# The use of multi-sources in the French LCS

Workshop on Labour Cost Data

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Grégoire Borey Insee













### The main data source: LCS

#### LC Survey:

- > Is collected over a period of two consecutive years
- ➤ Each year, data about 150,000 employees and 32,000 local units are collected
- Covers NACE B to S, O and P are partially excluded
- > Covers firms of 10 more employees
- ➤ Employers are asked to answer a local unit questionnaire, and employee questionnaires for selected employees (between 1 and 24)
- ➤ Employers are asked to respond to 60 to 520 questions about detailed elements necessary to construct labour cost and hours worked etc.
- ➤ LCS response takes 1h½ on average for local unit questionnaire and 10 min by employee questionnaire.



# Administrative sources ... improve time saving

- ➤ Collecting detailed elements of labour cost and worked hours forces to ask numerous questions and administrative data allows us to reduce firm questionnaires burden
- > DADS is a database that incorporate every annual declaration of social data that all companies with employees must carry out.
- ➤ This database is linked to SIRENE register which is a register of all compagnies and their establishments
- DADS contains for each local unit:
- the list of employees,
- and for each of them, the total remuneration paid and benefits, the hours paid, etc.
- > But not enough to match Eurostat request as DADS:
- do not cover employees of public sector (O and P)
- do not cover domestic services and extra territorial activities
- do not provide information on hours worked and on some specifis components of LC
- > So employers are « only » asked to respond to 40 questions in LC Survey local unit questionnaire and 20 for each employee selected.



# Administrative Source for Public Sector: SIASP

- > Administrative source specific to Civil Servants.
- ➤ SIASP is a statistical file, composed from diverse administrative sources. It allows us to know staff and payments of the agents of the civil service.
- ➤ Covers National Public Service agents in France except Mayotte (one of the French oversea departments) and military staff.
- Contains all the information needed except:
- ➤ Elements used to construct worked hours, and some specific information on expenditures and subsidies. (used in order to calculate D2 and D5 Eurostat variable)



#### Other sources

- ➤ NPS agent vocational training costs come from NPS administration and tax services.
- ➤ NPS agent subsidies come from National Accounts.
- ➤ Labour Force Survey information is used to compute hours worked by workers who have « requirement in days ».

### **Extend the scope... the NPS Survey**

- ➤ Both NPS Survey and SIASP are used to extend the scope to National Public Servant (except Military).
- ➤ NPS survey questionnaire is particularly suited to compute hours worked by teachers and professors.
- NPS survey occurred in 2011 and will be reconducted in 2015.
- ➤ In contrast with LCS, NPS survey interviews employees and not employers.
- > 33,000 employees are interviewed (web and paper questionnaire).

### Which sources for which scopes?

	Survey	Main administrative source	Others sources
Private Sector	LC	DADS	LFS
HPS			
LPS			
NPS	NPS Survey	SIASP	LFS, DGAFP, National Accounts

- In surveys we collect information on: hours worked, detailed components of labour cost
- In administrative sources we collect information on: hours paid, employee environment and employee characteristics
- In the other sources we collect : some specific data

# Administrative sources ... reduce sampling biases

- ➤ DADS and SIASP provide exhaustive sampling frames for the population of interest.
- > Stratified-sampling design (on administrative sources) is used in order to minimize hourly wage variance (proxy of Hourly Labor Cost).
- > DADS: main sampling frame
- > SIASP: NPS sampling frame

# Administrative sources ... validate survey information

- > DADS and SIASP are used for correcting/ calibrating the respondent sample.
- Final weights are calibrated to account for non-responses.
- DADS and SIASP are used to check and adjust data when information is available in both administrative data and surveys.
- > DADS and SIASP information are used in the worked hours calculation.

# Administrative sources ... refresh data

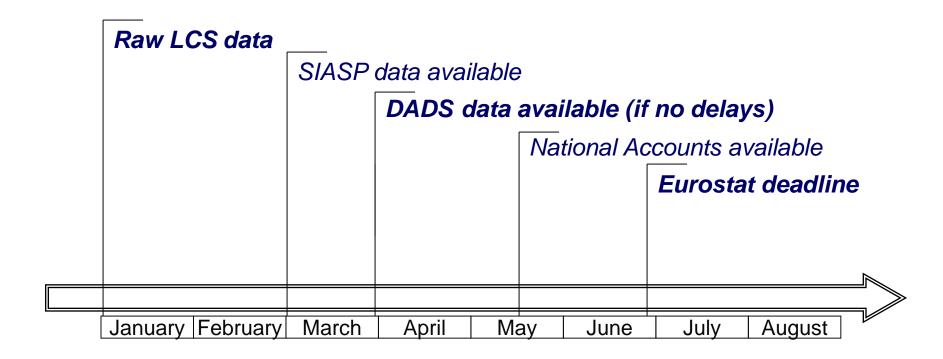
Administrative source data are used to update data from the first year of survey when we aggregate the two consecutive surveys, indeed survey workload is spread over two consecutives years.

> SIASP data are used to update NPS survey, because NPS survey occurs once per 4 years while we need information about NPS for SES and LCS.

#### **Limitations: time restriction**

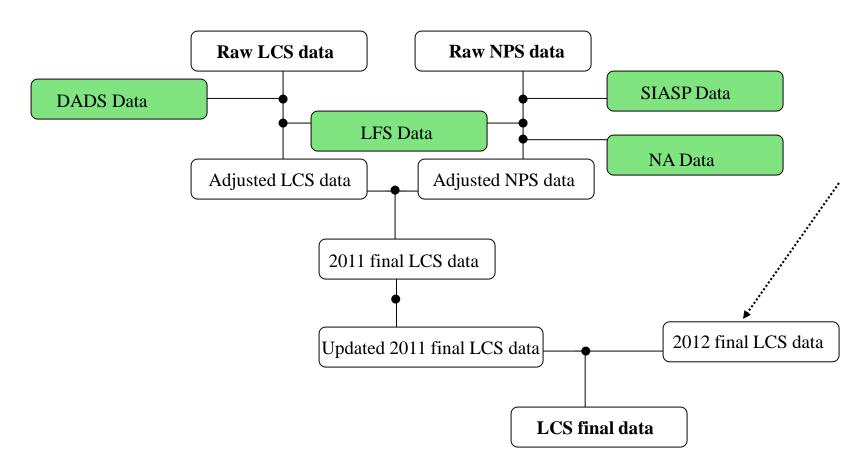
➤ Using multisources multiply time restrictions

Example: Chronological record for Eurostat response



### Limitations: add calculations steps

Using multisources allow us to check and adjust raw data ... but multiply calculation steps and so the workload, the time to respond (and potential sources of errors...).



## Limitations: May change over time

➤ Administrative data are first some management tools. They do not correspond to statistical concepts

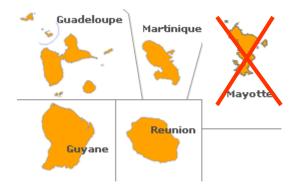


➤ And may evolve over time due to legislation changes for example ... whereas the statistical concepts do not entailing breaks in evolutions (ex: French Health insurance contribution)

➤ The whole management system may also change... The future of French administrative data: The DSN.

### Limitations: force us to adapt the scope

- Before 2012, NPS were out of the French LCS scope
- Due to gap in administrative data, ... military staff and Mayotte are still out of french LCS scope



And last but not least limitations: administrative source are supposed to be exhaustive but we cannot check it. Notably, when there is a computer bug or when local social security office forget to transfer some information to central administrative data center.

### The use of multi-sources in the French LCS

## Thank you for your attention!

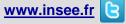
Contact

M. Grégoire Borey Tél.: 01 41 17 67 94

Courriel: gregoire.borey@insee.fr



18 bd Adolphe-Pinard 75675 Paris Cedex 14







09 72 72 4000 9h to 17h

