Longitudinal analysis in the French LFS data

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Overview

- Description of longitudinal weighting process in the French LFS
- Some statistics on transition between employment and unemployment in France
- From unemployment to employment : a study on the quality of jobs held by former unemployed



Background on the French LFS

- Quaterly survey of 60 000 usual residences ; 110 000 individuals aged 15 and more
- Rotative panel design : sampled dwellings (not households...) interviewed 6 consecutive quarters
- Waves 1, 6 : face to face / 2-5 : telephone
- No harmonised longitudinal weighting until now



Transversal weighting

- Simultaneous computation for non-response correction and sample calibration in metropolitan France
- Calibration performed wave by wave, based on :
 - external margins: population by region, sex and age
 - sampling base margins (tax register): mainly dwelling variables, some household variables
 - for individuals, a multiplier factor is applied to dwelling weights to account for partial non-response within a household
- Some differences in overseas departments
 - 2 stage computation : non-response model estimated then calibration
 - Department by department calibration



Why computing longitudinal weights ?

- Keeping individuals interviewed several times leads to restrict the sample to a « present-present » population
- At max, 5/6 of the transversal sample will remain for analysis
 → transversal weights are no longer correct
- Also we want this population to give similar results on key indicators : unemployment, etc.
- A simple multiplication on transversal weights is not enough : problems of attrition, moves, etc.
- New calibration needed



Why computing longitudinal weights ?



□ Still resp. HH ■ No more resp. HH ■ No more in scope HH

Yet, not all biases can be tackled by weighting :

- Moving individuals and households are not followed
 - for example some moves could be related to the finding of a new job (endogeneous attrition)
- Other potential problem : dependent interviewing
 - people are interviewed for some variables about changes since previous responses in order to decrease the burden



Method for the $Q \rightarrow Q+1$ weights

- Construction of the longitudinal data : keeping the « present-present » individuals aged 15-74
- Choice of the reference quarter, representing the « true » population of the data : Q+1
- Computation of margins on this population : SEX × AGE × ILOSTAT (32 subgroups) + overseas departments
- Margins on Q quarter : ILOSTAT → but numbers are rescaled for the sum to be equal to Q+1 population. Unemployment rate remains the same as in transversal



Method for the $Q \rightarrow Q+h$ weights

- 2-stage computation :
 - Transitions of the ILO status are estimated with $Q \rightarrow Q+1$ method on $Q \rightarrow Q+1$ data (summarized in a 9-items variable)
 - These numbers are added to others margins in the Q \rightarrow Q+h weights computation
- Q → Q+1 transitions are important figures that should remain the same whatever the horizon
 Share of unemployed at Q going in Q+1 to...



■ Without suppl. margins ■ With suppl. margins



Differences with Eurostat recommendations

- Differences in the choice of calibration variables : overseas departments, Q → Q+1 transitions for Q → Q+h weights
- Differences in the « normalization » of Q margins :
 - proportional normalization in France: all rates remain the same as in transversal
 - number of unemployed and employed unchanged in the Eurostat method : the number of inactive people is changed for the sum to be equal to Q+1 population



Transitions on labour market

Quarter Q	Quarter Q+1									
	Employment	under- employment	other type of employment	Unempl.	Inactivity	halo	other type of inactivity	Total		
Employment	95,9			2,0	2,2			100		
under-employment	90,1	57,9	32,2	5,9	4,0	2,2	1,8	100		
other type of employment	96,3	1,8	94 <i>,</i> 5	1,7	2,0	0,7	1,3	100		
Unemployment	20,3	4,8	15,5	59,6	20,1	13,0	7,1	100		
Inactivity	4,1			5,7	90,2			100		
halo	11,5	2,7	8,8	28,1	60,4	33,7	26,7	100		
other type of inactivity	3,0	0,3	2,7	2,4	94,5	3,6	90,9	100		

- 60% of unemployed remain unemployed in the next quarter
- 20% manage to find a job
- 20% become inactive but enter halo
- People in halo have higher chances to become unemployed



Leaving unemployment



Probability of leaving unemployment depending on time spent in unemployment

- 42% of people entering unemployment a given quarter have left it the following one
- The difficulty of going out of unemployment increases with time
- Almost 30% of people are still unemployed after one year



From unemployment to employment

- More transitions for young unemployed
- Less than 10% of unemployed aged 60 or older find a job in the next quarter
- Women are slightly more likely to leave unemployment





A precarious new job





Ex-unemployed
 <1 year seniority in company
 All working people
 Mesurer pour comprendre

- 73% of ex-unemployed find a temporary job (vs. 46% of newly employed and 13% of all working people)
- A gap specifically high for older or low skilled workers
- The satisfaction at work decreases with age for ex-unemployed, while the opposite for other workers
- Those results may be also observed for underemployment

A difficult reclassification

Status in th was	e new job													
was			Status in the new job											
was independent	same wage job	lower wage job	higher wage job	Total										
					3	33	25	21	100					
1	23	17	21	100										
3	37	27	22	100										
5	39	29	16	100										
3	32	25	22	100										
2	34	24	20	100										
2	36	23	20	100										
3	25	29	24	100										
3	30	25	22	100										
2	31	20	23	100										
3	36	26	20	100										
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• 13% of people leaving unemployment are in their first professional experience

• Almost ¼ of ex-unemployed finds a new job that is on average less well paid

• Unemployment leads sometimes to change one's status : some people become independent or employee



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Thank you for your attention

Questions ?

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15 / 15