensburg. Internationales Institut für Management.
- Hussain, Mushtaq (2005), Measuring Migrant Remittances: From the Perspective of the European Commission. International Technical Meeting on Measuring Migrant Remittances. January 24-25, 2005, World Bank, Washington.
- ICM (2006), BME Remittance Survey. Research Report. 27 July 2006, downloadable on the website <http://www.dfid.gov.uk/pubs/files/ukremittancesurvey.pdf> (consulted on November 2007)
- Lerch, Mathias, Janine Dahinden and Philippe Wanner (2007). Remittances Behavior of Serbian Migrants in Switzerland. SFM-51 Studies, Neuchâtel: Swiss Forum for Migration and Population Studies.
- Marcelli, Enrico A. and B. Lindsay Lowel (2005). "Transnational Twist: Pecuniary Remittances and the Socioeconomic Integration of Authorized and Unauthorized Mexican Immigrants in Los Angeles County." International Migration Review, vol. 39(1): 69-102.
- Merkle, L., and K. F. Zimmermann (1992): Savings, Remittances, and Return Migration, Economics Letters, 38, 129-134.
- OECD (2007), Remittances as indicators of mode 4 supply of services, OECD Statistics on International Trade in Services: Detailed Tables by Service Category, 1996-2005, 2007 Edition.
- Parsons, Christopher, Ronald Skeldon, Tierrie L. Walmsley and L. Alan Winter (2005): Quantifying the International Bilateral Movements of Migrants, Working Paper T13, Development Research Center on Migration, Globalisation and Poverty, University of Sussex
- Piracha M., Yu Zhu (2007), Precautionary Savings by Natives and Immigrants in Germany, SOEP Paper on Multidisciplinary Panel Data Research, 33, DIW, Berlin, August 2007.
- Ratha, Dilip and William Shaw (2007): South-South Migration and Remittances, World Bank Working Paper, No. 102. Washington, D.C.
- Sinning M. (2007), Savings, Remittances and the Brain Drain: Empirical Evidence from Immigrants to Germany. Not published.
- United Nations (1998), Recommendation on Statistics of International Migration, Statistical Papers Series M, No. 58, Rev.1, New York: United Nations.
- United Nations (2006), International Working Group on Improving Data on Remittances. Interim Report, November 2005. New York: United Nations. Department of Economic and Social Affairs. Statistics Division. 22-24 February 2006.
- World Bank (2006), "Global Economic Prospects 2006", Washington, D.C.

Websites of some mentioned surveys:

EMIF Survey: http://www.conapo.gob.mx/mig_int/3.htm

Canadian Survey of Household Spending:
<http://www.chass.utoronto.ca/datalib/major/famex.htm>

Pew Hispanic Center, National Survey of Latinos: <http://pewhispanic.org/reports/surveys/>

Bendixen and Associates: <http://www.bendixenandassociates.com/index.html>

World Banks' remittances Survey in Belgium:

<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/GEPEXT/EXTGEP2006/0,,contentMDK:20792338~menuPK:2138997~pagePK:64167689~piPK:64167673~theSitePK:1026804,00.html>

U.S. New Immigrant Survey: <http://nis.princeton.edu/>

Longitudinal Survey of Immigrants to Canada: <http://dsp-psd.pwgsc.gc.ca/Collection/Statcan/89-614-XIE/89-614-XIE.html>

Appendix 1: A Description of Surveys Providing Information on Remittances Bendixen and Associates Surveys and the National Surveys among Latinos (NSL)

1. The surveys of Bendixen and Associates, which provide the Multilateral Investment Fund of the Inter-American Development Bank with estimates of US remittances, are well known. The National Survey of Latinos (NSL) undertaken by the New Hispanic Center is very similar in its approach. Multiple waves have been gathered since 2000. Both surveys, conducted by phone, constitute major information sources on the remittances of Hispanic immigrants in the United States.

2. The samples are drawn from a list of phone numbers with names. Latin Americans are identified according to their name, using ethnic encoding methodology. Based on this identification, a non-proportionate stratified random sample is drawn. The sample size of the surveys depends on the community of Latin Americans selected, ranging between 1000 and 3000 individuals.

3. Within the contacted households, the person corresponding to the phone number is selected for the interview. The response rate is around 50%. Although their size is rather small, both samples are, after weighting, considered to be representative of the respective population in the United States, and serve to estimate macro-outflows of remittances from the United States to Latin America.

4. However, the definition of "eligible migrants" for interviews differs in the two surveys. The Bendixen Survey opts for a very restrictive definition of the eligible population, referring to the concept of *workers' remittances* as defined in BPM5: an adult (18 years old or older) foreign-born Latino who identifies himself as a migrant of Latin-American origin *and* who has family members in his country of origin. Consequently, remittances are defined as individual transfers to family members in the country of origin.

5. At far as the NSL 2003 is concerned, the definition of "eligible migrants" adopted is much broader, as is the definition of remittances. Those eligible to respond to this survey were adults (18 years old or older) and foreign-born; remittances were defined as individual money transfers abroad, regardless of the identity of the beneficiary. NSL Data are accessible⁸ and the results have been widely distributed by the survey's organizers.

Survey on Serbian Remittances in Switzerland 2006

6. The remittance behavior of Serbian residents in Switzerland was surveyed between March and April 2006. The Swiss Forum for Migration and Population Studies organized the survey, which was funded by the Development Division of the Swiss Secretariat of Economy. A large proportion of Serb-Montenegrin citizens in Switzerland are migrants who come originally from Kosovo. However, Serbians, an ethnic group among Serb-Montenegrin citizens, have a long-term migration history in Switzerland and are characterized by an important family migration component since the time of the civil war in Former Yugoslavia. The survey sampling was based on administrative data (Swiss Central Aliens Register). All the names and addresses of the adult (18 years or older) foreign born Serb-Montenegrin citizens living in Switzerland (for at least one year) were included. Recently naturalized people from Serbia-Montenegro, who obtained the Swiss citizenship during the last two years, were also

⁸ <http://pewhispanic.org/datasets/>

included in the sample. Among them, only ethnic Serbians were considered as being eligible to participate in the interview. Therefore the risk population has been defined using a simplified ethnic encoding methodology. However, it proved necessary to incorporate a screening procedure at the beginning of the interview in order to exclude people of non-Serbian origin who had not been identified by the original data screening.

7. The sample was stratified and randomly selected. The strata were defined according to the residence permit, which in Switzerland can be considered as a rough approximation of the length of stay. The sampled individuals' phone numbers were then identified, so that 600 interviews could be conducted by phone. The response rate was measured at 57%. Every randomly selected individual was asked to list all transfers from his/her household. For each transfer, the recipient was also identified. Thus, remittances were defined as *personal transfers*.

8. The survey also recorded in-kind remittances, capital transfers, and "other means of general economic support" (which could be assimilated with institutional remittances). The amount of these transfers has not, however, been estimated.

9. The extrapolation of the total amount of remittances proved to be problematic. Indeed, the difficulties encountered in selecting an ethnic community within citizens of a nation state frustrate any claim as to the representativeness of the respondent sample. Nonetheless, if this specific problem is ignored, remittances can be estimated by multiplying the number of Serbian households in Switzerland, identified through the 2000 Swiss Census⁹, by the average amount of remittances sent by remitting households weighted by the proportion of households that remit, estimated from the survey. A complementary survey was implemented in the country of origin in order to provide a more precise figure for the use made of remittances in this community (Lerch et al. 2007).

BME Remittances Survey in UK 2006

10. The United Kingdom seems to be the only country where a survey specifically focusing on remittances based on a national-sampling approach was conducted. The BME Remittance Survey, only distributed to remitters, was organized between 18 February and 20 March 2006 by the Department for International Development (DFID).

11. This survey related to the Black and Minority Ethnic (BME) households: about 10,000 households were contacted. According to the available documentation, sampling was based on a stratified random probability survey design. A total of 135 paired Output Areas (OAs) – the base unit of the 2001 Census – were selected, according to a rather complex random procedure including the proportion of BME households at the last Census. An Output Area contains 150 households on average and it was expected that 12 interviews per location should be completed (1,620 interviews).

12. Interviewers were expected to knock on every door within their OA in order to identify respondents who were eligible for the survey: the main criteria for eligibility was that the household should contain a (self-declared) member of the minority ethnic community and that this member had remitted to family and friends abroad within the last 12 months.

⁹ Censuses often provide more extensive information of identification of population of foreign origin than administrative data.

13. However, when multiple eligible persons were identified the one that remitted most recently was selected. Given that irregular migrants cannot be sampled, they were included if encountered during the fieldwork. 1,778 completed interviews were conducted with remitters (ICM 2006).

14. The questionnaire was delivered by hand and then collected when it had been filled out. The survey was complemented by a phone questionnaire to verify the role of the sampling method on the results. The response rate among the eligible population was very high (66%).

15. The concept of remittances used refers to *personal transfers*. The respondents were asked about the total value of transfers sent from their household to family or friends abroad¹⁰. Consequently, the survey not only recorded remittances to the country of origin but also to other states.

16. No estimation of the total amount of *personal transfers* sent from UK can be directly calculated, given that geographical areas rather than a precisely defined population have been sampled.

Los Angeles County Mexican Immigration Residency Status Survey 2001

17. The survey of Mexican migrants in Los Angeles County was organized in July 2001 by the University of California in collaboration with El Colegio de la Frontera Norte and the Coalition for Humane Immigrant Rights in Los Angeles. It constitutes another example of a survey based on census data, but this time it was households rather than geographical areas that were sampled. The survey did not specifically concern remittances but also included other aspects related to migration.

18. Based on data from the Census 2000, the targeted population was defined as being the number of households in which at least one person was born in Mexico, located in one of the 12,476 census blocks including at least twenty foreign-born Mexicans and with a population that was at least 75% Latino. The sample was drawn up in two stages: in the first step, 125 census blocks were randomly selected and then in the second step, households were randomly selected within these blocks. A total of 456 households were interviewed and the response rate was rather high (62%). Approximately 46% of the respondents were undocumented migrants. To be eligible to be included in the remittances survey, the respondents had to be born in Mexico. Transfers to friends or relatives in the year 2000 were recorded on an individual basis.

19. The survey did not provide any estimates of the total amount of personal transfers that were sent to Mexico. However, an analysis of the determinants of remittances was completed (Marcelli et al. 2005).

World Bank Remittances Survey in Belgium 2005

20. The World Bank organized a pilot survey on remittances in Belgium in the frame of the Global Economic Prospects 2006. This survey took place during the period March–April 2005. The sample was based on the snowball method. Addresses of migrants from Nigeria, Senegal, and the Democratic Republic of Congo were provided with the cooperation of some of the

¹⁰ Respondents were also asked about the total value of their individual transfers.

leaders of the respective diaspora networks, who were elected as volunteers from their community. These persons also acted as interviewers.

21. Eligible migrant households were defined in terms of the presence of at least one foreign born member in the household. The interviews were conducted using face-to-face techniques.

22. The concept of remittances used in this survey refers to *personal transfers*: amounts sent by someone in the household in question to any household in the country of origin were considered. Money transfers of all household members were recorded, and their value was estimated by each sender. Moreover, in-kind transfers were also reported and their value estimated. The data gathered during the survey are accessible on the web¹¹.

Encuesta sobre Migration en la Frontera Norte de Mexico (EMIF)

23. EMIF periodic surveys have been organized by the Colegio de la Frontera Norte since 1990. The overall design of these surveys comes close to that of an observatory of border movements. Travelers entering Mexico are interviewed in 8 cities at the Mexican-American border. The first waves identified them as the main "doors" to Mexico (used by 94% of the travelers). The survey on voluntary returns contains information about remittances.

24. The sampling of intercept points follows a multistage design and a probability factor is assigned to every stage. The first selection criterion is geographic. Regions connected with a communication infrastructure as well as with regions of origin and destination of migrants are identified. Within each region, cities, zones, and finally sample points are selected in proportion to the flow of migrants passing through. The second stage of the sampling refers to the temporary unit. A trimester, day, and hour are sampled.

25. The studied population is composed of the total flow that travels through the sampling point¹². The survey is therefore not representative of the Mexican population in the United States, but of the travelers. As a result, Mexican migrants who never return to Mexico or who return to other cities using, for instance, airlines are excluded from the survey.

26. At one specific day and hour, all the travelers from the US to Mexico are screened according to the following criteria of eligibility: aged 12 years or older, not born in the US and having migrated to the US for at least one month whatever the reason for migration. The definition of migration is therefore much wider than that suggested by international recommendations. Remittances are defined as individual money transfers, relating to the last month, sent to the country of origin.

27. Data are accessible on the web¹³ and the waves prior to 2001 have been analyzed as regards the use of remittance channels (Amuedo-Dorantes and Pozo 2005).

Bendixen and Associates Survey of Latin American Immigrants in Japan

¹¹<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/GEPEXT/EXTGEP2006/0,contentMDK:20792338~menuPK:2138997~pagePK:64167689~piPK:64167673~theSitePK:1026804,00.html>

¹² For instance bus stations, railways stations, trans-national bridges, etc.

¹³ http://www.conapo.gob.mx/mig_int/3.htm.

28. The Bendixen and Associates' survey organized in Japan is an example of a mixed design of convenient survey methodologies, linking intercept points and snowball techniques. Data were gathered in February 2005.

29. All possible sampling points¹⁴ (intercept points) were identified in 15 cities – all of which have a significant population of respective immigrants – on the basis of population statistics for Latin American immigrants stratified according to the region of residence, the country of origin, the level of urbanization in the region of residence, and the population density. Final sampling points were selected randomly.

30. The sampling of individuals available for an interview was completed by a recruitment using snowball techniques. Every individual of Latin-American origin aged 18 and older was eligible for an interview. The total number of interviews completed was 1070.

As in the aforementioned Bendixen and Associates' surveys undertaken in the United States, the definition of remittances is strictly restricted to transfers sent to family members back home.

¹⁴ Restaurants, work locations, remittances sending locations, churches, stores and other centralized locations.

Table 1: An Overview of Methodological Issues in Remittance Surveys

Sampling base	Sampling procedure	N and Selection of respondents	Definition of eligible migrants	Definition of remittances	Questions
<i>Bendixen and Associates Latin-American surveys (phone)</i>					
Latin-Americans from a list of phone numbers and names, identified by means of the ethnic encoding methodology	Random sampling	- Sampled individual - Size : 1000-2000	- 18 years and older - Of Latino-American origin (self-identification) - Foreign born - Family members in country of origin - Legal & illegal	- Individual remittances to <i>family members</i>	- Place of birth - Length of stay - Family income - Naturalization - Frequency of transfers - Transfer means - Banking literacy - Confidence in financial infrastructure
	<i>Do you sometimes send remittances to family ? When was the last time you sent remittances? How many times do you send remittances ever year? What is the average amount that you send?</i>				
<i>National Surveys of Latinos (phone)</i>					
Latin-Americans from a list of phone numbers and names, identified by means of the ethnic encoding methodology	Stratified disproportionate random sampling	- Sampled individual - Size : depending on waves, at least 2000	- 18 years and more - Foreign born	- individual	- Country of origin - Place of birth - Reason for migration - Year of first immigration - Naturalization - information about integration - Transfer means - Individual income
	How often do you send money? (frequency or never) What is the average amount you send each time?				

Sampling base	Sampling procedure	N and Selection of respondents	Definition of eligible migrants	Definition of remittances	Questions
<i>Serbian Remittances Survey in Switzerland 2006 (phone)</i>					
Serbian residents and recently naturalized (aged 18 and more) from the Foreign population register, identified among Serb-Montenegrens citizens by ethnic coding method	Stratified random sampling	- Sampled individuals - Size: 600	- foreign origin - aged 18 and more	- Household remittances	- Transnational living - Reason for migration - documents for first migration - Length of stay - family members in Serbia - Transfer means and costs - Frequency - Duration of remitting
	<i>In the past 12 months, did anyone in your household send or bring their his own money to someone in Serbia-and-Montenegro?</i> <i>For each recipient: total transfer sent during the last 12 months?</i>				- Purpose of transfer - Banking literacy - Investments
<i>BME Remittances Survey 2006 (brought questionnaire and took it later)</i>					
2001 Census Output Areas, with concentration of BME residents	Stratified disproportionate random sampling	- Most recent remitter in the household - Size: 1778	- Legal & illegal - Of minority ethnic origin (self-identification) - Remitted in last 12 months	- Individual and household remittances	- Country of origin - Length of stay - Likelihood of return - Reason for migration - Remittance behaviour - Banking literacy - Transfer means - Information on receivers
	<i>Thinking now about the last 12 months, how much money do you think this household has sent to family or friends abroad?</i> <i>How much money do you think you have sent personally to family or friends abroad?</i>				- Income-remittances elasticity

Sampling base	Sampling procedure	N and Selection of respondents	Definition of eligible migrants	Definition of remittances	Questions
Los Angeles County Mexican Immigrant Residency Status Survey 2001 (face to face)					
List of households with at least one foreign born according to Census 2000	Two stage cluster disproportionate random sampling	<ul style="list-style-type: none"> - All members - Size : 456 HH 	<ul style="list-style-type: none"> - at least one foreign born in HH (each has been interviewed) 	<ul style="list-style-type: none"> - individual remittances of all foreign born household members 	<ul style="list-style-type: none"> - Length of stay - (Non-) documented - Naturalization - Individual income of all HH-members
Encuesta sobre Migration en la Frontera Nore de Mexico (EMIF 2001-2002) (face to face)					
Northern Border crossers from US to Mexico (by train, car, bus, plain)	<ul style="list-style-type: none"> - Probability sampling of <i>intercept points</i> - Screening form to identify migrants among border crossers 	<ul style="list-style-type: none"> - Positively screened and ready migrants - Size: 5718 during 2001-2002 wave 	<ul style="list-style-type: none"> - 12 years and more - Foreign born - Migrated to US for visit, business or work for more than a month 	<ul style="list-style-type: none"> - Individual remittances 	<ul style="list-style-type: none"> - Frequency and total number of transfers - Transfer means - Number of migrations - Purpose of remittances - Year since first immigration - (Un-) documented status

Sampling base	Sampling procedure	N and Selection of respondents	Definition of eligible migrants	Definition of remittances	Questions
World Bank Remittances Survey Belgium – Nigeria, Senegal and Congo 2005 ? (face to face)					
Contacts of migrant households provided by institutionalized diasporas	Non-probability snowball sample (Sample size?)	- Randomly - All remitting members for information on transfers	- At least one foreign born in HH	- Individual remittances of all HH - members	- Country of birth - Length of stay - Individual income of all HH members
	<p><i>Over the past 12 months, did you or anyone living in this residence send money to anybody in ____?</i></p> <p><i>Did anyone else living in this residence contributes financially to the transfer of money to (recipient name)? For each recipient:</i></p> <p><i>Over the past 12 months, what is the total value (in Euro) of money that you sent to this person in ____?</i></p> <p><i>What is the total value of goods that you sent to ____ over the past 12 months?</i></p>				- Frequency - Transfer means and costs - characteristics of recipients
Bendixen and Associates Latin-American survey in Japan 2005 (face-to-face)					
List of possible sample points in 15 cities with significant concentration of Latinos	- Intercept points - Snowball sampling	- Available and ready individuals - Size : 1000-2000	- 18 years and older - Of Latino-American origin (self-identification) - Foreign born - Legal & illegal	- Individual remittances to <i>family members</i>	- Place of birth - Length of stay/remitting - Year of first migration - Individual income - Reason for migration - Naturalization - Transfer means and costs - Frequency - Duration of remitting - Banking literacy - Confidence in financial infrastructure
	<p><i>Have you ever sent money to a family member back home?</i></p> <p><i>How much money – on average – do you send each time?</i></p>				- Investments - Transnational living

Appendix 2: An Overview of Household Surveys with Questions Regarding Remittances Household Panels: The German Socio-Economic Panel Study

1. The German Socio-Economic Panel (GSOEP) is a representative survey of individuals and families in Germany collected annually since 1984. It provides data on households and their members. This panel includes a question on further payments or support by all household members to parents, children, (ex-)spouse, and other people related (or not) who live abroad (cross-border transfers). Between 1984 and 1995, these transfers were subdivided into (i) savings for later, (ii) support for the family, and (iii) transfers for other reasons. After 1995, only the total amount of payments to people abroad was registered.

2. For 2004, the formulation of the question was the following:

“Have you personally given payments or support during the last year (2003) to relatives or other persons outside of your household?

*How much during the whole year? Where does the recipient live?
Germany – Abroad”*

3. The sample of respondents included 2,608 foreigners in 2004. Other questions relating to migration include the traditional questions such as the place of birth, the naturalization status, and the citizenship. But the panel also provides information on the length of stay and transnational living (visits to home) as well as the intention to stay in Germany (expected duration of residence). The panel also provides data on whether the spouse or children of the respondent live abroad (Sinning 2007).

4. Remittances were analyzed using this panel (see for instance Piracha and Yu Zhu 2007, Sinning 2007, Holst and Schrooten 2006, Bauer and Sinning 2005, Merkle and Zimmermann 1992).

Household Budget Survey (HBS) in Switzerland

5. The Household Budget Survey covers 250 households monthly; they are randomly and disproportionately selected on the basis of the national phone register. It has been organized since 2000. The population of reference is defined as being the population of usual residence in possession of a phone number.

6. The survey records monthly *personal transfers* after specifying which kind of contribution is involved, for instance "alimony" or "other support contribution to somebody outside the household". The geographical location of every recipient is documented (be they in Switzerland or abroad).

7. The identification of an immigrant household is based on its composition in terms of the *nationality* and *country of origin* of all its members. However, naturalized migrants may be

difficult to identify, since for binationals the country of origin recorded is that which corresponds to the nationality most recently acquired. No other information on migration history is available.

8. Since the number of respondent households is low (371 foreigner households were interviewed in 2003), pooling of different waves is necessary if enough samples for an analysis of total immigrant populations are to be obtained (see the separate paper by Haug and Teotino on the Swiss HBS).

The British Longitudinal Household Study

9. The UK Longitudinal Household Study (UKLHS) is expected to question 40,000 households and to replace progressively the British Household Panel Study (BHPS). It is designed to support longitudinal research on the widest possible range of themes. The financial situation of households is one of the dimensions to be explored and this aspect includes inter-household transfers and remittances. It is therefore expected that questions on external transfers will be included (Buck et al. 2006).

Canadian Survey of Household Spending

10. The 2005 wave of the Survey of Household Spending (SHS) is a national representative survey, carried out among private households in 10 provinces of Canada.

11. The survey follows a stratified, multistage sample design selected from the Labor Force Survey (LFS) sampling frame. The LFS is a monthly household survey of samples of individuals who are representative of the civilian, non-institutionalized population aged 15 or older. The population according to the 2001 Census was stratified geographically, by regions. In each stratum clusters of approximately 200 households were defined and the first stage of sampling consisted in a random selection of these clusters. In a second stage, dwellings were selected within these primary sampling units.

12. 21,315 households were interviewed, with interviews carried out on a face-to-face basis. Personal as well as institutional remittances were recorded. Personal remittances are defined as gifts, contributions or support payments. A distinction was made between internal and international transfers.

13. The following questions were asked:

"In 2005, how much did each member spend on money gifts, contributions, and other support payments to persons who were not household members?"

- "Money given to persons living in Canada?"

- "Money given to persons living outside Canada?"

*“In 2005, how much did each member spend on charitable contributions to:
Religious organizations? Other charitable organizations, e.g., the United Way, heart
fund?”*

14. However, the SHS is a good example of the problems encountered by standardized nationwide surveys for surveying remittances. Even if 6% of households reported that they send remittances, the sample is not designed to be representative of the immigrant population¹⁵. Furthermore, no information on citizenship, place of birth or any other matters relating to migration history is available.

¹⁵ Berger, Arthur (2005): Presentation to CEMLA Remittances International Steering Committee, Coverage, Quality and Sources of Information. Statistics Canada.