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“Impact of Globalisation on National Accounts:  
Practical Guidance”

Remittances

Note by the Bureau of Economic Analysis, United States

Summary

Cross-border remittances – household income from foreign economies arising mainly from the temporary or permanent movement of people to those economies – have grown rapidly in recent years. As they have increased in size remittances also have increased in importance at both individual and national levels. Remittances vary widely in their importance to national economies which may lead to differences in the emphasis given by national statisticians to measuring and monitoring them. This paper describes recent efforts to address conceptual definitional and measurement challenges with regard to remittances and will discuss the challenges that remain. It also presents the experience of a number of statistical offices in developing remittances measures.
I. Introduction

1. Cross-border remittances – household income from foreign economies arising mainly from the temporary or permanent movement of people to those economies – have grown rapidly in recent years. International Monetary Fund estimates show their global value (measured as global receipts of “workers’ remittances” and “compensation of employees”) in United States dollars as rising from $143 billion in 2002 to $388 billion in 2008 or at an average annual rate of 18 per cent (table 1). Some of the increase may reflect valuation effects due to price and exchange rate movements and some may be an artifact of better measurement but much of it is real largely the result of increased international migration and declining transfer costs. Although remittances are not necessarily connected to migration in practice most remittances are accounted for by funds sent by migrants to relatives in their countries of origin. Because of this the largest migration corridors—Mexico to the United States and other Commonwealth of Independent States (CIS) countries to Russia for example—also tend to be the most important corridors for remittance transfers although nations with large and widely disbursed migrant populations such as India and China are also major remittance recipients (charts 1 and 2).

2. As they have increased in size remittances also have increased in importance at both individual and national levels. For individual recipients remittances are often a significant source of household income providing support for consumption education healthcare and potentially a path out of poverty. For individual senders remittances represent an important link with family in the home country. At the national level in addition to supporting household consumption remittances may be an important source of foreign exchange for net receiving nations. For net sending nations the majority of which are more developed remittances represent resource transfers to developing nations. Remittances can thus be seen as a type of development and humanitarian assistance which can be considered in conjunction with government aid private investment and other resource flows in evaluating needs for aid.

3. Remittances vary widely in their importance to national economies which may lead to differences in the emphasis given by national statisticians to measuring and monitoring them. For net sending nations the amounts transferred may be large in absolute terms but their importance relative to total economic activity generally is small. For the United States for example outflows of workers’ remittances and compensation of employees were $48 billion in 2008 but that amount was only a fraction of 1 per cent as large as United States Gross domestic product (GDP) in that year. For net receiving nations the situation often is reversed. Moldova for example reported only $2 billion for 2008 as inflows of workers’ remittances and compensation of employees but that amount was one-third as large as its total GDP in that year.

4. Although remittances are increasingly important to many economies accurate measurement of remittances remains difficult. The difficulties in measurement can be illustrated by the large discrepancy between global receipts (credits) and payments (debits) of remittances. Although in reality and by any definition the amounts sent and received are the same estimates of remittances based on reported payments tend to be considerably smaller than estimates based on reported receipts. In 2008 for example reported payments

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1 This definition is from Appendix 5 of the International Monetary Fund (IMF) Balance of Payments (BoP) and International Investment Position Manual, sixth edition. As will be discussed later, although most remittance flows arise from the movement of persons, some do not. However, all remittances and remittance-type flows are intended to benefit households, either directly or indirectly.
at $291 billion were only about three-fourths as large as reported receipts. Such differences suggest that at least some statistics on remittances lack the minimal level of reliability required for them to serve their intended purposes. They also may result in differences in perceptions about the adequacy of remittances as a source of assistance and of the need for other types of resource flows.

Table 1

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Compensation of employees</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Credit</td>
<td>49 475</td>
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<td>78 592</td>
<td>86 354</td>
<td>105 418</td>
<td>120 267</td>
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<tr>
<td>Debit</td>
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<td>67 926</td>
<td>77 679</td>
<td>86 646</td>
<td>96 182</td>
<td>114 164</td>
<td>136 454</td>
</tr>
<tr>
<td>Global discrepancy</td>
<td>7 837</td>
<td>7 843</td>
<td>6 015</td>
<td>8 054</td>
<td>9 828</td>
<td>8 746</td>
<td>16 187</td>
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<tr>
<td>Workers' remittances</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Credit</td>
<td>93 288</td>
<td>113 961</td>
<td>127 521</td>
<td>166 316</td>
<td>199 124</td>
<td>240 468</td>
<td>267 774</td>
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<tr>
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<td>77 821</td>
<td>81 389</td>
<td>91 725</td>
<td>99 458</td>
<td>118 026</td>
<td>138 720</td>
<td>154 869</td>
</tr>
<tr>
<td>Global discrepancy</td>
<td>-15 467</td>
<td>-32 572</td>
<td>-35 796</td>
<td>-66 858</td>
<td>-81 098</td>
<td>-101 748</td>
<td>-112 905</td>
</tr>
<tr>
<td>Sum of compensation of employees and workers' remittances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Credit</td>
<td>142 763</td>
<td>174 045</td>
<td>199 185</td>
<td>244 908</td>
<td>285 478</td>
<td>345 886</td>
<td>388 041</td>
</tr>
<tr>
<td>Debit</td>
<td>135 133</td>
<td>149 315</td>
<td>169 404</td>
<td>186 104</td>
<td>214 208</td>
<td>252 884</td>
<td>291 323</td>
</tr>
<tr>
<td>Global discrepancy</td>
<td>-7 630</td>
<td>-24 730</td>
<td>-29 781</td>
<td>-58 804</td>
<td>-71 270</td>
<td>-93 002</td>
<td>-96 718</td>
</tr>
</tbody>
</table>

updated with data from the IMF’s BoP Database.

Note: This table uses BoP Manual (fifth edition) definitions. In particular “workers' remittances” is defined as current transfers from employment income by migrants who are employed in new economies and considered residents there. In the list of standard components for the BoP accounts “workers' remittances” has been replaced in the sixth edition by “personal transfers” a somewhat broader concept

5. Two main factors have complicated the measurement of remittances—differing definitions and difficulties in capturing the transactions. The problem of differing definitions has recently been addressed through the publication of standard statistical definitions in two IMF guidebooks the sixth edition of the Balance of Payments and International Investment Position Manual and International Transactions in Remittances: Guide for Compilers and Users. Over time these should result in greater consistency in definition. Historically however research and reports on remittances have often included as “remittances” one or more items not covered by the new definitions such as money brought home by returning migrants funds sent by migrants back to their countries of origin to purchase real estate invest in local businesses or otherwise for the migrant’s own account and the estimated value of volunteer time spent on international programs. In some cases the definition employed has depended on the use of the statistics or on data availability. Economic accountants require a definition that is compatible with the rest of the national
accounting framework and thus are concerned with details such as the residency status of the sender and the absence of a quid pro quo. Government aid officials and development professionals are often more concerned with total resource flows between countries regardless of the residency of the sender or the presence or absence of a quid pro quo to show the economic impact of these flows on sending and receiving nations.

Chart 1  
**Compensation of Employees plus Workers’ Remittances – Credits in 2008**

![Chart 1](image1)

*Source: IMF Balance of Payments Database.*

Chart 2  
**Compensation of Employees plus Workers’ Remittances – Debits in 2008**

![Chart 2](image2)

*Source: IMF Balance of Payments Database.*

6. With regard to data capture because of the small size of individual transactions and the sometimes uncertain status of those who make them remittances data are difficult to collect using traditional methods. Individual remittance transactions often fall below reporting thresholds for banks and other financial institutions and thus cannot be indentified within the reported data. Money transfer operators the preferred vehicle of transfer for many migrants may only settle net payments though the banking system making it difficult
to identify the underlying gross receipts and payments. In addition remittance transactions are often effected outside the formal financial system such as through hand-carry by returning migrants and workers or through unlicensed transfer businesses both of which usually bypass formal reporting systems. Capturing data via household surveys may also be difficult especially in nations where large portions of the migrant population lack legal status. Faced with these numerous and varied difficulties in data collection some countries have chosen to estimate remittances using statistical modeling techniques that do not attempt to capture and sum individual transactions but rather combine sample information on or assumptions about remittance behavior by various demographic groups with information on the populations belonging to each group.

7. This chapter will describe recent efforts to address conceptual definitional and measurement challenges with regard to remittances and will discuss challenges that remain. It will proceed as follows. The next section will provide background on the commonly used definitions of remittances and will review the new definitions provided in the sixth edition of the International Monetary Fund’s Balance of Payments and International Investment Position Manual (BPM6) and in the companion guidebook International Transactions in Remittances: Guide for Compilers and Users (Guide). Section 3 discusses conceptual issues that may arise in defining and measuring remittances and the problems that mismeasurement may cause for national accounts. Section 4 outlines the practical measurement problems facing compilers. Section 5 offers suggestions for ways to overcome compilation difficulties and section 6 concludes with a discussion of ongoing activities and recommendations for future work.

II. Background – Development of Guidelines

8. Because they represent international transactions remittances have long been addressed in the balance of payments framework. The fourth edition of the Balance of Payments Manual (BPM) published in 1977 included the item “worker’s remittances” defined as “unrequited transfers by those migrants (persons who have come to an economy and who stay or are expected to stay for a year or more) employed in their new economy.” This item with the definition slightly altered to state explicitly that the item pertains only to current transfers remained the single component specifically associated with remittances in the fifth edition of the Manual published in 1993.

9. In the 1990’s as global migration increased transfers from migrants became increasingly important to many national economies prompting government policymakers development officials and national compilers to focus increased attention on the size and nature of remittance transfers. The balance of payments item “worker’s remittances” provided some information but it did not completely cover the wide variety of remittance-type transactions occurring between nations. Worker’s remittances is limited to current transfers by employed permanent migrants and thus excludes current transfers by non-migrants and by unemployed migrants as well as any household-to-household capital transfers. It also excludes the resource flows to countries of origin that result from employment of their residents in other countries as well as transfers made not directly to households but to nonprofit institutions that serve households.

10. To construct a broader measure of remittances analysts have often combined workers’ remittances with two other items from the balance of payments—gross compensation of nonresident employees and migrants’ transfers.² While the resulting

² As discussed later, under BPM6, migrants’ transfers are no longer regarded as balance-of-payments transactions.
measure gives a more complete picture it does not capture all flows that may be regarded as “remittances” which may include such items as capital transfers and transfers from non-migrants. In addition the measure may overstate “remittances” to the extent that a portion of the compensation payments does not flow back to home countries but is spent by nonresident workers in host economies.

11. Rather than use balance of payments statistics public and private agencies and organizations have sometimes compiled their own estimates of remittances occasionally by surveying migrant or recipient populations. These surveys have employed a variety of definitions of remittances and may sometimes have captured transactions that would not universally be regarded as within the scope of the remittances concept such as real estate purchases business investments and savings which involve funds sent abroad but which are not transfers. One such broader estimate of cross-border giving has reflected the value of time spent by volunteers on international programs which represents assistance by residents of one country to residents of another but lies outside the scope of standard economic accounts.3

12. The use of multiple compilation methods each of them reflecting a different collection of transactions has produced vastly different estimates of remittances. The wide variety of estimates has created confusion and uncertainty over their importance relative to other flows and their impact on sending and receiving nations.

A. BPM6 - a standardized definition

13. The development of a standard balance of payments definition of remittances began at the Sea Island Summit in 2004 where Group of Eight (G8) participants acknowledged the rapid growth and developmental impact of remittances in the action plan Applying the Power of Entrepreneurship to the Eradication of Poverty. The plan highlighted the need for better statistics on remittances and called for the G8 countries to “work with the World Bank IMF and other bodies to improve data on remittance flows and to develop standards for data collection in both sending and receiving countries.” This statement led to the creation of the United Nations Technical Sub-group on the Movement of Natural Persons (TSG) which worked in consultation with the IMF Committee on BoP Statistics and the Advisory Expert Group on National Accounts to clarify the definition of remittances. The TSG’s recommended definitions have been incorporated in BPM6. Following the adoption of these definitions a working group which came to be known as the Luxembourg Group was formed under the auspices of the IMF to develop a compilation guide based on the BPM6 definitions. The resulting Guide provides further detail on the nature of remittances and outlines several compilation methodologies. The Guide’s recommendations will be discussed further in Section 5.

14. BPM6 introduces four increasingly broad categories of remittances (see Table 2):4

15. Personal transfers is a standard component of the balance of payments framework. Personal remittances total remittances and total remittances plus transfers to non-profit institutions serving households (NPISHs) are supplemental items. This structure allows compilers to publish a variety of remittance measures without altering the central balance-of-payments framework although they may need to alter their data collection to align with the new guidelines.

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3 See Hudson Institute, The Index of Global Philanthropy, 2008. This report gives $2.2 billion as a lower-bound estimate of the value of such time spent by United States volunteers in 2006.
4 See Appendix 5 of BPM6 for additional information.
Table 2
Remittance Concepts in BPM6

<table>
<thead>
<tr>
<th>Total Remittances and Transfers to NPISHs: a+b+c+d+e+f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Remittances: a+b+c+d</td>
</tr>
<tr>
<td>Personal Remittances: a+b+c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal transfers (part of current transfers)</th>
<th>Compensation of employees less taxes social contributions transport and travel</th>
<th>Capital transfers between households</th>
<th>Social benefits</th>
<th>Current transfers to NPISHs</th>
<th>Capital transfers to NPISHs</th>
</tr>
</thead>
</table>

Abbreviations: Capital transfers to NPISHs

Note: “Travel” as used in column b is as defined in BPM6 to include food lodging and other goods and services acquired for personal use by seasonal border and other short-term workers who are not resident in the economy in which they are employed

16. These concepts provide a broader and more fully articulated framework for the analysis of remittances than was available under BPM5. The narrowest remittance measure personal transfers retains a focus on individual transfers from residents similar to that of the BPM5 concept of workers’ remittances. However it places the focus on the household-to-household nature of the transactions rather than on the employment status of the sender. Personal transfers include additional types of household-to-household transfers—such as transfers from non-migrants and non-workers—that are excluded from workers’ remittances.

17. The next item personal remittances broadens the scope of the concept by adding household-to-household capital transfers and the next compensation of nonresident workers. Personal remittances approximate the commonly used calculation of remittances discussed above although it does not include migrants’ transfers which under BPM6 are no longer regarded as transactions in the balance of payments. See “Cross-Border Remittance Statistics in Russia” for a more detailed examination of the differences between the BPM5 and BPM6 remittance statistics using Russian data.

18. The final two items incorporate social benefits and transfers to NPISHs. These transfers are not commonly thought of as remittances but they are conceptually similar as they provide direct support to households abroad. These broadest definitions are of interest to those wanting to determine the total amount of support provided to the households of one nation by those who are residing or working or who have worked in another.

19. While no country currently publishes the full array of new remittance measures many countries publish remittance-related components usually including a measure of personal transfers (with many countries still showing “workers’ remittances” as defined under BPM5) and gross compensation of employees. Available data suggest that for many countries personal transfers are the largest component of remittances reflecting the broad base of potential senders and recipients and the social and economic importance of these transfers. For example for India and the United States the largest receiving and sending

5 BPM5 also recognized that migrants’ transfers are not transactions in the true sense, but it nonetheless recommended recording them as such in order to provide contra-entries to flows of merchandise and other items resulting from migration. BPM6, in contrast, recommends that these items, which do not involve changes in ownership, be excluded from merchandise and other accounts, placing both those accounts and the account for transfers (secondary income) on a conceptually more correct basis.
nations personal transfers account for the majority of remittance flows (charts 1 and 2). However in some countries particularly those with a sizeable population of border workers a large guest worker program or membership in an economic area that provides for labor mobility within the area compensation of employees is the largest component. This is the case for example for inflows to France Germany and Belgium and outflows from the Russian Federation Switzerland Germany and Luxembourg. The relative importance of personal transfers and compensation may differ between receipts and payments.

20. Social benefits are likely the smallest component of total remittances reflecting the relatively small population of long-term employees who return to their country of origin or retire abroad. Data from the United States Social Security Administration for example indicate that United States Social Security payments made to beneficiaries outside the United States totaled $3 billion in 2008 which accounted for only a small fraction of the value of United States remittances components that can be separately identified. The relative importance of transfers to NPISHs is determined mainly by the size of the non-profit sector which varies across countries.

21. In addition to those items included in the definition of remittances BPM6 also highlights the analytical importance of two additional remittance-related data series: investment by migrants and travel. These items do not provide support directly to households but they represent additional channels through which national economies interact with their migrant populations. Other potentially important data series are telecommunications and trade in home-goods (goods such as foods that migrants import or have shipped from relatives back home).

III. Conceptual Issues

22. The release of BPM6 and the Guide represent major advances in defining remittances and in providing statistical guidelines both of which should result in higher quality better understood and more internationally comparable statistics. However the fact that multiple remittance concepts made up of components that are treated quite differently in economic accounts are presented calls for extra care in interpretation and in communications with data users. Table 3 shows the components required for compiling the different remittance measures and the different accounts from which they are constructed.

23. Taken together the various remittances concepts draw upon four different balance of payments accounts: (1) goods and services (2) primary income (3) secondary income and (4) capital account. As noted in BPM6 (para. 2.13) “[t]he different accounts within the balance of payments are distinguished according to the nature of the economic resources provided and received.” These differences also are recognized in national accounts and as a result the nature of any distortions in national accounts that may be caused by inaccuracies in the measurement of remittances can differ depending on which remittance component or components are mismeasured.

24. Compensation of employees for example affects GDP primary income and disposable income in the home country (the country of permanent residence of the workers) but not in that of the host country (the country where they work). Thus if it is mismeasured (or unrecorded) these items also will be mismeasured as will be saving—computed as the residual of disposable income and final consumption expenditures. Personal transfers in contrast are not reflected in GDP or in primary incomes but they do affect disposable income. If they are mismeasured GDP will be unaffected but there will be errors in the measurement of disposable income and saving. Capital transfers are not reflected in GDP or in measures of income but they do result in changes in national balance sheets for both donor and recipient economies which would thus be distorted by their mismeasurement.
Table 3
Components Required for Compiling Remittance Items and Their Source: Item and Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Source and description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compensation of employees</td>
<td>Primary income account standard component</td>
</tr>
<tr>
<td>2. Personal transfers</td>
<td>Secondary income account standard component</td>
</tr>
<tr>
<td>3. Travel and transport related to employment of border seasonal and other short-term workers</td>
<td>Goods and services account supplementary item</td>
</tr>
<tr>
<td>4. Taxes and social contributions related to employment of border seasonal and other short-term workers</td>
<td>Secondary income account supplementary item</td>
</tr>
<tr>
<td>5. Compensation of employees less expenses related to border seasonal and other short-term workers</td>
<td>Primary income account (for compensation of employees) standard component</td>
</tr>
<tr>
<td></td>
<td>Goods and services account (for travel and transport expenses) and secondary income account (for taxes and social contributions) supplementary items</td>
</tr>
<tr>
<td>6. Capital transfers between households</td>
<td>Capital account supplementary item</td>
</tr>
<tr>
<td>7. Social benefits</td>
<td>Secondary income account supplementary item</td>
</tr>
<tr>
<td>8. Current transfers to NPISHs</td>
<td>Secondary income account supplementary item</td>
</tr>
<tr>
<td>9. Capital transfers to NPISHs</td>
<td>Capital account supplementary item</td>
</tr>
</tbody>
</table>

Source: Table A.5.1 in Appendix 5 of BPM6.

25. These differences in effects are a reflection of the fact that “remittances” is not a national or international accounts concept but rather represents a grouping together of a variety of items from these accounts in an effort to measure the sum total of country-to-country flows through which individuals or organizations residing or working in one country benefit households of another country. Because of the differences for some purposes it may be useful to view the remittance aggregates in conjunction with information on their components given the rather fundamental differences among the components in their economic nature. It may be particularly desirable to have information on net compensation of employees separately from that on the various items of transfers since compensation alone represents income generated by productive activities of the recipient countries’ own residents.

26. From time to time questions have arisen about several items that are excluded from total remittances but that are sometimes considered in a remittances context. It will be useful to review these not to call into question the internationally agreed concepts and definitions but rather to explore the boundary between remittance and non-remittance flows and because they are sometimes viewed in conjunction with the included items in studies.
and reports on international philanthropy and development assistance. In general their effect is to broaden the remittance concept.

27. Transfers to NPISHs are not included in the BPM6 measure of total remittances yet these transfers may differ from household-to-household transfers only in the sense that intermediary institutions are involved in mediating funds that are donated by households in one country with the intent of benefitting households in another country. Among the items that have been excluded from total remittances these transfers perhaps have the most in common with the included items and their significance and relevance has been recognized by the new standards even if they have not been included in the core remittance aggregates.

28. The value of volunteer time spent on international programs likewise represents benefits provided by residents of one country to residents of another. However this value lies outside the scope of conventional economic accounts and therefore has not been recognized in statistical guidelines even as a related concept.

29. Investment by migrants in their countries of origin is recognized by BPM6 as a “related concept” but it is excluded from all of the remittances measures suggested in it and in the Guide. The presence of a quid pro quo or the fact that such investment is included in the financial account could be argued as justifying the exclusion (although a quid pro quo (namely labor services) is present in the case of compensation of employees). However migrants’ investments may be in businesses that provide relatives or others in their countries of origin with employment opportunities and thus may benefit home-country households as well as the emigrant investors residing abroad. Thus while migrants’ investments in their countries of origin are excluded from the statistical measures of remittances it must be acknowledged that they can have much in common with components that are included.

30. Financial and nonfinancial assets of returning migrants are likewise excluded from all of the remittances measures on the grounds that they lie outside the current balance of payments framework. However including the earnings of workers who stay abroad for less than a year and excluding the accumulated assets of workers who stay for a year or more before returning home may strike some as an arbitrary distinction especially when only small differences in length of stay are involved. Perhaps reflecting this view these values may sometimes be considered in a remittances context even though they lie outside the standard definitions.

31. Corporate giving raises equally difficult questions. A pharmaceutical firm’s donation of medicines to a foreign relief organization could be included in current transfers to NPISHs (which are not limited to transfers made by households). However what should be the treatment if the firm sold the drugs in developing countries at discounted prices or even below-cost? Economic accounting guidelines recommend recording transactions at market prices so one might argue that the transaction should be adjusted up to market price and the discount shown as a type of transfer relevant to remittances. However the price received may be only a partial measure of the value of the sale to the firm which may be rewarded for its benevolence through the accumulation of goodwill or the avoidance of regulations or price controls. In some cases discounting may simply represent the profit-maximizing actions of a price discriminating monopolist exploiting demand differences in distinct markets. Perhaps reflecting these considerations as well as practical difficulties in

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6 BPM6 does acknowledge that investment may be a “vehicle” for remittances in cases where relatives live rent-free in migrant-owned real estate, or are paid above market wages by migrant-owned businesses. In cases where these trends are known to compilers, estimates may be made to account for the remittance portion of these transactions.
data collection the value of this form of giving has not been recognized as a remittance component in the new international guidelines.

32. Different sorts of questions about corporate giving arise when the giving is done not across the border but rather through affiliates located in recipient countries. Because foreign affiliates are treated in economic accounts as resident in their countries of location rather than in the countries of their owners their donations in host countries are treated as between residents and thus outside the balance of payments framework. Yet to the extent that the giving raises the foreign affiliate’s costs and lowers its profits the income received by the home-country parent firm would fall making the cost to it of the donation much the same as if it had made the donation directly.

33. From these examples it is clear that the remittances concept is among the more difficult economic constructs to define and interpret. While the new guidelines have done much to clarify and expand remittance concepts the complexity of the concept and multiple potential uses of the data mean that conceptual difficulties remain.

IV. Difficult to Capture

34. Layered atop these numerous conceptual issues is an equally varied array of measurement challenges most of them relating to the personal transfers component. Personal transfers are typically small household-based on both the sending and receiving ends and capable of being sent through a wide variety of channels making them difficult to capture using traditional methods of collection. Additional factors such as the legal status of the remitting population the financial infrastructure of the nation and residence of the sender also complicate the capture of personal transfers data.

35. In most countries individuals have many options both formal and informal for sending personal transfers.\(^7\) Widely used formal methods of sending monetary transfers include banks credit unions and licensed money transfer operators (MTOs). Funds sent through these channels enter the formal financial system and can be captured along with other types of financial flows. However entry into the financial system does not completely eliminate the collection difficulty. Remaining issues include identifying gross flows (many institutions net their international transactions) determining the primary source and destination of the transfers and distinguishing between personal transfers and other small financial transactions.

36. Informal methods of monetary transfer include hand-carry either by the senders themselves or through family members or friends transfers through unlicensed MTOs and hawala or similar area-specific informal systems.\(^8\) When sent through these channels the transferred funds do not enter the formal financial system and bypass most established data collection points: money carried across a border often does not have to be declared below a certain threshold unlicensed MTOs may operate outside of the banking system and hawala does not involve actual cross-border payments between households. Collecting data on transfers made through informal channels requires targeted methods such as surveys of the sending or receiving populations. Statistical modeling may also help to overcome these difficulties.

37. In-kind transfers may also flow through formal or informal channels although it is generally believed that most in-kind transfers travel through informal channels. Formal

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\(^7\) For a more comprehensive discussion of remittance channels, see the Guide.

\(^8\) Hawala is a method of transfer, well established in Islamic communities, where instruction on payment, rather than the money itself, is sent across borders.
methods of transfer include declared shipment via post or with a registered exporter. Informal methods include hand-carry and undeclared shipment via cross-border passenger or transport vehicles. Compared to money transfers data collection for in-kind transfers faces an additional complication: determining the value of the remitted items. Formal shipments should have a declared value; however because of their small size they may fall below reporting thresholds. It may also be difficult to distinguish in-kind transfers from other small shipments. Informal shipments are not only difficult to track; they face the additional problem of valuation.

38. A number of factors including geography financial infrastructure cost and history may contribute to the choice of one transfer channel over others. Transfers between nations with a shared geographic border especially a relatively open border are more likely to be transmitted by hand or through established informal travel and trade routes. Financial infrastructure such as the prevalence of banks in both nations and the ease of opening an account affects the use of bank transfers. The cost of sending a transfer is also a consideration although so too is the convenience for both sender and recipient. International efforts made in recent years to decrease the cost of transferring through formal channels have led to an increase in the use of these channels. Finally the familiarity and trust that the sender and recipient have in a transfer company or method is also an important factor; remitters are often highly loyal to their chosen transfer method.

39. The combined effects of all of these factors are reflected in the choice of transfer channel. In some nations this may result in a single channel dominating the market potentially simplifying data collection as efforts can be focused on a single market segment. In nations where a variety of easily accessible transfer methods are available and no single channel dominates data must be collected from multiple market segments or through other methods such as surveys of senders or recipients.

40. Factors other than the transfer channel also complicate measurement. The legal status of the migrant population is one factor; illegal residents may be more likely to use informal channels and are often difficult to contact or survey. Nations that are international banking centers may have funds sent from third countries transit through their banking system creating noise in the financial-flows data. Finally no matter the channel it is difficult to determine length of residency of the sender a key factor in distinguishing between personal transfers and compensation of employees.

41. Measuring transactions in the broader remittance categories is also difficult. Although there may be official data associated with visa or tax records the question of residence complicates the collection of data on compensation of employees. Additional complications arise if there is a large non-legal migrant workforce or in nations with open guest worker programs. Social benefits and transfers to NPISHs are likely to flow exclusively through formal channels; however identifying these flows may be difficult. Data on social benefits largely issued by the government may be available through official records although identifying and obtaining data from all potential benefit sources may complicate data collection. The difficulty of collecting data on transfers to NPISHs depends on the source of the transfer. As with personal transfers small transfers from households will be difficult to identify whereas large transfers from well-known charities or foundations will be more easily captured.
V. Proposals for Operational Treatment

42. The Guide outlines four principal methods for compiling data on remittances: extracting the data from international transactions reporting systems (ITRS) direct reporting by MTOs household surveys and model-based methods. Each of these approaches focuses on data capture from different segments of the remittance market and each has strengths and weaknesses in terms of coverage cost and feasibility. Data compilers can use these methods singly or in combination; as the collection issues outlined above illustrate remittances can take many forms and more than one method is often needed to construct comprehensive estimates.

43. An ITRS regularly collects data from banks and enterprises on transactions with non-residents. These systems often grew out of foreign exchange control systems and today are commonly used to collect data on international financial transactions. ITRS systems vary in their degree of coverage ranging from those that attempt to capture all transactions individually regardless of size to those that collect detailed data from only the major transactors and allow aggregated reporting for small transactions. They also vary in timeliness; data may be reported electronically at the time of transaction or manually at less frequent intervals. For collecting remittance data more detailed timely reporting is of course preferable. However collecting data on remittances is not the primary purpose of ITRS systems and the systems often cannot be altered to fit the needs of remittance data compilers.

44. Where they exist, ITRS can be an important source of data on remittances sent through formal channels including licensed MTOs whose international transactions are often conducted through the banking system. Because the ITRS system is already in place and legally enforced this method of data collection usually is highly cost-effective and accurate. IRTS data are also comprehensive in that they cover all categories of remittances sent through formal channels including social benefits and transfers to NPISHs.

45. ITRS however often cannot provide the level of detail required by compilers. In systems with reporting thresholds a significant portion of the data on remittance flows may not be collected. Within the data that are captured it may be impossible to distinguish remittances from other small transactions or to distinguish among the different categories of remittances especially in systems that allow for the aggregation of transactions. Because ITRS only captures those transactions actually settled through the financial system the data will not reflect the gross flow of remittances if institutions net their transactions prior to settlement. In addition in nations that are international banking centers ITRS may over-report remittances to the extent that these transactions transit through the nation’s financial system. Finally by nature ITRS does not capture informal or in-kind transfers both of which are substantial in many nations.

46. Another method of data collection is a direct survey of MTOs.10 This method is similar to ITRS in that the data are reported by a financial intermediary rather than by the sender or recipient. Unlike ITRS the direct survey method gives compilers control over the level of detail collected allowing them to overcome some of the problems encountered when using ITRS. Specifically compilers can request that MTOs report gross rather than net transactions and can set thresholds low enough to capture the majority of remittance

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9 The Latin American Center for Monetary Studies has also issued a guide, Best Practices for the Compilation of International Remittances, 2006. This guide is primarily intended for Latin American countries, but a number of its recommendations can be applied more broadly.

10 The Guide notes that this method can also be applied to other remittance intermediaries, such as banks and hawala operations.
transactions. In nations where MTOs are required to collect information on the purpose of transactions compilers may be able to collect data on remittances separately from other small transactions. Compilers may also be able to collect information on the cost number and frequency of transfers which is useful in understanding the nature and impact of remittances. If MTOs are the dominant transfer vehicle a direct survey may allow compilers to collect the majority of transfer data in an accurate timely and cost-effective manner. The case study “Cross-Border Remittances Statistics in Russia” presents data on personal transfers to and from Russia collected via a survey of MTOs.

47. Despite these advantages data collected from MTOs are unlikely to capture the full range of remittance-type transactions. MTOs are primarily a vehicle for personal transfers and cannot serve as a source of data on the other components of remittances. Short-term workers may remit some of their compensation through MTOs prior to their return home; however these transfers are considered part of compensation of employees and it is unlikely that MTOs will be able to distinguish between transfers made by short- and long-term migrants. A survey of MTOs will not capture informal and in-kind transfers. Finally where information on the purpose of the transfer is not collected MTOs will be unable to distinguish personal transfers from other small financial transactions. To overcome this final complication compilers may conduct periodic sample surveys of MTO users to determine what per centage of transactions are transfers.

48. Moving from surveys of financial intermediaries to surveys of senders and recipients leads to the method that may have the potential to produce the most comprehensive and detailed remittance statistics—a household survey. Focused on the units whose support is at the heart of the remittances concept a well-designed household survey can collect data on all transfer channels and all remittance categories although some categories can only be collected from recipients. Household surveys can collect receipts and payments of personal transfers net compensation of employees (provided the worker or some member of his or her household is present in the economy when the survey is conducted) and transfers to NPISHs. However information on social benefits is only available from recipient households and surveys of households will not cover institutional payments to NPISHs. Household surveys can also collect supplemental data on the demographic profiles of senders and recipients and on the use and impact of remittances. The case study “Labour migration survey in Ukraine ” presents data on remittance flows and the demographic profile of remitters collected on a household survey conducted by Ukraine.

49. There are however significant difficulties in implementing household surveys. One of the most important is cost which increases with the sample size. In most countries migration is a relatively rare event necessitating a large sample size to ensure that the survey captures a representative group. One way of mitigating this cost is to build a focused sample frame by including a test question on an existing survey to identify households engaged in remitting. Another is to limit the scope of the survey to only those aspects of remittances that cannot be collected via other methods.

50. Household surveys are also particularly vulnerable to reporter error. Such errors may be unintentional resulting from a lapse in memory or misunderstanding of the survey

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11 National regulations, particularly those focused on anti-money-laundering and combating the financing of terrorism, often determine what information MTOs are required to collect from their customers.

12 Another option is to assume that all transactions below a certain dollar amount are personal transfers, although this usually can be expected to overstate remittances.

13 Transfers from domestic NPISHs to foreign NPISHs or foreign households may be collected on a survey of NPISHs.
questions. Carefully constructed survey questions that clearly explain the types of transactions and time period for which data are being collected can diminish these errors although additional questions will also increase costs. Reporter errors may also be intentional especially when the questions concern finances. Remittance senders may overstate the amount of transfers sent in an attempt to make themselves appear more generous while recipients may understate their receipts to prevent additional taxation or for security reasons.

51. Other disadvantages of household surveys include the lack of timeliness and difficulties in surveying unauthorized transitory or seasonal populations. The difficulty in surveying the migrant population may make household surveys a less useful tool in migrant-receiving countries than in migrant-sending countries.

52. The final method of compilation the model-based approach moves away from collecting data on actual transfers and instead uses information on other economic and demographic factors to estimate remittance flows. Models offer a cost-effective way to compile comprehensive statistics particularly in nations where remittances flow through many channels. Although they are most commonly used to compile statistics on personal transfers models can also be designed to cover other remittance categories.

53. There are two main modeling approaches econometric and demographic. Econometric models construct a mathematical relationship between remittance flows and various explanatory variables such as GDP per capita income the exchange rate interest rate and size of the migrant population. Demographic models take demographic data collected in censuses or other surveys and apply either an average amount remitted or a percentage of income remitted to the relevant population. For implementation both types of models require some information about the size and characteristics of remittance transfers; however this information can come from a one-time or infrequent survey partner country data or academic studies greatly reducing the burden of data collection. The case study “Estimates of Remittances in the Czech Republic” outlines the demographic model used by the Czech Republic to estimate remittances and the case study “Bulgarian experience in developing estimates for remittances” details the model used by Bulgaria to estimate compensation of employees.

54. As with the other methods there are weaknesses in the model-based approach. Because models are built around the assumption of fixed relationships among variables they are especially vulnerable to changes in patterns of remitting behavior. Models are also highly reliant on good source data. This is a particular concern for demographic models in nations where there is a large unauthorized population for which it may be difficult to obtain accurate data. Finally because the resulting estimates are not based on actual flows model outputs are difficult to verify.

55. In addition to these four compilation methods remittance-related data especially for the broader components may also be available from other sources. Government agencies managing visa and social security programs often have administrative data on visa holders employers or social security payments abroad that compilers can use to construct compensation and social benefit estimates. Data on social benefit payments may also be available from public financial or tax filings of firms or pension companies. In some nations private firms or non-profit organizations conduct research into migrant populations private giving or other aspects of remittances the results of which may be available to compilers.

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14 A third method, the residual model, assumes that remittances account for the majority of imbalances in financial flows.
56. Nations may also be able to set up data exchanges with major remitting partners to collect data they are not able to collect themselves. The adoption of BPM6 guidelines should increase the opportunities in this area by providing a set structure for organizing and publishing remittance estimates allowing nations to check their remittance figures against those of their major partners. A supply and use framework may be useful in making these comparisons and testing the assumptions made in estimating remittances and related national accounts.

57. To determine which method or combination of methods is most appropriate for a nation data compilers must be knowledgeable about their remittance market including the prominent transfer channels and the characteristics of the involved population. In nations where significant amounts of remittances travel through informal channels a survey of MTOs will not provide a complete measure of personal transfers. Nations with a substantial unauthorized population will have difficulty using household surveys. To a large extent knowing the market determines the collection method. Mexico for example combines direct reporting from MTOs and financial institutions with estimates of hand-carried transfers based on a monthly survey of international travelers. This method captures data on the two major transaction channels for transfers to Mexico.15

58. Different methods are also often needed to collect data on different remittance categories. Although some nations may be able to collect the majority of personal transfers data from MTOs other methods will need to be employed to collect data on compensation of employees. As an example the United States uses demographic models to calculate personal transfers and compensation of employees administrative data from the United States government for social benefit payments and a survey of non-profit organizations supplemented with data collected by the United States government and a private organization to calculate payments by NPISHs.16 The use of different methods is further illustrated in the country case studies where the method for estimating compensation of employees differs from the method for estimating personal transfers.

59. Regardless of the methods employed compilers need to stay abreast of new developments in the transfer market. Financial and technological innovations are continually expanding the transfer options available to remitters. Mobile banking—and with it mobile transfers—is increasingly popular in many countries as are linked bank accounts debit cards and Internet-based transfers. Current compilation methods may fail to capture transfers sent through these new channels. Changes in the demographic profile of the remitting population such as age origin and legal status may also affect the ability of a collection method to produce accurate estimates as can changes in national financial regulations.

VI. Ongoing Activities and Recommendations for Future Work

60. Work on improving remittance data is on-going at the international level. At the June 2008 Summit at Hokkaido Tokyo the G8 announced the creation of a Global Remittances Working Group (GRWG) coordinated by the World Bank to further international work on remittances issues. The GRWG is divided into four thematic areas the


16 In August 2008, the United States Census Bureau conducted a survey of remitting behavior as a one-time module attached the monthly Current Population Survey. The Bureau of Economic Analysis will explore the potential for the results of this survey to be used to refine the demographic model that it uses to estimate personal transfers.
first of which is “Data.” In June 2009 an International Technical Meeting on Measuring Remittances was held in Washington D.C. to further refine the work program for the “Data” area. Participants proposed creating a new technical working group focused on improving remittance data that would meet annually to oversee and promote global and regional efforts to improve data including the provision of technical assistance and the exchange of metadata and bilateral data. Participants also proposed creating a website that would serve as a global repository for detailed metadata bilateral data and the results of ongoing research. The GRWG is also constructing a matrix of remittance activities conducted at the World Bank with plans to expand the matrix to other international institutions.

61. Despite their potential power until recently only limited work was done to develop household surveys as a tool for collecting remittance data. In an effort to address this knowledge gap in January 2008 the United Nations Economic Commission for Europe (UNECE), World Bank and United States Census Bureau sponsored an Expert Group Meeting on the Contribution of Household Surveys to Measuring Remittances. Meeting participants have since formed the Suitland Working Group operating under the Conference of European Statisticians’ Work Plan on Improved International Migration Statistics to further examine these issues as well as the broader topic of using household surveys to measure migration. At a conference in March 2009 the Suitland Working Group further refined its work plan. Areas of focus include creating a draft module on migration and remittances to be included in nationally representative household surveys linking administrative data with survey data addressing data quality issues and developing an online repository of household survey questionnaires.

62. At the regional level the UNECE can support these on-going efforts by providing technical assistance for improved data collection and the conversion to BPM6 definitions. Several regional institutions including the Center for Latin American Monetary Studies, the IMF Middle East Technical Assistance Center and the Statistical Office of the European Union (EUROSTAT) have conducted programs to improve remittance data collection in member countries. UNECE member nations that have difficulty adjusting to the new BPM6 definitions or that do not currently have adequate data collection methodologies may benefit from UNECE-provided assistance to refine or develop collection methods.

63. Bilateral data sharing is another area where a regional UNECE initiative may be effective. Because migration is often a regional phenomenon the sharing of data within a regional group can highlight asymmetries between major partner countries which the nations can then examine within the context of the larger region. The development of a centralized remittance database either publicly available or restricted may facilitate data sharing and the development of a supply and use framework may facilitate the analysis of the data.

64. Finally as mentioned above continual research is needed into emerging transfer methods and changes in the demographic profile of the remitting population. Research should be conducted at the national and regional levels to capture both country-specific developments and regional changes.

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17 The other areas are “Interconnections with migration, development, and policy,” “Payment and market infrastructure,” and “Remittance-linked financial products and access to finance.”

18 For additional information, see the conference website at http://www.unece.org/stats/documents/2009.03.migration.htm.