Experience on multimode data collection in the NSI Spain: challenges and opportunities.

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Objective: Efficiency in the multimode data collection process
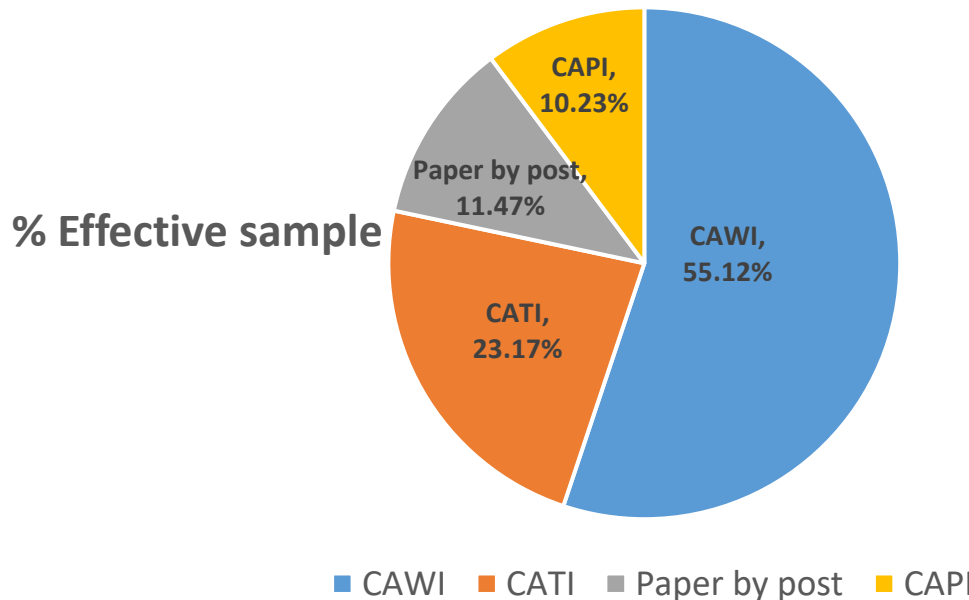
- Based on a real survey, deepening in some matters related to multimode data collection:

    - Efficiency

    - Information quality:
        - Questionnaire: Conceptual difficulty and completion time.

    - Remember:

        - Monitoring of the data collection process.

ECEPOV: Efficiency

Data referred to ECEPOV: Supplementary survey to the Census of Population. This census was exclusively based on administrative sources.

- Sporadic survey. Sample: 300.000 households.

- Don´t forget the quality

% Effective sample

CAPI, 10.23%

Paper by post, 11.47%

CAWI, 55.12%

CATI, 23.17%

Legend: ■ CAWI ■ CATI ■ Paper by post ■ CAPI

Global Response Rate: 56.36%

Keep deepening in multimode method

- Some key points for multimode data collection:

  - Availability of telephone numbers of respondents.

  - Data collection platform used.

- Some consideration on the use of multimode data collection in ECEPOV

  - Modes: CAWI, CATI, CAPI and Paper questionnaire by post.

- Lessons learned and next steps

Availability of telephone numbers of respondents

- What if telephone numbers are not available for the institution?
  - Different situations: Rotating panel vs One-time survey

- Situation of INE Spain:
  - Agreement: Telephone numbers were available for the sample units (near by 90% of sampled households).
    - Not available for all the units in the sampling frame.
    - Land lines and mobile phones.

  - E-mail addresses are not available for household surveys.

Data collection platform: IRIA

- The data collection plan is conditioned by the platform that will be used.

- NSI Spain has its own platform: **iria**

  - All collection modes are integrated in a flexible way.

  - Storing the information in centralised data bases.

    - When outsourcing the data collection, NSI Spain provides the platform, including communications.

    - Good practice: Staff in the data collection unit deeply knows the tool and can programme the questionnaire.

  - IRIA: One platform for economic and household surveys

ECEPOV: Strategy of data collection

% EFFECTIVE SAMPLE

- Experience in EU-SILC: CAWI, CATI and CAPI

16.21 CAPI
40.83 CAWI
42.96 CATI

■ CAWI ■ CATI ■ CAPI

- **ECEPOV: Strategy of data collection**
- 2 stages:
  - Office stage: CAWI, CATI, Paper questionnaire via post.
  - Face-to-face stage: CAPI

CAWI

CATI

Paper by post

CAPI
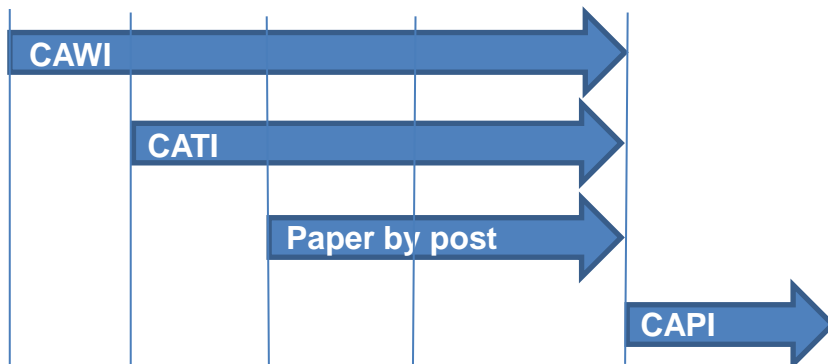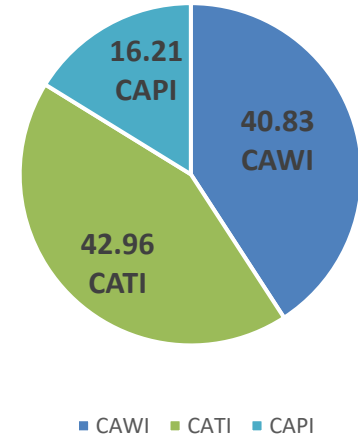
-Continuous process in which introducing a new mode doesn't suppose closing previous modes.

CAWI

- Good practice : Pushing the CAWI response via telephone.

Percentage of questionnaires collected by CAWI between tasks in the data collection process:

	Before calling	Pushing	CATI	Paper by post
CAWI	54%	21%	19%	6%

Good practice: Daily and **detailed** monitoring of the data collection with all the calendar stages and meetings for quick decision making.

CATI

- IRIA has its own algorithm for calling the respondents:

  - Data collection staff knew that algorithm and this allows to make the data collection more efficient by adjusting some parameters.

- Recording of the telephone calls: Chance for a quick and very efficient monitoring for taking measures related to quality.

  Total calls made: 889.818 calls (31% successful).

- Automatic dialing was not used without an interviewer available and ready.

Strategy for improving the protocol

- **Strategy**:
  a) Identify where most of the frequent problems appear and make minor changes in the questionnaire.
  b) Focus on re-contacting the 50% with a more advanced questionnaire completion.
  c) Questionnaire completion time:
     - CAWI: 1-person household: 34 minutes, 3-people: 58 m;
     - CATI: 1-person household: 27 m; 3-people: 41 m
  d) From the start, feedback from the unit in charge of the survey in order to back the decisions.

Accesses needed to complete a questionnaire

Acceses	CAWI %	CATI %
1	56,47%	69,89%
2	25,65%	20,31%
3	10,49%	6,26%
4 or more	7,39%	3,55%

Face-to-face stage: CAPI

- IRIA includes CAPI data collection.
- The interviewers used iPad-type tablets, lighter than the ones normally used in other surveys.
- A sub-sample of unit without response after stage 1 was selected based on:
  - Response rate in each territory.
  - Outcome of the contacts with the household (identify weak negatives).
- Monitoring of the interviewers: frequent charges and discharges of information to/from the tablet.
- This data collection mode was conditioned by the pandemic:
  - A new COVID wave arrived half-way the CAPI data collection process.

Lessons learned

- Don't forget to measure the **questionnaire completion times**, especially for one-time surveys.

- If using paper questionnaires by post, be more selective.

- Society has rapidly evolved and **CAWI** is better accepted than we expected.

- Don't forget to test the **communication systems**.

- Schedule and deadlines: basic for organising the work batches.

- Don't **underuse the flexibility** granted by the **platform**.

Next steps

- **Smartphones** should be made generally available as a usable devise in household surveys:
  - It should be part of IRIA or develop an app.

- Use of SMS for questionnaire **claiming**.

- **Paradata**: Used for strategic planning to more efficiently mix the different modes.

- Take advantage of the better connectivity in **CAPI** data collection:
  - Work directly connected to the centralised data bases.

- Introduce the recording of **CAPI** interviews, at least partially.

Thank you!!