



# Remittances Statistics: **First Meeting of the Luxembourg Group**

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# **Remittances Compilation Methodology in Brazil**

**Luxembourg Group on Remittances**

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## A. Introduction

This paper aims at describing remittances data collection and compilation practices in Brazil and evaluating how they adapt to the most recently discussed methodology. Greater attention is devoted to inflows of workers' remittances, given its relevance compared to other forms of remittances to Brazil. Nonetheless, other remittances flows are described, namely compensation of employees, migrants' transfers and other current remittances. Additionally migrants' deposits in domestic bank accounts are analyzed. This is an issue that, although usually not linked to remittances, deserves debate given its unique characteristics and similarities to workers' remittances.

<b>Remittances</b>					
	USD million				
	2001	2002	2003	2004	2005
Compensation of employees	95	102	109	181	214
Credit	270	293	269	354	325
Debit	- 175	- 191	- 160	- 173	- 111
Workers' remittances	1 009	1 573	1 882	2 292	2 217
Credit	1 178	1 711	2 018	2 459	2 480
Debit	- 169	- 138	- 136	- 167	- 263
Other remittances	620	818	1 005	982	1 399
Credit	682	859	1 066	1 039	1 490
Debit	- 62	- 41	- 61	- 57	- 91
Migrants' transfers	- 38	414	497	338	611
Credit	326	445	535	763	735
Debit	- 364	- 31	- 37	- 425	- 124

## B. Compilation and Publication

Remittances data of Brazil, as well as all balance of payments data, are collected and compiled by Banco Central do Brasil, through its Balance of Payments Division of the Department of Economics. Data are:

- ✓ Compiled following BPM5
- ✓ Collected and published on a monthly basis
- ✓ Published no later than 4 weeks after the reference period
- ✓ Published in millions of US dollars.

### B.1 - The Brazilian Data Collection System

The Brazilian data collection system is mostly based on an open ITRS system that comprises a closed exchange settlement system, insofar as it reconciles exchange transactions in the country with resident banks' deposits abroad. Data are collected directly from exchange contracts, which are filled out following legally mandatory guidelines as to how transactions must be classified. Coverage is largely

comprehensive, since use of foreign currency is illegal and, in practice, insignificant in Brazil. Additionally, there is no threshold for data collection, since all exchange operations must be registered.

Remittances covered by the ITRS system includes all remittance channeled through:

- ✓ Banks
- ✓ Remittance companies
- ✓ Credit Unions
- ✓ Credit Cards
- ✓ Postal Remittances

Given the comprehensiveness described, remittances inflows through informal channels are residual.

Exchange contracts are generated online by the BCB Information System (SISBACEN) after all required data have been input and electronically verified<sup>1</sup>. Banks are legally responsible for the trustworthiness of all information provided on the contract, as well as for retaining all documents relevant to the transaction for a determined period of time.

Data are included in the form of predetermined set of codes, among which:

- ✓ Economic nature of the transaction (one of which is migrants' transfers)<sup>2</sup>
- ✓ Economic nature of the resident counterpart<sup>3</sup>
- ✓ Economic nature of the non-resident counterpart
- ✓ Country of origin of the inflows
- ✓ Currency of the transaction
- ✓ Identification of the non-resident counterpart to the transaction
- ✓ Identification - including the national identification code and all other relevant information – of the resident counterpart<sup>4</sup>

Apart from ITRS data, the balance of payments also includes data from other sources, such as the Ministry of Finance (MF) and the Ministry of Development, Industry and Trade (MDIC), for data on imports and exports, including donations.

Data on settlements carried out abroad between residents and non-residents are not currently collected. Although estimates show that these settlements comprise a small share of overall transactions, it is acknowledged that this omission is a deviation from standard methodological procedures<sup>5</sup>. On these grounds, Banco Central do Brasil is developing procedures for collecting these data.

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<sup>1</sup> SISBACEN is directly linked to banks' systems and is accessed directly and on line by exchange operators.

<sup>2</sup> There are over 200 codes that allow for the detailed description of transactions.

<sup>3</sup> This allows for the sectoral classification according to BPM-5. Additionally, the national identification code of the resident counterpart allows for the industrial classification of the flow.

<sup>4</sup> The exchange regulations allow for flows of workers' remittances to be contracted (and registered) aggregately. In this sense, up to 50 different remittances can be registered in only one exchange contract, thus reducing operational costs for money transfer companies.

<sup>5</sup> This does not affect workers' remittances data.

## **B.2 - Workers' Remittances**

There has been much debate regarding the quality of workers' remittances inflows data in Brazil in the last few years. Estimates made by other institutions and analysts deviate, in some cases significantly, from those compiled and published by Banco Central do Brasil.

As pointed out in various studies, many are the reasons that may account for the underreporting of data, ranging from methodological issues to problems in data reporting and collection systems. Although underreporting may occur in the case of Brazilian official data, if so it is nonetheless much less significant than usually suggested, since many estimates fail to take into account the specific characteristics of the Brazilian financial system and legislation, its efficiency and solidness, as well as demographic aspects that differentiate the Brazilian migrants from those of most other South American and mainly Central American countries.

### **B.2.1 - ITRS and Compilation of Workers' Remittances**

The compilation of workers' remittances is entirely based on ITRS data. Complete exchange contracts details are accessible to authorized BCB personnel. Balance of payments compilers have complete access to all information, on an individual contract basis. All remittances senders and receivers are individually identified in the contracts. The ITRS system is especially highly comprehensive in the case of workers remittances. According to findings of Bendixen & Associates<sup>6</sup>, at least 90% of remittances are made through either banks (53%), international remittance companies (29%) and credit unions (8%), all of which channel their exchange operations through the formal exchange market. Even among the remaining 10%, courier and mail also operate in the same manner. Only a small portion, thus, would be channeled through the informal exchange market. It should be stressed that this is clearly evidenced through examination of the exchange contracts.

### **B.2.2 - Data Consistency Check**

The individual transactions database allows for highly detailed analysis of inflows of workers' remittances. Data can be analyzed, for example, on a country of origin basis and foreign counterparts data. Furthermore, it is possible to know the number and values of each contract and/or remittance.

Notwithstanding the comprehensiveness of the ITRS, additional data analyses are conducted in order to evaluate economic and statistical consistency of data.

The statistical analyses comprise the study of changes in the structure of remittances. The BOP Division seeks to determine if there are significant changes in certain characteristics of remittances, such as average value of remittances, number of high value remittances and changes in country of origin of remittances<sup>7</sup>.

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<sup>6</sup> "Public Opinion Study of Remittances Recipients in Brazil", Bendixen and Associates, April-May 2004.

<sup>7</sup> The analyses of country of origin recently showed a sharp and simultaneous shift in remittances from Japan and the US. Through the analyses of individual company data it was easy to conclude that some companies started channeling their remittances from Japan through the United States, possibly a consequence of a clearing scheme.

Data from 2001 to 2005 show very small changes in monthly per capita remittance inflows. This figure is calculated by dividing the whole amount of contracts in the year by the total number of recipients, divided by 12. Data show an average monthly remittance of US\$241, in 2005, and a maximum of US\$ 262 in 2004, with a standard deviation of US\$7.55. This pattern remained stable notwithstanding an average 23% annual growth in overall remittances in the period.

<b>Workers' remittances patterns data</b>					
	2001	2002	2003	2004	2005
<b>Inflows</b>					
Recipients	353 964	502 538	596 816	704 237	853 456
Contracts	276 829	335 353	416 342	455 212	603 322
USD	1 064 478 952	1 519 737 752	1 796 159 522	2 217 526 348	2 469 422 682
Average monthly remittances USD	251	252	251	262	241
<b>Outflows</b>					
Remitters	27 047	23 263	21 139	27 785	48 636
Contracts	56 018	47 601	44 109	55 781	78 032
USD	169 185 550	137 356 682	135 299 198	163 044 597	255 805 521
Average monthly remittances USD	521	492	533	489	438

Data also show that from 2001 to 2005 the number of people receiving remittances increased 141.1%, to over 853 thousand. Total remittances grew in a similar proportion, 132%, reaching close to US\$2.5 billion. This significant increase is yet to be determined, given that the number of Brazilian residents abroad did not increase in the same proportion. One possible explanation is a very strong income elasticity of remittances, which would mean that remittances respond very strongly to changes in disposable income of migrants, which in turn is highly correlated to the level of economic activity in the countries where they reside.

For the evaluation of economic consistency, remittances flows are analyzed vis-à-vis exchange rates, economic activity in both recipient and remitting countries, migration, costs of remittances and structural or regulatory changes in the financial system.

Data are also cross-checked with monetary data in order to determine if changes in monetary base due to operations of the foreign sector are consistent with exchange data. The table below shows the factors that affect the monetary base. Monetary base expansions and contractions occur due to a series of factors, not all of which individually identified. ITRS transactions are reflected under External Sector Operations. The data refers to transactions channeled through the formal market.

<b>Factors affecting the monetary base</b>									
<b>Flows accumulated in the month and daily flows in the current month</b>									
R\$ million									
Period	National Treasury <sup>1/</sup>	Operations with federal securities	External sector operations	Bacen's rediscount operations	Deposits of financial institutions <sup>2/</sup>	Derivatives operations - adjustments	Other accounts <sup>3/</sup>	Monetary base change	
2004 Dec	-2 789	12 184	7 186	- 1	-1 578	- 1 582	215	13 635	
2005 Jan	2 988	- 14 841	6 876	22	388	- 717	22	-5 261	
Feb	-6 815	- 7 080	9 576	- 24	312	- 518	194	-4 355	
Mar	-7 317	- 4 458	10 569	- 0	324	164	- 121	- 839	
Apr	-10 969	10 712	- 7	- 0	- 106	- 187	74	- 484	
May	-4 914	4 852	- 1	- 0	1 691	- 237	549	1 939	
Jun	- 916	- 298	- 3	- 0	- 10	- 46	36	-1 237	
Jul	1 696	879	- 18	- 0	- 429	- 9	- 329	1 789	
Aug	-2 145	336	12	- 0	1 148	- 33	219	- 464	
Sep	238	573	- 12	- 0	- 64	- 312	- 137	286	
Oct	-5 559	- 3 085	7 593	- 0	967	- 145	11	- 219	
Nov	-7 775	5 275	8 550	- 0	82	- 472	- 31	5 628	
Dec	-1 520	9 945	9 261	- 0	-1 928	- 172	145	15 732	
2006 Jan	9 868	- 26 578	5 541	- 0	755	1 773	236	-8 404	
Feb	-8 267	3 478	5 156	- 0	62	1 349	7	1 784	
Mar	-9 465	- 3 157	6 567	35	688	- 615	55	-5 892	
Apr	-7 839	1 412	4 714	- 35	- 1	1 959	- 33	177	

1/ Securities operations not included.

2/ Includes reserve requirements on bails, deposits earmarked to the SBPE, deposits on insufficient investments on rural credit, Proagro's deposits, financial institution deposits – Resolution 2,461, time deposits, payments on Advances on Exchange Contract (ACC), additional requirements and deposit in advance for check clearing and payments of demand deposits not invested on microfinance.

3/ Includes credits receivable of the Department of Bank Liquidation, Monetary Reserve investments, Mecir expenditures and office supplies, payroll, deposits for capital payment and increase, penalties and costs on insufficient banking reserves and other accounts.

Given that foreign currency is not used domestically in Brazil, unlike in other countries, even informal remittances must necessarily be, at a given time, exchanged for domestic currency. If exchanges occurred, there would be a significant increase in undetermined factors affecting the monetary base, and the item Other Accounts would show a significant value.

Additionally, the BOP Division compares outflow remittances data from other countries, whenever available, to evaluate how they compare to those we compile.

### B.3 - Migrants' Transfers

Given that it has been discussed that migrants' transfers should be excluded from the framework, we understand that in the case of Brazil a significant share of these transfers may have to be reclassified due to their specific nature.

Most migrants' transfers to Brazil refer to inflows of resources brought to the country by Brazilians returning home after a certain period residing in Japan. These migrants, the *dekassegis* (migrants of Japanese descent), usually migrate to Japan with the purpose of saving money for making investments in Brazil when they return. Their savings are generally kept in bank accounts in Japanese banks, usually branches of

Brazilian banks, and are transferred when they return. Although in a strict sense these transfers are migrants transfers, they are transfers that differ from workers remittances only in form, and not in nature.

#### **B.4 - Compensation of Employees**

Compensation of employees and migrants' transfers are collected through the ITRS. Although exchange legislation determine that transfers not be netted, this is not an unusual practice in cases of remittances of small values and those made by persons. It is thus likely that transfers are made already net of expenditures such as tax and travel.

#### **B.5 - Migrants' Deposits in Domestic Bank Accounts**

Recent developments in the Brazilian financial system have made it possible for migrants (abroad) to have accounts in domestic banks in which they can make deposits from abroad. These deposits closely resemble workers' remittances. Although no transfers are made directly to related persons, resources end up being used in the same fashion as they would if they were remitted as workers' remittances, the only difference being that instead of keeping the resources with a relative in Brazil, they keep it in an account of their own. These resources in general tend to be transferred to accounts of relatives in the country or used in domestic investments by migrants when they return to Brazil.

These deposits are currently classified under other investments/liabilities. A method to single out deposits of this specific nature and separate them from others has yet to be developed

#### **B.6 - Other remittances**

Data for other remittances are collected from ITRS and from the MF and the MDIC. These remittances are compiled according to BPM5 and include basically transfers in cash or in kind to households.

### **C. Future Improvements**

Notwithstanding its comprehensiveness, the remittances data collection system presents a few shortcomings which require future improvements.

It is acknowledged that bilateral data is not of good quality. No improvements can be made directly to the ITRS for this purpose, since it only registers the country from where resources are remitted. Therefore, data of other nature would have to be used to complement the ITRS. Data that would likely be most suitable are demographic data on Brazilian residents abroad, which could be used as a parameter for allocation of overall remittances by country.

Another shortcoming is that although data are available in a very detailed manner, individual data analysis is a very time-consuming task, especially given the number of transactions, as can be seen on the table "Workers' remittances patterns data". To make data useful, data analysis procedures and parameters must be adopted, in order to detect outliers and unusual patterns.

The issue of income elasticity of remittances requires more study. Factors such as economic activity, although fundamental, are insufficient to explain why, if so,



remittances shift so sharply under certain economic conditions. Detailed analysis of migrants' labour markets may very likely help shed some light on this issue. Migrants' transfers and migrants' deposits in domestic bank accounts are issues that require further debate. Granted that they are similar in purpose and in nature to other personal remittances, and that from the economic standpoint these forms of remittances have all the characteristics of transfers of income, it does not seem reasonable to classify them otherwise.