Measuring remittances with the ITRS

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ITRS Definition

An ITRS is a data collection system that obtains data from banks and enterprises on the level of individual transactions. It should measure:

- individual BoP cash transactions channeled through domestic banks and domestic enterprises' accounts with banks abroad
- non-cash transactions
- stock positions

ITRS Definition

There are two general types of ITRS:

- Fully comprehensive, closed system
- Open system

In practice, ITRS fall somewhere in between these two extremes.

Closed ITRS

A closed ITRS collects data on all resident-to-nonresident transactions and reconciles them with corresponding changes in other transactions (e.g. trade balance) and external asset/liability positions (e.g. resident banks' foreign currency positions and residents' foreign currency holdings)

Open ITRS

An open ITRS does not directly reconcile transactions and external asset and liability positions. Flows (transactions) are not direct and automatic counterparts to changes in stock positions. The open ITRS is usually partial, insofar that it does not register all transactions and thus does not match flows and stocks.

The use of complementary data sources is necessary.

Background

Most ITRS stem from foreign exchange controls and their enforcement systems, in which banks and other entities with licenses to hold foreign assets or transact in foreign currencies report, on a compulsory basis, transactions made for their customers' or on their own behalf.

Comprehensiveness

An exchange-based ITRS typically covers transactions reported by participating institutions, such as

- Commercial banks, including payments channeled through the banking system, such as MTO operations
- Other licensed foreign exchange transactors.

Omissions

Remittances that will usually not be captured by the ITRS are those using traditional informal systems such as:

- Hawala
- Remittances in kind
- Cash transported by individuals or couriers
- Cell phone or retail value cards

Preconditions for efficiency

Among the most relevant preconditions for the efficiency of the ITRS as a remittances data source are:

- Legal framework
- Adequate and compulsory reporting requirements
- Outreach of the banking system and degree of formality of the payments settlement system

Legal framework

The legal framework should ensure that transactions are channeled through licensed intermediaries and that those intermediaries report transactions data in an accurate and timely manner. This framework should also support surveillance of reporting procedures.

Compulsory requirements

The compulsory reporting requirements should be tailored to the needs of the remittances data compiling unit. Efficient methods should be applied to reporting procedures, ideally in electronic form, and according to predetermined structures, with the use of codes.

Outreach and formality of banking system

A significant outreach of the banking towards potential data recipients and the widespread use of formal payments settlement channels are necessary in order for the ITRS to be regarded as a comprehensive data source.

Advantages of the ITRS

Granted that the preconditions are satisfied, the ITRS presents significant advantages over other sources:

- Timeliness and periodicity
- Cost-effectiveness
- Accuracy

Timeliness and periodicity

Under the ITRS, reporting institutions are subject to requirements established, usually directly, by the remittances compiling institution. The use of electronic means for collecting information, commonly encountered, supports timely and frequent reporting.

Cost-effectiveness

In countries where balance of payments data is a by-product of current exchange controls or a derivation of former exchange systems, it is likely that the ITRS is a cost-effective source of remittances data.

Accuracy

A well structured, comprehensive ITRS tends to be very accurate in what it measures. Without reporting thresholds especially, it is very adequate for the compilation of transactions of small amounts such as personal transfers.

Shortcomings

There are also possible disadvantages that the compiler should be aware of:

- Omissions
- Misclassification
- Thresholds
- Netting

Omissions

The ITRS may present significant omissions in personal transfers in countries in which household-to-household transactions are conducted primarily through informal channels. In this case, in which neither stock position changes nor flows are reported, the ITRS cannot overcome the omissions.

Misclassification

Misclassification occurs due mostly to small transactions being classified as transfer, although they may be payments for goods or services or constitute investments in the form of deposits. Transfers by means of MTO are, as a general rule, classified as remittances, which is not necessarily so.

Thresholds

The existence of simplification or exemption reporting thresholds may imply a significant loss of information, given that remittances are usually made in small amounts.

Netting

The settlement of net amounts may impair data quality. The problem is greater in countries in which there are both significant inflows and outflows, which is not the case for most countries.

The Brazilian ITRS

Background

The Brazilian ITRS stems from a system designed for the control of foreign currency flows under a specific legal framework. Nevertheless, this purpose has strongly shifted towards data compilation, supported by changes in both the legal framework and institutional structures.

ITRS Characteristics

The Brazilian ITRS, considering only the compilation of the remittances, is a closed system insofar as it reconciles foreign exchange operations with resident banks' deposits abroad and trade data. Data are collected directly from exchange contracts.

ITRS Exchange Data

Regarding exchange data:

- Exchange contracts are mandatory (foreign currency is not used domestically)
- All individual contract data are registered by banks on the BCB system (SISBACEN), which then generates the contracts
- ITRS data are available on an individual and daily basis to BoP compilers

ITRS Exchange Data

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

- Economic nature of the transaction
- Economic nature of the resident counterpart
- Economic nature of the non-resident counterpart
- Country of origin/destination of flows
- Identification of the resident counterpart
- Identification of the non-resident counterpart

ITRS Coverage

The ITRS covers all remittances channeled through :

- Banks
- MTOs
- Credit cards
- Postal remittances

Data Consistency Check

Different procedures are used to check for consistency of remittances data:

- Through cross-checking with monetary data
- Through the analysis of patterns of remittances
- From an economic standpoint

Cross-checking with Monetary Base

ITRS data are 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 relative size of “Other Accounts” is an indicator of possible informal exchange operations.

Cross-checking with the Monetary Base

Factors affecting the monetary base

R$ million

Period	National Treasury	Operations with federal securities	External sector operations	BCB's rediscount operations	Deposits of financial institutions	Derivatives operations	Other accounts	Monetary base change
2004 Dec	-2 789	12 184	7 186	-1	-1 578	-1 582	215	13 635
2005 Dec	-1 520	9 945	9 261	0	-1 928	-172	145	15 732
2006 Dec	-2 159	13 309	5 569	0	-1 646	499	195	15 767
2007 Jul	-1 284	-12 009	13 106	37	-878	1 144	92	208

Cross-checking with the Monetary Base

Given that foreign currency is neither accepted as legal nor informal tender, remittances received must be exchanged for Reais. If significant informal exchanges occurred, there would be a significant increase in undetermined factors affecting the monetary base, and the item Other Accounts would present a significant value.

Cross-checking with the Monetary Base

This consistency check is valid for remittances inflows to Brazil because they are made from countries with hard currencies. It is not valid for outflows, since the Real is accepted in neighboring countries. Inflows from neighboring countries, in Reais and other currencies, are insignificant.

Analysis of Patterns

Analysis of patterns of remittances show that from 2001 to 2005:

- The number of remittances increased 141%, to over 853 thousand
- Remittances increased 132%, reaching almost US$2.5 billion
- A minimum average monthly remittance of US$241, in 2005 , and a maximum of US$ 262 in 2004, with a standard deviation of US$7.55

Analysis of Patterns

Workers' remittances patterns data

	2002	2003	2004	2005	2006
Inflows					
USD (millions)	1 520	1 796	2 218	2 469	2898
Contracts (thousand)	335	416	455	603	613
Average monthly remittances per contract	378	360	406	341	394
Outflows					
USD (millions)	137	135	163	256	301
Contracts (thousand)	48	44	56	78	87
Average monthly remittances per contract	240	256	244	273	290

Economic evaluation

Exchange rates, economic activity of remitting countries and domestic economic activity are among the aspects considered for the evaluation of economic consistency of remittances.

Shortcomings and challenges

Bilateral classifications

Bilateral classification of remittances inflows made by means of MTOs are based on the immediate sending country. Therefore, channeling through major financial centers impairs bilateral data quality. The use of demographic and partner country data may be a viable solution.

Measuring outflows

Remittances outflows are estimated to be small in overall value, but the relative size of omitted data may be significant. Regional demographic and economic characteristics suggest that immigration tends to increase in the next years, as do remittances through channels currently not measurable under the ITRS.

Idiosyncrasies

Trends and patterns of remittances to Brazil are very unique in nature due to specific demographic, geographical, cultural and historical aspects of the country and its population. Therefore, it is necessary to study these idiosyncrasies in order to develop a model that efficiently describes these trends and patterns.

Compilation and Publication

Remittances are:

- Compiled by Banco Central do Brasil
- Compiled according to BPM5
- Collected and published on a monthly basis
- Published no later that 4 weeks after the reference period
- Published in millions of US dollars