UNECE 29.4.2008 TF on the measurement of the quality of employment Päivi Keinänen. Statistics Finland

Analysis of the pre-selected indicators of the conceptual work:

Working time indicators

Finland

### Introduction

This working paper evaluates and analyses indicators of working hours for the UNECE Task Force on the Statistical Measurement of Quality of Employment. The purpose is to evaluate indicators which refer to the length of time used for working. Working time is regulated by laws and collective agreements "to benefit workers health and family life, to reduce work accidents and contribute to greater productivity"<sup>1</sup> (ILO 2007). The purpose is to restrict eccessive hours of work detrimental to health and well-being of working population.

In labour statistics, employed persons' hours of work commonly refer to one week or a year, but statistics may also refer to hours worked per day or a month. Most statistics and data conserning the volume of work refer either to normal, usual or actual hours worked during one week. Statistics may also refer to persons or jobs (in case of establishment surveys), or presented as full-time equivents.

The main source for working time in Finland is the Labour Force Survey<sup>2</sup>, which includes data not only of usual and actual weekly hours, but also actual annual hours. Establishment data of working time are e.g. more infrequent and/or restrictive in coverage.<sup>3</sup> National Accounts include total hours worked and number of employed persons and - accordingly - actual annual working time can estimated.

# 1. Consideration of the list of indicators

The main purpose of indicators is to measure the length of employed persons' working time, which can give qualitative information and understanding on employed persons' well-being. Long working hours have an adverse impact on workers' health and well-being; short hours may not be sufficient for decent standard of living.

The ILO Quality of Employment indicators on working hours, listed in the appendix of draft interim report, includes: 1) excessive or long working hours, 2) annual hours of work, and 3) time related underemployment. Other possible indicators (see WP1) are overtime work, working/non-working time, and increasing share of part time work. Average normal/usual or actual weekly working hours are not included in proposed indicators.

Two indicators are defined qualitatively: being either long or too short. When excessive working hours refer to normal or usual weekly hours, they include regular extra hours and overtime, but are not affected by ascence from work. Excessive hours are often defined as 49 or more hours per week.

Annual hours of worked reflect many aspects of working time: length of normal and actual weekly hours, share of part-time work, overtime hours and absence from work for any reason.

<sup>&</sup>lt;sup>1</sup> "Working Time Around the World". ILO 2007

<sup>&</sup>lt;sup>2</sup> National Accounts include total hours worked, and hours worked per employed person can be estimated

<sup>&</sup>lt;sup>3</sup> Establishment data is available from Annual Statistics of Manufacturing. Structure of Earnings Survey, wage statistics (hourly paid employees) and - less frequently - from Labour Cost Surveys. Time Use Studies on actual hours are less frequent (latest data collection for 12 months was 1999-2000). In addition to the LFS and TUS, actual hours are only available from the LCS.

Time related underemployment refers directly to undesired hours, current job does not meet personal preferences, requirements or adequate income.

## 1.1. Annual hours worked per person

Total hours worked have been defined for national accounts in the SNA<sup>4</sup>, and for the EU-countries in ESA<sup>5</sup>. Annual working time is an indicator, estimated as a share of total hours and average number of employed persons. Two sources are used to measure the length of (actual) annual working time, Labour Force Survey and National Accounts<sup>6</sup> (Fig.1). Annual working time from LFS is somewhat longer compared to OECD data before year 2000, when continuous reference week was introduced in the LFS<sup>7</sup>, although the main data source for labour volumes in the NA is the LFS's hours worked. Differences are due to a) conscript servicemen, who in the NA are included in employment; b) the use of Structural Business Statistics for mining, manufacturing, electricity, finance and insurance, and compulsory social security activities. Other sector specific sources when available.<sup>8</sup>

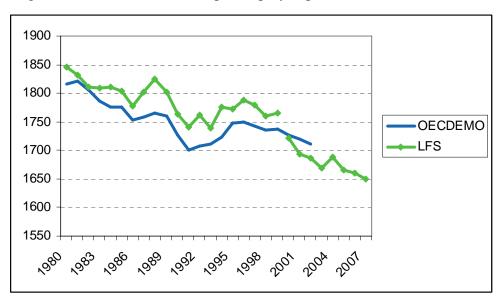


Figure 1. Actual hours worked per employed person 1980-2007. Finland

Before year 2000, the LFS had one survey week each month (usually a week near the middle of the month). Moving to the continuous survey from January 2000 caused a break in time series due to the calendar effects, as all weeks - also those with public holidays - are measured.

<sup>&</sup>lt;sup>4</sup> System of National Accounts 1993, CEC, IMF, OECD, UN, World Bank

<sup>&</sup>lt;sup>5</sup> European System of Accounts 1995, Eurostat

<sup>&</sup>lt;sup>6</sup> Finnish data published by the OECD differ from the LFS; data published in KILM uses OECD data

<sup>&</sup>lt;sup>7</sup> Beginnig in 2008. Eurostat's new variable "continous receipt of wages salaries" and "duration of absence" have been implemented in the LFS. Available data indicates. that the number of employed is lower than previously (due to absence from work).

<sup>&</sup>lt;sup>8</sup> Number of hours worked in NA are usually estimated by multiplying the number of employed with the average annual hours worked per person using the LFS data. In all industries changes in the development in wage sums and wage levels is taken into consideration. Information from the SBS also includes hours information collected from enterprises.

# 1.2. Excessive hours

Indicator of exessive hours of work is defined as 49 or more hours per week. This is in line e.g. with the ILO Convention (No.1) and the European working time directive, were "worker's average working time, including overtime, in any reference period which is applicable in his case - shall not exceed an average of 48 hours for each seven days". The 48 hours include overtime. For statistical measurement, the definitions retain a week as the reference period. ILO refers to usual weekly hours, but EU Directive is not explicitly defining if usual or actual overtime is meant.

In WP1 (page 13-14), excessive hours of work are divided in two categories: hours actually worked and annual hours of work. Later in WP1 (page 29) excessive hours of work should be defined as usual hours in <u>all</u> jobs. However, usual and actual hours refer to the main job in the EULFS definitions.

In Finland average actual hours are less than usual hours, which indicates that short absences (less than a week) from work are more common than over-time. Share of employed persons, who usually work 49 hours or more, are presented by socio-economic categories (Table 1).

Year 2006, %	Total	Males	Females
All	8.7	12.8	4.4
Employees	4.2	6.1	4.6
Blue collar	3.8	4.9	1.7
White collar	4.4	7.4	5.3
Self-employed	39.4	45.1	26.9
Entrepreneurs	40.8	46.3	28.3

Table 1. Employed persons with usual weekly working time 49 hours or more, 2006

Source: LFS

There remains a significant gap in the length of the usual working week between employees and self-employed. Longer working weeks are also more common for white-collar employees than workers. Furthermore, men work usually longer hours than women. Hours also vary widely between industrial sectors. Average usual working hours range from 35.8 per week in public administration and services (L-K) to 41.1 hours in construction (F) or 46.1 hours in agriculture etc. (A,B).

Differences in the share of part-time workers affects average weekly working times. Table 2 gives normal weekly hours in full-time work.

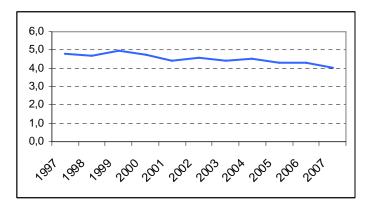
Nace	Total	Full-time jobs	Part-time jobs
All employed	38,0	40,6	20,1
Agriculture, fishing , forestry 01-05	46,1	50,8	19,4
Manufacturing, mining, energy 10-41	39,0	40,0	20,3
Construction 45	41,1	42,2	21,7
Trade, repair etc. 50-52	37,1	41,4	21,3
Hotels, restaurants 55	35,9	41,9	20,7
Transport, communication 60-64	40,2	42,8	19,0
Finance etc. 65-67, 70-74	36,9	39,8	19,0
Public administration etc. 75- 98	35,8	38,5	19,8

Table 2. Average usual weekly hours in full-time and part-time jobs, 2003

# 1.3. Time related underemployment

Comparable statistics describing underemployment are available from 1997. Broadly defined, underemployment comprises situations in which the person is employed, but not in the desired capacity, whether in terms of compensation, hours, or level of skill and experience. The share of underemployed due to various reasons is rather small, 5 to 4 percent of total employment - and slowly declining.

Figure. Underemployed as a share of total employment, per cent



# 2. Development of new indicators

Other possible indicators could be unvoluntary part-time, actual weekly hours, existence of secondary jobs, paid and unpaid overtime are available from the LFS. Establishment surveys

Involuntary part-time due to the lack or unavailability of full-time work is common - 28 % of employees in 2006. There is also a gender gap: 23 percent of men and 30 percent of women work involuntarily in part-time jobs. Its share increases with age until the age of 55 years for both sexes.

Overtime work could be among the indicators of quality of work. However, the definition and measurement of overtime is not well-established in statistics. Overtime may be paid, which normally means that compensation is higher than for normal hours. It may also be compensated in time, often called "unpaid overtime". Overtime rates also depend on the period of measurement: one week as a reference (as e.g. in the LFS), gives lower rates than longer refence periods.

# 3. Use of indicators in specific context

Indicators could be presented separately for various groups of workers. The length of working time varies considerably between employees and self-employed, and often professionals have longer hours than workers. Part-time work is more common in service industries, for females and youth. It would be useful, if indicators were presented for the most relevant sub-groups separately.

## 4. Evaluation of the indicators

<u>Annual hours actually worked</u> per person is commonly used to measure the length of working time. As an indicator of time worked, it is an effective and useful concept reflecting various aspects that affect time worked. It illustrates both the average number of weekly hours actually worked in full- and part-time employment, takes into account normal weekly working time and overtime hours, but also actual hours less than normal or paid hours. Actual hours indicate the (average) quantity of realised labour input, and thus point also towards the productivity of labour.

Annual hours worked per person as such have no information on the desired or normative<sup>9</sup> length of annual working time. As an example, high share of part-time jobs reduces annual hours. If the share of involuntary part-time is high, short annual hours are not desirable. Thus, it is left to the user how to interpret data and differences between years, countries, sectors, employment categories etc.

In practise, definitions and sources of the indicator are varied - for example the treatment of long-term absence from work for various reasons. In the EU definition of employment, persons temporarily not at work are considered as employees provided they have a formal job attachment<sup>10</sup>. Empoyed persons (incl. absenteeism) cover persons receiving wages and salaries, but also persons receiving social

<sup>&</sup>lt;sup>9</sup> There are exeptions. E.g. the Confederation of Finnish Industries EK publishes regular annual working time for industrial workers in day work (1,715 hours in 2008).

<sup>&</sup>lt;sup>10</sup> See Annex for ESA definition. The EU LFS includes a variable to measure formal attachment, which classifies as employed persons, who are absent from work and receiving social allowances.

allowances (European System of Accounts). The definition of employees in the SNA is different<sup>11</sup>. Additionally, taking into account the diverse sources used, comparability between countries can be challenged.

<sup>&</sup>lt;sup>11</sup> SNA 1993 prefers jobs instead of employed persons, and labour input is defined as full-time equivalents. (pp. 407- 408)

#### Annex

Definition of employees in ESA (European system of accounts)

ESA 11.14 Person temporarily not at work, are considered as employees provided they have a formal job attachment. This formal attachment should be determined according to one or more of the following criteria:

a) the continued receipt of wage or salary;

b) an assurance of return to work following the end of the contingency, or an agreement as to the data of return;

c) the elapsed duration of absence from the job which, wherever relevant, may be that duration for which workers can receive compensation benefits without obligations to accept other jobs.

This covers persons temporarily not at work because of illness or injury, holiday or vacation, strike or lock-out, educational or training leave, maternity or parental leave, reduction in economic activity, temporary disorganisation or suspension of work due to such reasons as bad weather, mechanical or electrical breakdown, or shortage of raw materials or fuels, or other temporary absence with or without leave. (ESA, p. 245).

**Table 25** The annual average estimate and the coefficient of variation (%) ofthe ways how a person wants to work more by age using a sub-sample in2005

onko tästä hyötyä?

10-year age group Way how a person wants to work more							
Men & Women	(Employed employee)						
1) Yearly estimate	Through an	Through a job	Only within	In any of the			
2) Yearly estimate of the	additional job	working more	the present job	previous ways			
working age population (%)		hours than the					
3) Coefficient of variation (%)		present job					
15-24	681	4 455	15 743	7 779			
	0	0.1	0.4	0.2			
	50.7	18.9	10.2	14.5			
25-34	423	2 668	14 172	5 776			
	0	0.1	0.4	0.1			
	58.6	25.4	11.1	17.1			
35-44	560	2 531	12 371	5 264			
	0	0.1	0.3	0.1			
	57.6	26.8	11.8	18.9			
45-54	1 916	4 193	11 885	5 290			
	0	0.1	0.3	0.1			
	32.3	20.7	11.6	18.3			
55-64	0	474	4 420	1 536			
	0	0	0.1	0			
		57.5	18.6	31.7			
65-74	0	85	320	0			
	0	0	0	0			
		99.7	72.1				