Quarter and annual estimates in Swedish LFS

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Content of the presentation

- Keywords

- LFS 1970-1992

- LFS 1993-

- Some results

- Publications calendar

Keywords

- **Consistency** between monthly, quarterly and annual figures

- Monthly and quarterly samples

- Reference period = Reference Week

Swedish LFS 1970-

- Statistics Sweden received the responsibility 1961

- On a monthly basis since 1970

- Three separate samples in each quarter

- 7/8 of each of the three samples recur after 3 months

- Telephone interviewing – CATI since 1990

- Reference period - one particular week

Swedish LFS 1970-1992

- Monthly sample

  - two consecutive weeks – reference weeks

  - distributed randomly and "equally" on the reference weeks

- Quarterly estimates:

$$\hat{t}_q = \frac{1}{3}\sum_{m=1}^{3}\hat{t}_m$$

Swedish LFS 1970-1992

- Annual estimates:

$$\hat{t}_a = \frac{1}{12}\sum_{m=1}^{12}\hat{t}_m = \frac{1}{4}\sum_{q=1}^{4}\hat{t}_q$$

- The quarter and annual estimates are a function, a simple average, of the monthly figures

Swedish LFS 1993-

- Continuous survey since 1993

  - LFS covers every single week of a year

  -a "survey month" covers 4 or 5 reference weeks

- The monthly/quarterly sample distributed randomly and "equally" on the reference weeks.

Swedish LFS 1993-

- 7/8 of the sample for a given month recur after 3 months

- 7/8 of the sample in a particular week recur after 13 weeks.

- The system captures the effects of seasonality, holy days etc.

- Quarterly estimates:

$$\hat{t}_q = \frac{4}{13}\left(\hat{t}_j + \hat{t}_{j+1}\right) + \frac{5}{13}\hat{t}_{j+2}$$

- The individual quarterly weights obtains:

$$w_q = \frac{4}{13}w_{j,j+1}, \; w_q = \frac{5}{13}w_{j+2}$$

$$j = 1,4,7,10$$

		According to formula (1)=t1		According to formula (3)=t3		Bias=(1-(t1/t3))*100	
col.	2	4	5	7	8	10	11
		At work.	Hour of actual work.	At work.	Hour of actual work.	At work.	Hour of actual work.
Year	Quarter	thousand	million	thousand	million	thousand	million
1993	1	3506,4	127,8	3506,9	128,0	0,01	0,16
	2	3435,8	121,0	3426,1	120,8	-0,28	-0,22
	3	2831,8	107,2	2886	109,2	1,88	1,91
	4	3448,6	126,1	3437,7	125,2	-0,32	-0,74
1994	1	3420,7	124,5	3424,1	124,6	0,10	0,07
	2	3450,1	124,7	3444,3	124,8	-0,17	0,05
	3	2868,6	108,5	2923	110,7	1,86	1,93
	4	3523,1	131,2	3513,4	130,5	-0,28	-0,56
1995	1	3501,8	130,2	3502,6	130,5	0,02	0,16
	2	3548,6	124,3	3542,7	124,3	-0,17	0,03

Publishing calendar

- 18-20 days after the end of the last reference week in the month: press release, table packages and time series including SA

- 18-20 days after the end of last reference week in the quarter: press release and table packages

Publishing's calendar

- 40 days after the end of the last reference week in the quarter: two reports

  - Standard quarterly report and press release

  - Thematic quarterly report and press release

- 40-50 days after the end of the last reference week in the year a standard yearly report