

**The collection of International Trade-in-
Services data through sampling surveys:
the case of Spain**

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José A. Isanta

**Instituto Nacional de Estadística (INE-Spain). Services Statistics
Directorate (E-mail: jaisanta@ine.es)**

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1 Institutional set-up

- Under current legislation Banco de España (BE) is the institution responsible for compiling and disseminating BOP statistics in Spain.
- At present, to estimate the BOP item *Other Services* and most other BOP items, BE chiefly uses its International Transactions Reporting System (ITRS)
- In 2003, BE and INE agreed a project to collect basic ITS data using a system made up of various possible statistical sources, in which a sampling survey of resident enterprises and other legal entities was to play a fundamental role.
- The main goal was to replace the current ITRS system with a survey in order to estimate the BOP item *Other Services* more accurately in future.

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1 Institutional set-up

- The current legal framework governing the inter-institutional co-operation between INE and BE on the new survey is a gentlemen's agreement.
- The future figures will directly be estimated by the survey as basic statistical data on international trade in services and not as BOP data.
- Regarding the responsibilities for the new survey, INE has been directly responsible, in close co-operation with BE, for putting all the agreements related to the survey design into practice.
- BE has been responsible for sending to INE its business register with all the units reporting foreign receipts and payments on ITS transactions through its ITRS system, on a quarterly basis.

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1 Institutional set-up

- BE has been the main party responsible for the conceptual framework of the ITS concepts and definitions used in the survey. It has also supervised and advised INE in the preparation of the Methodological Manual of the survey.
- Both parties made a great joint effort to adapt the methodological aspects - standard ITS concepts and definitions under the International Manuals (BPM5 and MSITS) - to actual practice
- At the moment, INE and BE are working together to compare the micro and macro data obtained by both collection methods (ITRS/S and survey) in order to identify where the main differences are and why.
- When the new system (survey-only or mixed) is shown to be sound, it will replace the current model of foreign receipts and payments on ITS

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2 Survey based collection system

The aim of the project is to measure resident – non-resident international trade in services statistics, with exception of Travel and FATS.

Population : resident institutional units considered legal entities as enterprises (financial and non-financial corporations) and other organizations (general government, etc.), irrespective of principal economic activity

Geographic scope: All the statistical units of the population residing in Spanish territory

Frequency of reporting: Quarterly

Definitions included in the questionnaires

Resident units: Those units having their centre of economic interest in the economic territory of Spain

Foreign affiliates/branches located in Spain are considered as residents in Spain. However, commercial offices or representation desks located in Spain acting as trade intermediaries for non-resident enterprises are considered residents in the country where the headquarters (or enterprise they represent) is resident.

ITS transactions include exports (sales) and imports (purchases) of services, including transactions within the EU

Definitions included in the questionnaires

Exports refers to all services provided by resident companies to non-residents, whether directly or through subcontracted companies (whether resident or non-resident). The resident companies subcontracted by other residents to provide a service to a non-resident should not include this transaction as an export.

Imports refers to all services provided by non-resident companies to residents. Imports also include the services provided by non-residents when they subcontract the provision of services to other companies (whether resident or non-resident).

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Sampling Design

One of the most important drawbacks, as in many other countries, to plan a sample design for SITS was the lack of an administrative register including all the units trading in services at the international level to play the role of a single population frame to select a representative sample.

To prepare such a directory, the information on reporters of foreign receipts and payments to the BE (through the ITRS) was a good starting-point. First, it could make up a primary register to operate as population for the survey and, second, it permitted the analysis of the target population.

Thanks to this register, enterprises were characterized in two groups according to their continuity trading in services: stable and non-stable enterprises.

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Building and maintaining a business register (BR)

Three sources were used to build the BR: (1) Register of enterprises trading in services with non-residents (BE, monthly), (2) Large Enterprises' VAT Returns (Treasury, monthly), and (3) Central Business Register (INE-Spain, yearly).

These sources were re-arranged in such a way that (1) they were mutually independent, and a given enterprise will never appear in two or more frames, and (2) that the three frames cover the complete range of enterprises trading in services internationally.

It was known that source (1) had the highest probability of trading internationally, followed by source (2).

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Sampling method

A classical stratified random sampling procedure was used with equal probability of selection, selecting more of the sample in those strata with a higher number of enterprises trading in services with non-residents according to BE files. The final 2005 sample size was 10,304 units.

The stratification variables are: principal economic activity of the enterprise at the two-digit level of NACE Rev.1 (division) and enterprise size measured in number of employees (size intervals). It is important to mention that the geographical dimension has not so far been used when sampling.

Closer look at sub-samples

Sub-sample s1: The BE population contained a small number of enterprises (between 3000 and 4000) with the greater part of total yearly imports and exports of services and which traded in services with non-residents with continuity (during at least 4 consecutive years).

Sub-sample s2: The Treasury frame match with the BE frame to select Large enterprises trading in services, and not yet included in s1.

Sub-sample s3: The Central Business Register was also matched against BE frame; enterprises with NACE Rev.1 in sections A, B, L, P and Q, and enterprises with fewer than 10 employees were excluded since their influence on ITS transactions is not significant.

The pilot project

- In mid-2004, a monthly pilot project was launched to survey around 3000 firms, which were selected from Sub-sample s1.
- The pilot project mainly aimed at checking the suitability of the monthly questionnaire specially designed for the project, and the problems of the firms in practice in providing the required information before the fixed deadline: $m + 7$ days (seven days after the end of the reference month m).
- Despite the quantitative and concentration analysis taken by industry and size, the creation of a perfect sampling design was completely secondary at this first stage, since the 3000 units were selected only on the basis of the stability criterion

The pilot project – main conclusions

1. The respondents found many problems in fulfilling and returning the monthly questionnaire in m+7 days. Most did not have the information available by that deadline.
2. The Annex was very lengthy and demanded a lot of reading for matching the EBOPS item correctly. Some EBOPS concepts are difficult to understand and in most cases did not fit well with data stored in firm's databases.
3. For some respondents it was not possible to provide ITS data by geographical breakdown at level 3, countries.
4. Asking the respondents whether they have performed ITS transactions during the reference period was very tempting. Many firms ticked NO (to get rid of the survey) whereas some transactions for these units were recorded by BE files for that period.

The pilot project – some solutions

1. **Periodicity change**: After an ad hoc short inquiry among a number of respondents to determine the best periodicity, a quarterly questionnaire was agreed for the future.
2. **Two questionnaires**: a long (LQ) and a short questionnaire (SQ). The idea is that LQ collects stable respondents' quarterly transactions one by one at the maximum level of breakdown for EBOPS items and for countries. LQ is aimed at those firms with the highest trade figures in each EBOPS main item according to BE files. However, SQ is an abbreviated questionnaire requiring exports and imports of services only for the main EBOPS items.

The pilot project – some solutions

3. **Filter table for services**: In order to avoid the respondents' recording only on ITS transactions linked to their main economic activity or not taking enough time to read the Annex to identify all transactions, they are directly referred to the filter table [after indication that they traded in services during the reference quarter]. This table consists of a complete EBOPS item list where the respondents must tick the services traded (exports or imports) before recording the corresponding monetary values in other tables later. This table obliges the respondent to have a look at the full range of possible international services and identify those traded during the reference period, before providing any monetary value

The current situation and future plans

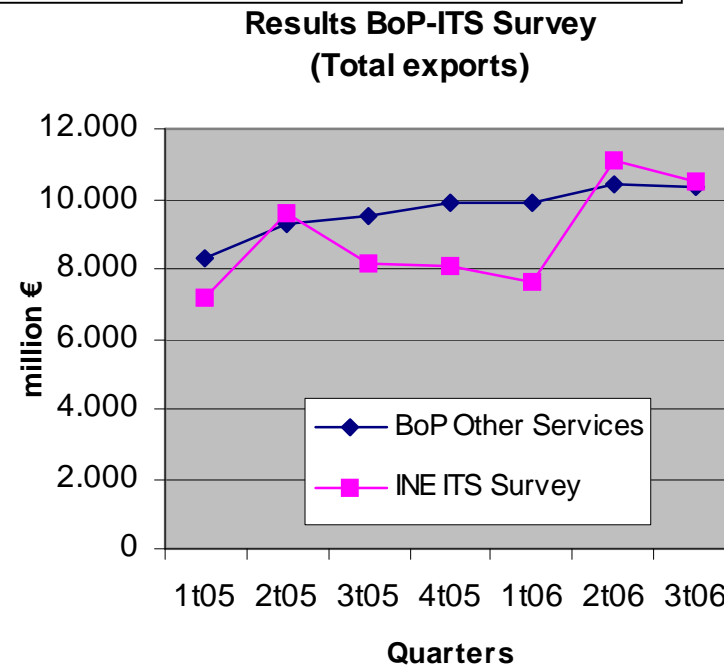
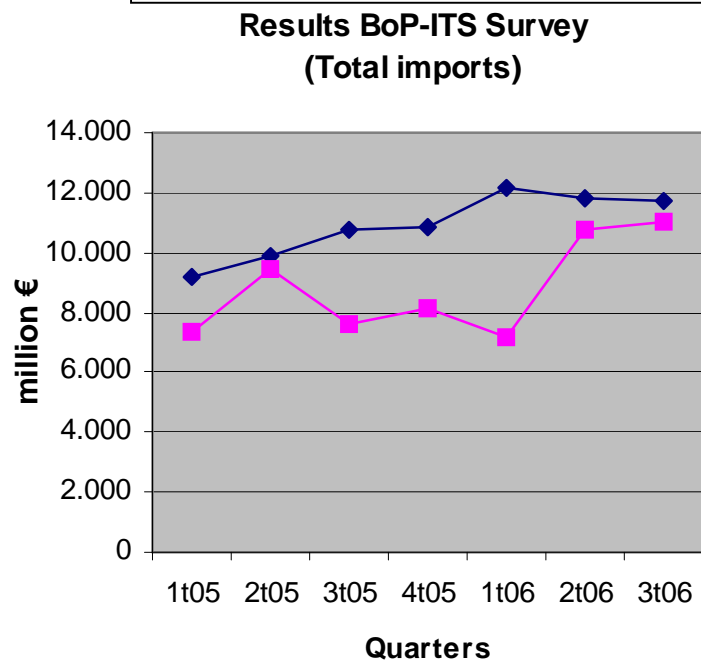
Quarterly results (1Q05-3Q06) are available from the new survey. BE and INE are working together to check the survey results against those obtained from ITRS, at macro and micro data level, with the aim of ensuring their “suitability” before being disseminated and added to the BOP *Other Services* estimate.

The graphs below depict the series BOP *Other services* obtained from ITRS and from the survey. The series are not totally homogeneous. The BOP series collects the figures finally published (ITRS reported data corrected by different ‘ex post’ adjustments), whereas the survey series shows data directly reported by respondents in questionnaires duly edited, imputed and grossed, but without any later adjustment.

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The current situation and future plans

Graph: Total imports and exports of Other services (BoP-ITRS/S vs. ITS-Survey)



The current situation and future plans

Some actions have been taken in 2006-2007

- a) improved criteria for validation checks and imputation;
- b) distribution by item and geographically of the results obtained from Survey Questionnaire (SQ) and integration of the figures from both questionnaires;
- c) change of SQ to collect the insurance items more accurately;
- d) for BOP purposes, estimate monthly results.

Ultimately, the survey is intended (1) to estimate the BOP item Other Services and (2) to provide more information regarding links of industry and product. The NACE code of the statistical units and the size of the unit (measured in number of employees) will enable us to tabulate services industry, product and size.

Thank you for your attention