

Dimension 3 - Working hours and balancing work and non-working life: working time arrangements

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Introduction

Working-time arrangements include different elements: normal and maximum number of hours per working day or week; overtime provisions; distribution of working-time during the day, week or year and associated flexible time arrangements. These elements are regarded as a fundamental dimension of international labour standards. Statistics on working time are needed to implement, monitor and evaluate policies and programmes pointed to the balancing of work and family life.

In relation to that, the aim of this paper is to evaluate how the indicators formulated by Task Force for the dimension working time arrangements can be useful indicators of quality of employment. Following the guidelines indicated from the Task force the goal is to select the indicators that are representative enough to adequately evaluate the state of this dimension. In relation to the criteria of availability and comparability of the information, we consider four indicators of the Labour Force Survey (LFS) collected with quarterly cadence:

1. percentage of work at night
2. percentage of work at evening
3. percentage of work on Sunday
4. percentage of work on Saturday

For this indicator the concept of unusual hours is gradual: the minimum is to work on Saturday and the most is to work at night. Moreover, the LFS distinguishes between those who usually follow this atypical type of schedule and those who do it sometimes. Hereafter, it follows the definition of the variables by Eurostat.

Evening and Night work

The definitions of evening and night vary considerably so that it is not easy to establish a strictly common basis for all Member States. Generally speaking, however, evening work must be considered to be work done after the usual hours of working time in this Member State, but before the usual sleeping hours. Night work must be generally considered to be work done during the usual sleeping hours. As foreseen by directive 2003/88/EC, the definition of usual sleeping hours can vary by country but, in any case, it should include hours between midnight and 5 a.m. The criterion applied to code these variables is the actual frequency within a reference period of four weeks. Therefore:

- **Code 1:** "Usually"
working during the evenings/nights at least half of the days worked in a reference period of four weeks preceding the end of the reference week;
- **Code 2:** "Sometimes"
working during the evenings/nights less than half of the days worked, but a least one hour in a reference period of four weeks preceding the end of the reference week;
- **Code 3:** "Never"

working during the evenings/nights on no occasion in a reference period of four weeks preceding the end of reference week.

Saturday and Sunday working

To provide measurements relating to reconciliation between work and family life and for assessment of health related issue (see the night work convention of the ILO, and directive 2003/88/EC of 4.11.2003).

Implementation rules

The criterion applied to code these variables is the actual frequency within a reference period of four weeks. Therefore:

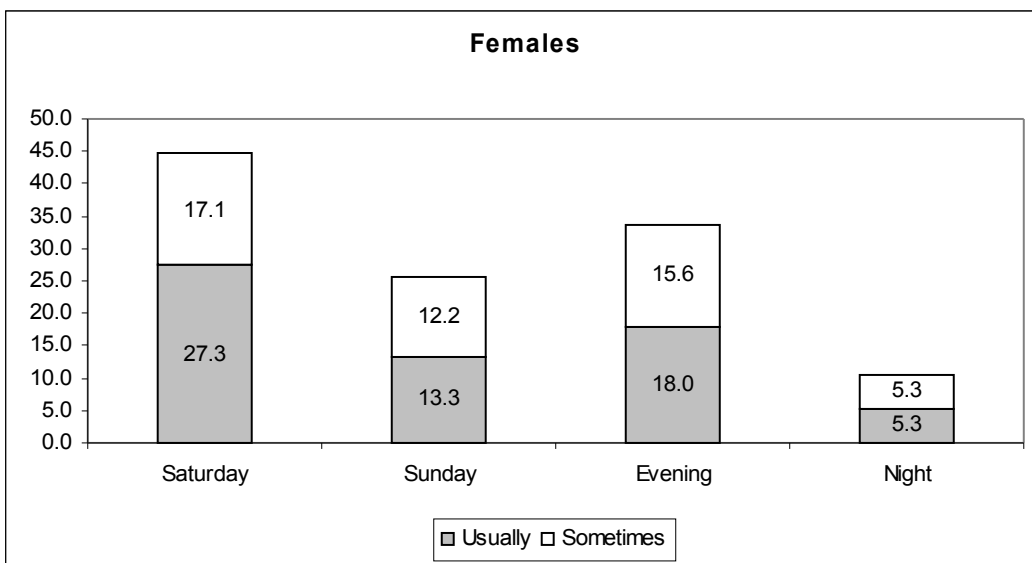
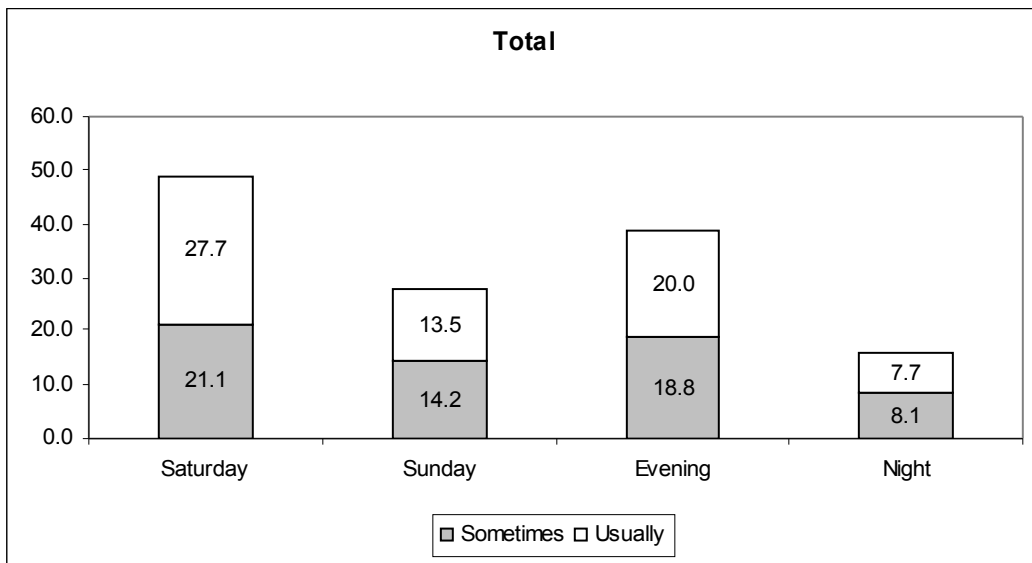
- **Code 1:** "Usually" in this context should be interpreted to mean: working at least two of the Saturdays/ Sundays in a reference period of four weeks preceding the end of the reference week.
- **Code 2:** "Sometimes" in this context should be interpreted to mean: working on one Saturday/Sunday (at least one hour) in a reference period of four weeks preceding the end of the reference week.
- **Code 3:** "Never" in this context should be interpreted to mean: working on Saturdays/Sundays on no occasion in a reference period of four weeks preceding the end of reference week.

With respect to the construction of the indicators related to the quality of employment, it is useful to understand if it is better to consider only who usually works in particular timetables or also who occasionally works in these timetables. Moreover, considering the non-redundancy criteria we evaluate if it is better using the four indicators separately or some combination of them. The analysis concerns three main stages: 1) a comparison among the European 27 countries in order to verify the variability of the four indicators; 2) for Italy, the availability of microdata allows to construct new indicators combining the information of the four variables considered. Subsequently we study the relations with some socio-demographic background variables (gender, age, educational qualification, etc.) and with the employment characteristics of main job (professional status, occupation, economic activity, etc). Moreover, the variability of these indicators can be estimated in the last 4 years, since the start of the new Labour Force Survey in Italy; 3) selected some indicators we control one subjective dimension using the information available from ad hoc module 2004 on 'work organisation and working time arrangements'. In particular, in the ad hoc module, we asked to employees who work in some atypical timetables the convenience of these working time arrangements for personal life situation. That is useful in order to select the indicators more linked to the dimension of quality of employment.

1. Working time arrangement in Europe

On 2006 in the countries of Eu27 unusual working time arrangement is widespread, especially people working on Saturday and at evening (chart 1). The incidence of atypical hours differs a lot considering the modality "usually" or "sometimes": around half of employed people who work in unusual working time arrangement does that usually and the other half sometimes. Males work more often at evening and above all at night in comparison to females. However, the frequencies of modalities "usually" and "sometimes" maintains the same pattern for both sexes.

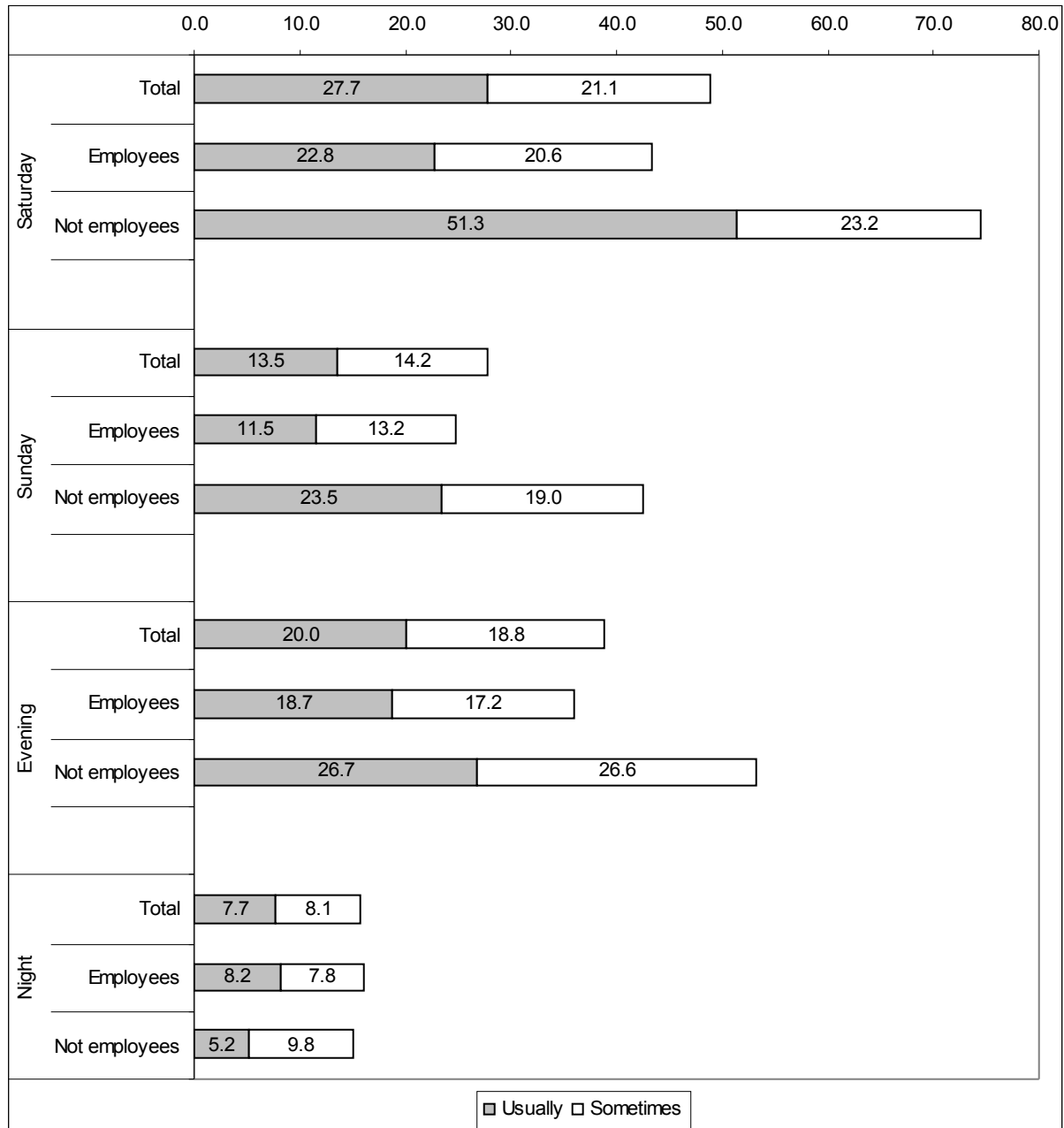
Chart 1 - Population in employment working on unusual time as a percentage of the total employment by gender



Source: LFS, 2006

Moreover, the prevalence of non-standard working hours clearly differs among professional status (chart 2). Not Employees most often report unusual working time. In particular, the majority of not employees work on Saturday and at evening, 75% and 53% respectively. Such working hours are also more common on Sunday (43% vs. 25% of employees). Differently, employees work more often at night.

Chart 2 - Population in employment working on unusual time as a percentage of the total employment by professional status



Source: LFS, 2006

These results suggest that considering only the modality “usually” the indicators are more helpful to disclose particular conditions of work. On the other hand, considering also the modality “sometimes” for not employees, some unusual hours become finally standard.

Anyway, the average of Eu27 covers up the high differences among countries. Considering the ranges of the indicators it is possible to highlight this variability (table 1).

Table 1 – Population in employment working on unusual time as a percentage of the total employment by professional status (Eu27 and the percentage of the country with the minimum value and the country with the maximum value)

Unusual time		% totally (usually + sometimes)			% usually		
		Eu27	Minimum value of Eu27 countries	Maximum value of Eu27 countries	Eu27	Minimum value of Eu27 countries	Maximum value of Eu27 countries
Saturday	Total	48.8	28.5	66.5	27.7	11.6	38.5
	Employees	43.4	24.6	58.6	22.8	8.5	32.5
	Not employees	74.5	43.4	90.6	51.3	21.8	65.8
Sunday	Total	27.7	16.9	35.9	13.5	6.6	20.7
	Employees	24.7	14.2	34.9	11.5	4.9	22.0
	Not employees	42.5	22.8	68.0	23.5	9.6	43.9
Evening	Total	38.8	16.6	60.9	20.0	4.3	31.6
	Employees	35.9	15.6	47.5	18.7	3.3	28.5
	Not employees	53.3	19.9	85.8	26.7	7.3	52.5
Night	Total	15.8	8.7	23.6	7.7	1.4	17.4
	Employees	16.0	8.8	25.3	8.2	1.4	19.3
	Not employees	15.0	2.5	32.5	5.2	1.2	12.2

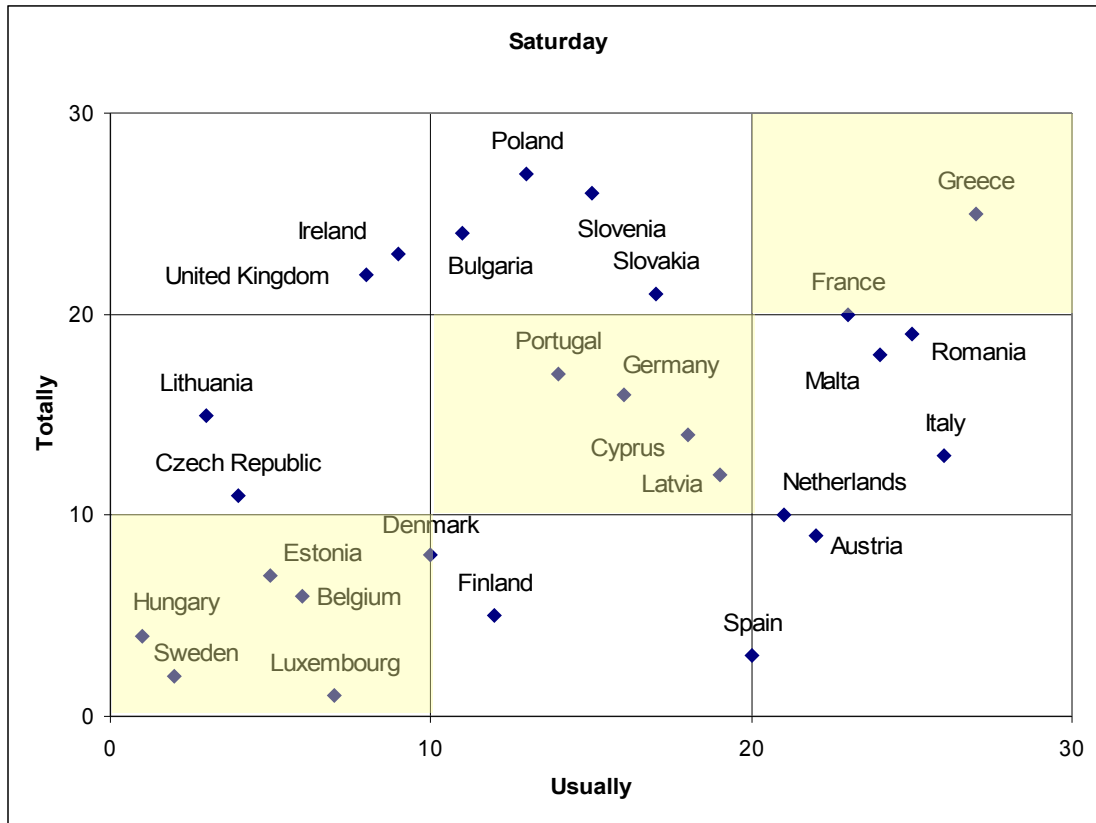
The percentage of employed people working on Saturday increases from 28% (Luxembourg) to 66% (Poland); in particular in 10 countries of Eu27 (Bulgaria, Ireland, Greece, France, Malta, Poland, Romania, Slovenia, Slovakia, United Kingdom) the majority of employed people works on Saturday (Annex 1). In relation to not employees, in all country the high majority work this day, with the exception of Sweden (43%). In regard of the modality “usually” the range moves from 12% (Hungary) to 38% (Greece) for all workers and from 22% (Hungary) to 66% (Romania) for not employees.

In the main, considering or not considering the modality “sometimes” the ranking of countries changes a lot in relation of the diffusion of atypical hours. Following charts provide a more precise indication of these difference. For each indicator the ranking of countries is calculated for the modalities “usually” and “totally (usually+sometimes)”; in the ranking 1 represents the minimum value and 27 the maximum value. In particular, the position of the countries on the three quadrants in the main diagonal do not change a lot the position in the ranking; for the others instead the variation is relevant. For example, United Kingdom has a low value of employed people work on Saturday usually (22% and 8° in ranking) but a high value considering also the modality “sometimes” (54% and 22° in ranking); instead for Austria the situation is opposed: 31% and 22° in ranking and 44% and 9° in ranking respectively (Annex 1).

In general, working on weekend is above all “usually” in countries like Spain, Italy, Austria and Romania, while is more often “sometimes” in countries like United Kingdom, Poland and Bulgaria; instead in Greece both schedules are diffuse. Considering work at evening, the relation between the two modalities of the variable is closer: more countries are in the quadrants of main diagonal. Finally, in relation to people working at night, Italy and Poland have an opposite situation: the former has a percentage about double of people work usually (8.2% and 4.8% respectively) but half of who works at night totally (11% and 22% respectively).

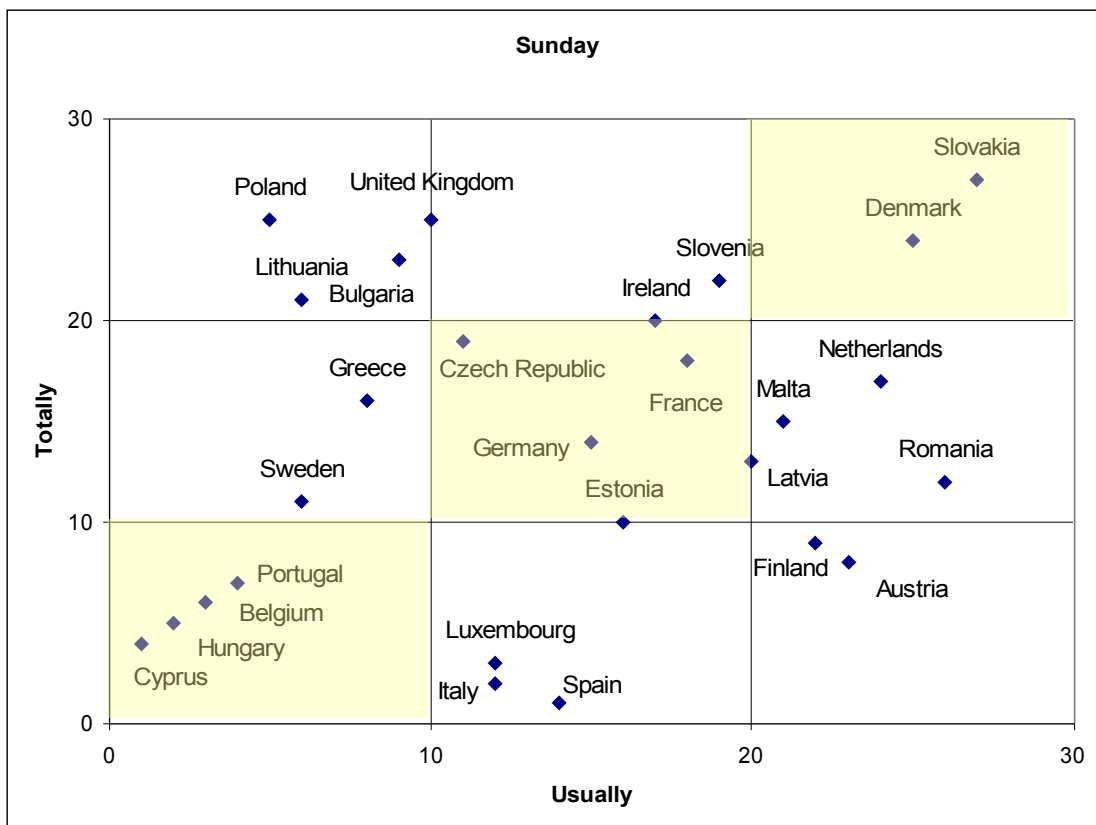
These results highlight that in some countries the atypical hours are common more in “usually” schedule while in others more often employed people occasionally working in these days or hours. So, for this indicator it is not the same considering only the modality “usually” or both modalities.

Chart 3 - Ranking of Eu27 countries by employed people who work on Saturday (usually and totally)



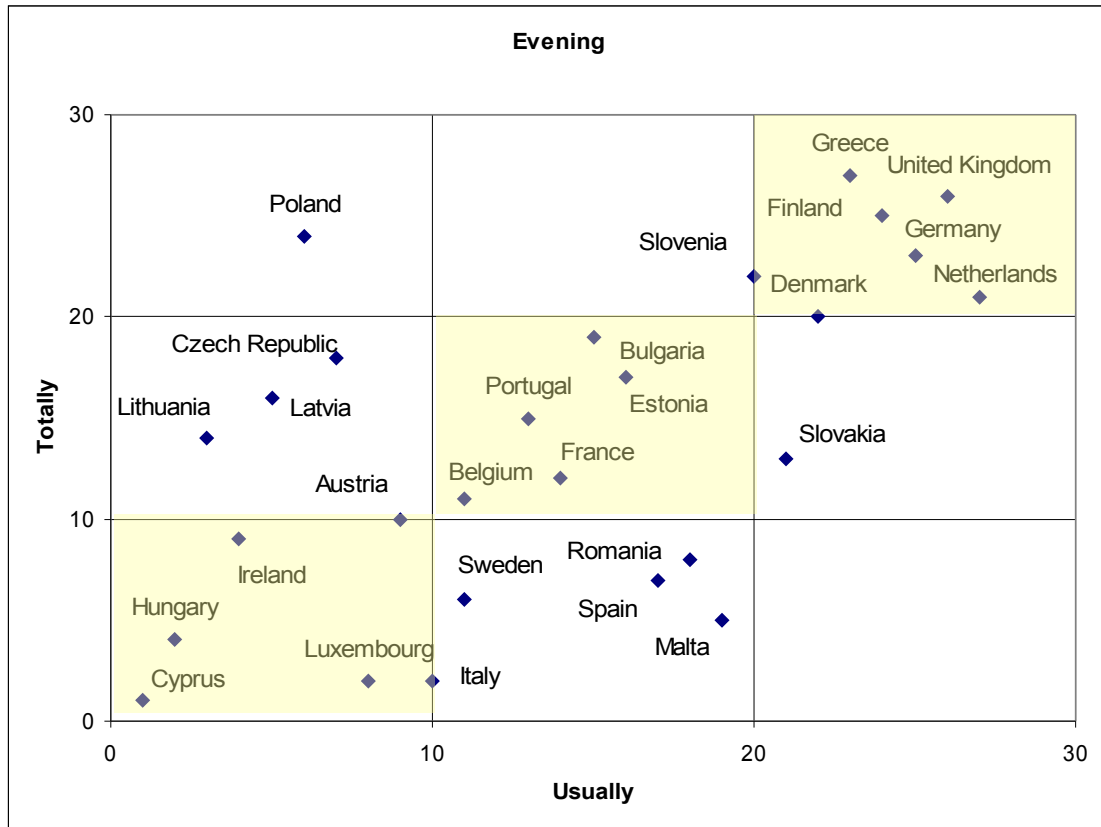
Source: LFS, 2006

Chart 4 - Ranking of Eu27 countries by employed people who work on Sunday (usually and totally)



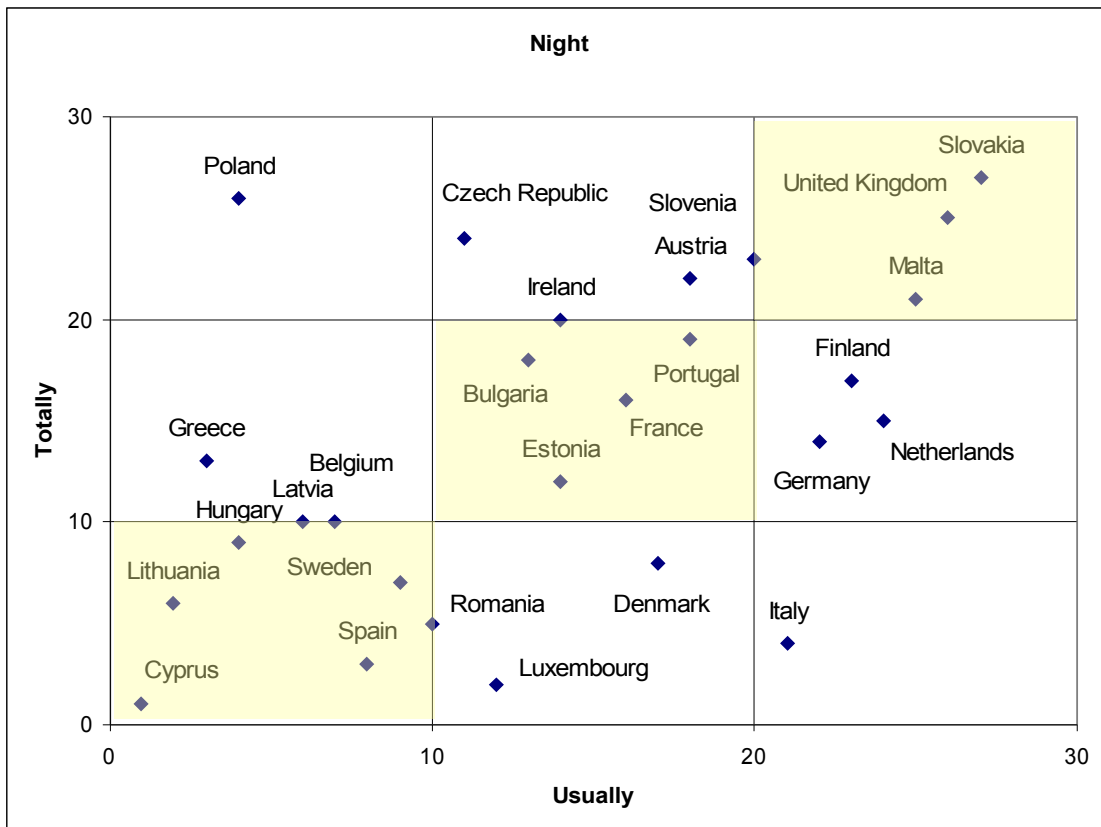
Source: LFS, 2006

Chart 5 - Ranking of Eu27 countries by employed people who work at evening (usually and totally)



Source: LFS, 2006

Chart 6 - Ranking of Eu27 countries by employed people who work at night (usually and totally)



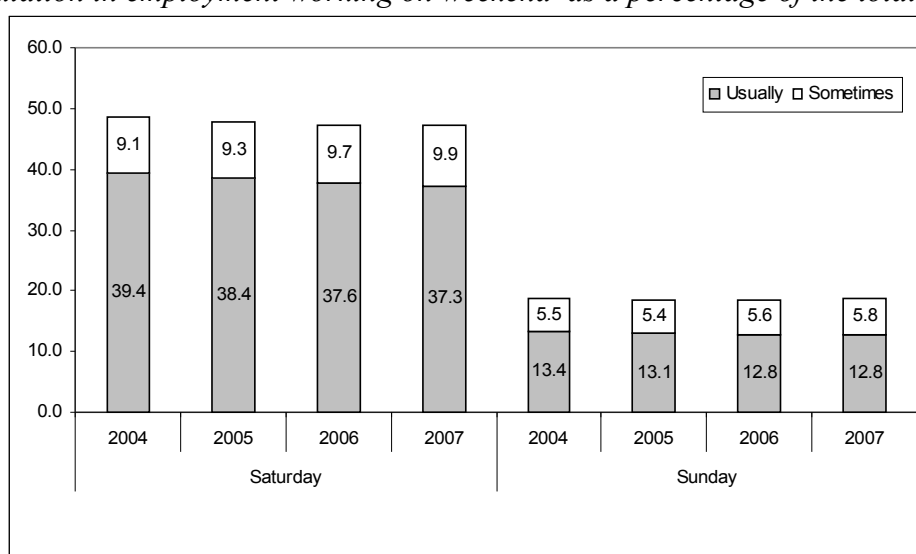
Source: LFS, 2006

2. Working time arrangement in Italy

As regard Italy, it is possible to carry out further deepening about the information of the four indicators. The availability of microdata allows to construct new indicators combining the information of the four variables considered. In fact, one working hypothesis is that the quality of employment can differ in relation to the different combinations of the atypical timetables. For example, in terms of quality of employment, we cannot evaluate in the same way who works only sometimes on Saturday and who works usually both Saturday and Sunday and both at evening and at night. Moreover the variability of these indicators can be estimated in the last 4 years, since the start of the new Labour Force Survey in Italy. The relation of these news indicators with some socio-demographic background variables and with the employment characteristics of main job allows to achieve more information.

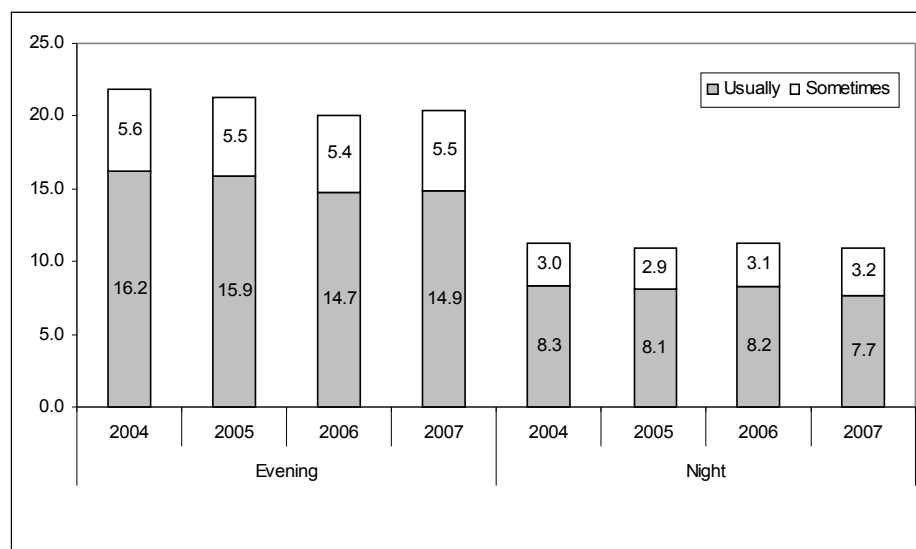
First, the variability of these indicators is low in the 4 years considered (charts 7 and 8). Also considering the data collected with quarterly cadence the variability remain low (chart 9).

Chart 7 - Population in employment working on weekend as a percentage of the total employment



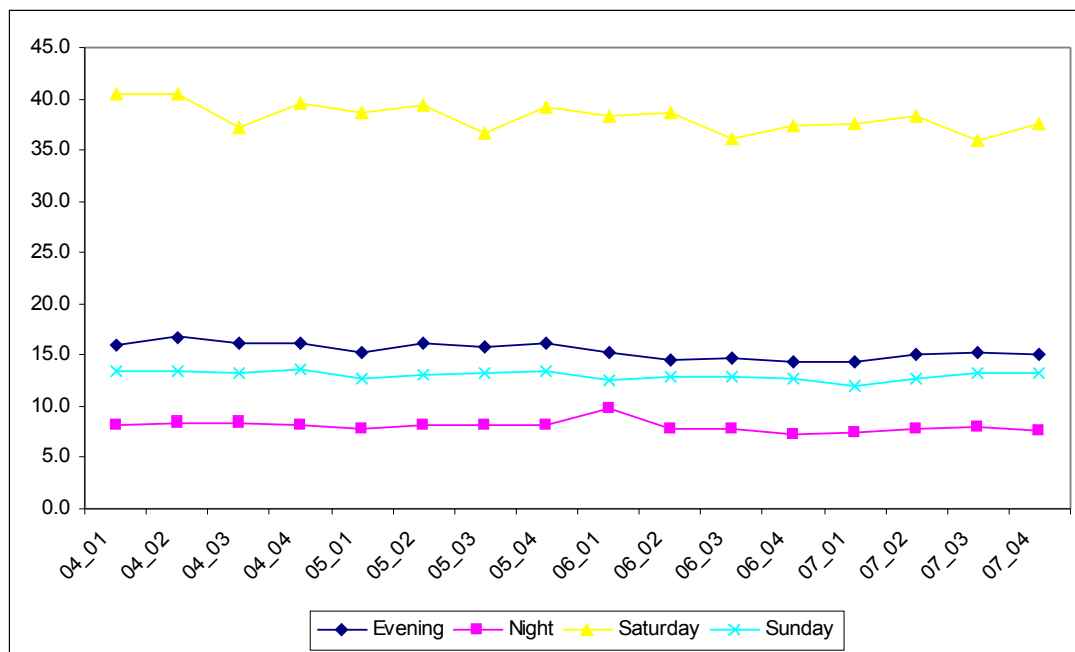
Source: LFS Italy, 2004-2007

Chart 8 - Population in employment working at evening and at night as a percentage of the total employment



Source: LFS Italy, 2004-2007

Chart 9 - Population in employment working on unusual time usually as a percentage of the total employment



Source: LFS Italy, 2004-2007

Considering only the last year we analyze the combination of these indicators. In Italy on 2007 about 3 millions of employed people (12.3%) work usually on weekend; almost the totality of employed people who work usually on Sunday work also usually on Saturday but not the contrary (table 2).

Table 2 – Population in employment working on weekend

Saturday	Sunday			Total
	Usually	Sometimes	No	
value				
Usually	2,863	629	5,176	8,668
Sometimes	28	669	1,591	2,288
No	74	58	12,133	12,266
Total	2,965	1,356	18,900	23,222
% row				
Usually	33.0	7.3	59.7	100.0
Sometimes	1.2	29.2	69.6	100.0
No	0.6	0.5	98.9	100.0
Total	12.8	5.8	81.4	100.0
% column				
Usually	96.6	46.4	27.4	37.3
Sometimes	0.9	49.3	8.4	9.9
No	2.5	4.3	64.2	52.8
Total	100.0	100.0	100.0	100.0
% total				
Usually	12.3	2.7	22.3	37.3
Sometimes	0.1	2.9	6.9	9.9
No	0.3	0.3	52.2	52.8
Total	12.8	5.8	81.4	100.0

Source: LFS Italy, 2007

In regard people working at evening and at night 1,639 (7.1%) employed people in Italy work regularly in both the hours, 717 (3%) in a combination of “usually” and “sometimes” (table 3). In this case, who works at night works also at evening but about the half of employed people work usually at evening but not at night.

Table 3 – Population in employment working at evening and at night

Evening	Night			Total
	Usually	Sometimes	No	
value				
Usually	1,639	218	1,603	3,459
Sometimes	27	473	781	1,280
No	125	56	18,301	18,482
Total	1,791	747	20,684	23,222
% row				
Usually	47.4	6.3	46.3	100.0
Sometimes	2.1	36.9	61.0	100.0
No	0.7	0.3	99.0	100.0
Total	7.7	3.2	89.1	100.0
% column				
Usually	91.5	29.1	7.7	14.9
Sometimes	1.5	63.3	3.8	5.5
No	7.0	7.5	88.5	79.6
Total	100.0	100.0	100.0	100.0
% total				
Usually	7.1	0.9	6.9	14.9
Sometimes	0.1	2.0	3.4	5.5
No	0.5	0.2	78.8	79.6
Total	7.7	3.2	89.1	100.0

Source: LFS Italy, 2007

The combination of four indicators highlights the probability of different working time schedules (tables 4 and 5). In the last year 11,969 (51.5%) Italian employed people worked at least during one atypical hours. Considering the two opposites, 1,133 (5%) worked usually on weekend, at evening and at night while 5,494 (23.7%) only on Saturday (usually or sometimes).

Table 4 – Population in employment working on unusual time combination

	Evening	Night	usually	usually	usually	somet.	somet.	somet.	no	no	no	Total
			usually	somet.	no	usually	somet.	no	usually	somet.	no	
Saturday												
Sunday												
usually	usually	usually	1,133	93	495	11	67	84	45	8	929	2,863
usually	somet.	usually	57	27	116	3	28	62	4	4	328	629
usually	no	usually	166	30	459	3	31	187	40	7	4,253	5,176
somet.	usually	usually	7	2	4	1	3	2	0	0	8	28
somet.	somet.	usually	60	26	38	4	231	78	4	12	216	669
somet.	no	usually	42	13	106	1	40	136	5	6	1,241	1,591
no	usually	usually	15	1	11	0	1	2	4	0	39	74
no	somet.	usually	5	1	3	1	7	6	0	1	35	58
no	no	usually	154	24	371	4	64	222	23	18	11,253	12,133
Total			1,639	218	1,603	27	473	781	125	56	18,301	23,222

Source: LFS Italy, 2007

Table 5 – Population in employment working on unusual time combination as a percentage of the total employment

		Evening	usually	usually	usually	somet.	somet.	somet.	no	no	no	Total
		Night	usually	somet.	no	usually	somet.	no	usually	somet.	no	
Saturday	Sunday											
usually	usually	4.9	0.4	2.1	0.0	0.3	0.4	0.2	0.0	4.0	12.3	
usually	somet.	0.2	0.1	0.5	0.0	0.1	0.3	0.0	0.0	1.4	2.7	
usually	no	0.7	0.1	2.0	0.0	0.1	0.8	0.2	0.0	18.3	22.3	
somet.	usually	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
somet.	somet.	0.3	0.1	0.2	0.0	1.0	0.3	0.0	0.0	0.9	2.9	
somet.	no	0.2	0.1	0.5	0.0	0.2	0.6	0.0	0.0	5.3	6.9	
no	usually	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	
no	somet.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	
no	no	0.7	0.1	1.6	0.0	0.3	1.0	0.1	0.1	48.5	52.2	
Total		7.1	0.9	6.9	0.1	2.0	3.4	0.5	0.2	78.8	100.0	

Source: LFS Italy, 2007

In order to understand which indicators are better to represent the dimension “working hours and balancing work and non-working life: working time arrangements” is useful to analyze some characteristics of workers. The indicator “working on Saturday” alone is not too interesting: the profile of the workers is similar to the total employment unless incidence of not employees (35% vs. 26%) and of service and shop and market sales workers (19% vs. 12%). The indicator “working on Sunday” is also typical of workers in sectors wholesale and retail trade, and in sector hotels and restaurants. Using the combination “working on Saturday and on Sunday usually” the profile is more evident and the indicator better describes an uneasiness to reconcile working time with personal life (table 6).

Regarding people working at evening and at night we find the high presence of non national, of service and shop and market sales workers, of plant and machine operators and assemblers and of some service activities (hotels and restaurants, transport, storage and communication, health and social work). Only for employed people working at evening there is a little more incidence of the modality “Legislator, senior officials and managers” in comparison to total employment (11% vs. 8%). The profile of people work usually at night is similar to the profile who works usually both at evening and at night (table 7).

Table 6 – Population in employment working on weekend

CHARACTERISTICS	TOTAL	Saturday		Sunday		Saturday and Sunday usually
		Usually	Totally	Usually	Totally	
TOTAL	23,222	8,668	10,956	2,965	4,322	2,863
	100.0	100.0	100.0	100.0	100.0	100.0
SEX						
Males	60.5	61.2	63.4	62.6	63.8	62.7
Females	39.5	38.8	36.6	37.4	36.2	37.3
AGE						
15-24	6.4	6.9	6.7	7.9	7.3	7.8
25-34	24.7	23.8	24.1	24.9	24.5	25.0
35-44	31.8	31.5	31.7	31.7	32.0	31.5
45-54	25.2	25.4	25.4	24.3	24.8	24.3
55-64	10.3	10.6	10.3	9.2	9.5	9.3
>64	1.6	1.9	1.8	2.0	1.9	2.1
EDUCATION LEVEL						
low	39.4	44.3	43.3	43.9	41.9	43.9
average	44.9	43.0	43.0	44.0	43.9	44.2
high	15.6	12.7	13.7	12.1	14.2	11.9
CITIZENSHIP						
National	93.5	92.7	92.8	92.4	93.3	92.5
Non national	6.5	7.3	7.2	7.6	6.7	7.5
PROFESSIONAL STATUS						
Employees	73.9	64.1	65.4	67.2	68.0	67.1
Not employees	26.1	35.9	34.6	32.8	32.0	32.9
FULL-TIME/ PART-TIME						
Full-time	86.4	88.3	88.7	86.9	87.2	87.1
Part-time	13.6	11.7	11.3	13.1	12.8	12.9
ISCO88						
Legislators, senior officials and managers	8.3	14.5	12.8	14.4	12.9	14.6
Professionals	10.0	8.4	9.3	6.6	8.6	6.5
Technicians and associate professionals	22.0	14.8	16.2	13.8	15.0	13.7
Clerks	10.8	6.3	6.4	4.8	5.3	4.8
Service and shop and market sales workers	11.6	21.5	19.1	30.3	27.6	30.5
Skilled agricultural and fishery workers	2.0	3.2	3.0	5.4	4.7	5.5
Craft and related trades workers	16.3	12.2	13.7	5.6	6.6	5.4
Plant and machine operators and assemblers	8.9	7.0	7.9	8.3	8.3	8.2
Elementary occupations	9.1	10.8	10.2	8.2	8.1	8.1
Armed forces	1.1	1.3	1.4	2.8	3.0	2.8
NACE						
Agriculture	4.0	5.8	5.5	8.1	7.5	8.2
Manufacturing	21.7	13.2	15.2	9.3	9.9	9.0
Construction	8.4	4.6	6.0	1.0	1.7	0.9
Wholesale and retail trade	15.2	23.8	21.1	14.0	16.1	14.0
Hotels and restaurants	5.0	10.2	8.7	23.3	17.9	23.5
Transport, storage and communication	5.4	6.2	6.3	7.4	7.4	7.4
Health and social work	6.8	7.8	8.2	14.0	14.0	14.2
Other service activities	33.5	28.6	29.0	23.0	25.5	22.8

Source: LFS Italy, 2007

Table 7 – Population in employment working at evening and at night

CHARACTERISTICHS	TOTAL	Evening		Night		Evening and Night usually
		Usually	Totally	Usually	Totally	
TOTAL	23,222	3,459	4,740	1,791	2,538	1,639
	100.0	100.0	100.0	100.0	100.0	100.0
SEX						
Males	60.5	69.7	70.0	75.1	74.6	74.4
Females	39.5	30.3	30.0	24.9	25.4	25.6
AGE						
15-24	6.4	6.9	6.5	6.8	6.6	6.8
25-34	24.7	25.7	25.4	26.0	25.4	26.0
35-44	31.8	33.8	33.6	34.2	33.9	34.6
45-54	25.2	24.5	24.9	25.0	25.6	24.8
55-64	10.3	8.0	8.4	7.4	7.9	7.3
>64	1.6	1.0	1.2	0.6	0.8	0.5
EDUCATION LEVEL						
low	39.4	39.5	37.3	42.7	39.9	41.5
average	44.9	45.1	45.2	44.4	45.0	45.4
high	15.6	15.4	17.5	12.9	15.2	13.2
CITIZENSHIP						
National	93.5	91.6	92.8	91.4	92.6	91.5
Non national	6.5	8.4	7.2	8.6	7.4	8.5
PROFESSIONAL STATUS						
Employees	73.9	72.3	70.8	81.1	79.9	82.0
Not employees	26.1	27.7	29.2	18.9	20.1	18.0
FULL-TIME/ PART-TIME						
Full-time	86.4	90.6	90.8	93.0	92.9	93.0
Part-time	13.6	9.4	9.2	7.0	7.1	7.0
ISCO88						
Legislators, senior officials and managers	8.3	10.8	10.6	7.6	7.4	7.4
Professionals	10.0	9.9	11.7	7.3	9.4	7.5
Technicians and associate professionals	22.0	17.1	18.8	16.0	17.7	16.7
Clerks	10.8	5.5	5.6	4.4	4.4	4.3
Service and shop and market sales workers	11.6	22.1	19.9	24.0	22.3	24.8
Skilled agricultural and fishery workers	2.0	1.6	1.6	1.5	1.6	1.1
Craft and related trades workers	16.3	8.5	8.9	8.1	7.8	7.0
Plant and machine operators and assemblers	8.9	16.0	14.6	20.3	18.5	20.5
Elementary occupations	9.1	6.0	5.6	6.5	6.1	6.1
Armed forces	1.1	2.6	2.7	4.4	4.7	4.5
NACE						
Agriculture	4.0	2.4	2.6	2.2	2.4	1.7
Manufacturing	21.7	22.0	20.8	23.2	21.4	22.7
Construction	8.4	1.7	2.3	0.9	1.3	0.9
Wholesale and retail trade	15.2	11.0	11.5	4.3	4.7	3.5
Hotels and restaurants	5.0	16.7	13.7	17.4	15.1	18.2
Transport, storage and communication	5.4	8.6	8.6	11.0	11.0	10.9
Health and social work	6.8	11.5	11.8	17.2	17.9	18.0
Other service activities	33.5	26.1	28.7	23.8	26.3	24.1

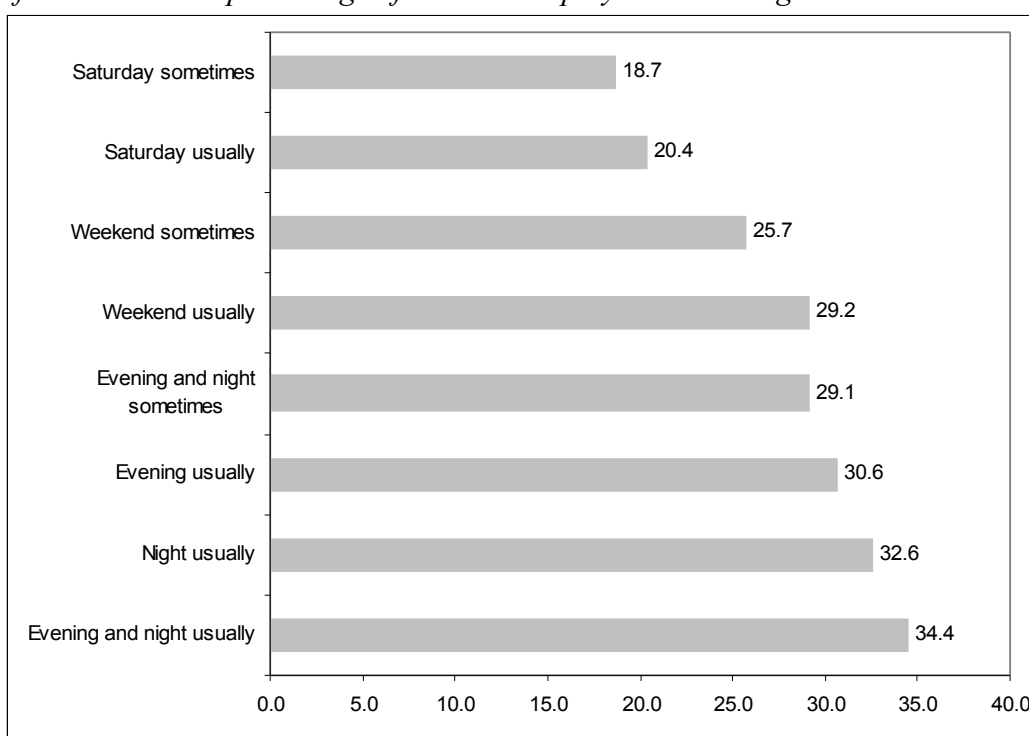
Source: LFS Italy, 2007

3. Ad hoc module 2004 on ‘work organisation and working time arrangements’

Whether or not these flexible working arrangements are likely to be attractive to employed people is a difficult question. Relation to that we can use the information available from ad hoc module 2004 on ‘work organisation and working time arrangements’. In particular, in the ad hoc module we asked to employees working in some atypical timetables the convenience of working time arrangements for personal life situation. The question we asked to employees that worked in at least one unusual hours during the reference period was: “*Work in the evening, at night or during weekend is convenient or is not convenient for personal life situation?*”. That can be useful in order to select the indicators more linked to the dimension of quality of employment.

On the whole, the 25% of the employees that works in these atypical hours considers it not convenient for personal life situation. Considering some combination of working time arrangement the incidence increases from 19% for people who work only on Saturday sometimes to 34 % for who works at evening and at night usually (chart 10).

Chart 10 - Population in employment working on unusual time that consider it not convenient for personal life situation as a percentage of the total employment working on unusual time



Source: LFS ad hoc module Italy, 2004

Differently, the results considering the working and socio-demographic characteristics are not so different. The reason could be that the combination of working time arrangement is more relevant than the impact of every single working and socio-demographic characteristic.

The ad hoc module results confirm that the concept of working arrangement should be interpreted strictly. Employed people occasionally working on some atypical hours should be not included. In conclusion, following the criteria indicated from the Task Force, for the dimension analyzed we suggest these two indicators: 1. Working on weekend usually; 2. Working at night usually.

Annex

Table 1 - Population in employment working on unusual time as a percentage of the total employment (%)

	Saturday			Sunday			Evening			Night		
	Usually	Sometimes	Totally	Usually	Sometimes	Totally	Usually	Sometimes	Totally	Usually	Sometimes	Totally
Total												
Belgium	19,9	18,3	38,2	10,6	13,1	23,7	15,2	20,2	35,4	5,0	8,6	13,6
Bulgaria	23,5	31,9	55,4	12,0	22,5	34,5	17,9	24,4	42,3	6,5	10,9	17,4
Czech Republic	18,7	26,9	45,6	12,7	18,7	31,4	12,6	28,6	41,2	6,1	14,6	20,7
Denmark	23,4	18,9	42,3	18,5	16,9	35,4	23,6	20,1	43,7	7,3	5,6	12,9
Germany	26,5	22,0	48,5	13,5	14,5	28,0	26,5	19,2	45,7	8,9	6,3	15,2
Estonia	19,3	20,3	39,6	13,6	13,1	26,7	18,0	22,2	40,2	6,6	7,4	14,0
Ireland	22,8	30,8	53,6	14,0	18,1	32,1	11,1	22,8	33,9	6,6	11,8	18,4
Greece	38,5	22,3	60,8	11,7	17,3	29,0	24,9	36,0	60,9	3,8	11,1	14,9
Spain	28,8	5,4	34,2	13,4	3,5	16,9	18,7	12,9	31,6	5,2	5,6	10,8
France	31,2	21,8	53,0	14,1	16,4	30,5	16,6	19,0	35,6	7,0	9,6	16,6
Italy	37,7	9,7	47,4	12,8	5,7	18,5	14,7	5,4	20,1	8,2	3,1	11,3
Cyprus	27,4	20,3	47,7	6,6	14,8	21,4	4,3	12,3	16,6	1,4	7,3	8,7
Latvia	28,1	19,2	47,3	15,7	12,1	27,8	11,4	28,3	39,7	4,9	8,7	13,6
Lithuania	15,8	32,6	48,4	11,6	21,1	32,7	9,7	26,3	36,0	2,8	9,0	11,8
Luxembourg	20,5	8,0	28,5	12,8	6,7	19,5	14,0	6,1	20,1	6,2	3,0	9,2
Hungary	11,6	23,8	35,4	7,3	16,1	23,4	7,8	14,1	21,9	4,8	8,5	13,3
Malta	31,4	19,3	50,7	16,2	12,3	28,5	19,4	9,1	28,5	11,1	8,0	19,1
Netherlands	29,8	15,2	45,0	18,1	11,3	29,4	31,6	13,3	44,9	9,9	5,7	15,6
Austria	30,9	13,0	43,9	17,1	8,3	25,4	14,3	19,8	34,1	7,5	12,2	19,7
Poland	24,2	42,3	66,5	11,5	24,0	35,5	12,2	36,3	48,5	4,8	16,9	21,7
Portugal*	24,5	25,2	49,7	11,3	13,4	24,7	16,0	21,8	37,8	7,5	10,7	18,2
Romania	37,6	15,0	52,6	18,7	8,9	27,6	19,1	12,7	31,8	5,8	5,8	11,6
Slovenia	25,2	37,0	62,2	15,1	18,5	33,6	20,8	24,7	45,5	7,8	12,2	20,0
Slovakia	27,2	25,9	53,1	20,7	15,2	35,9	23,0	12,7	35,7	17,4	6,2	23,6
Finland	23,6	12,4	36,0	16,8	9,0	25,8	25,1	24,4	49,5	9,4	7,4	16,8
Sweden	13,6	15,8	29,4	11,6	15,3	26,9	15,2	14,4	29,6	5,6	7,0	12,6
United Kingdom	22,5	31,0	53,5	12,2	23,3	35,5	27,0	22,9	49,9	11,6	9,3	20,9

* for this country the value related to people working at evening is estimated

	Saturday			Sunday			Evening			Night		
	Usually	Sometimes	Totally	Usually	Sometimes	Totally	Usually	Sometimes	Totally	Usually	Sometimes	Totally
Males												
Belgium	19,8	19,6	39,4	10,8	13,7	24,5	17,9	22,9	40,8	6,4	11,2	17,6
Bulgaria	26,0	37,0	63,0	14,1	27,8	41,9	19,1	27,6	46,7	8,8	13,8	22,6
Czech Republic	20,0	31,4	51,4	13,5	21,7	35,2	13,5	33,0	46,5	6,8	17,1	23,9
Denmark	21,8	22,0	43,8	17,3	19,4	36,7	24,9	21,8	46,7	8,6	7,3	15,9
Germany	26,2	26,6	52,8	13,8	16,9	30,7	28,9	22,9	51,8	11,4	8,4	19,8
Estonia	19,4	23,2	42,6	13,2	13,1	26,3	18,7	26,2	44,9	7,9	8,7	16,6
Ireland	25,6	35,8	61,4	15,7	18,4	34,1	12,1	27,0	39,1	7,6	14,7	22,3
Greece	42,3	22,9	65,2	12,9	18,8	31,7	26,0	36,8	62,8	4,6	13,2	17,8
Spain	27,2	6,0	33,2	13,2	3,5	16,7	19,6	14,7	34,3	6,0	6,4	12,4
France	29,1	26,2	55,3	13,7	18,5	32,2	18,3	23,3	41,6	9,7	13,3	23,0
Italy	38,3	11,6	49,9	13,4	6,2	19,6	16,9	6,3	23,2	10,0	3,8	13,8
Cyprus	24,5	25,4	49,9	7,3	16,4	23,7	4,9	14,6	19,5	2,0	9,5	11,5
Latvia	28,2	22,2	50,4	15,1	12,5	27,6	12,0	30,1	42,1	6,1	11,0	17,1
Lithuania	14,8	35,7	50,5	11,1	22,3	33,4	9,0	28,7	37,7	3,0	10,9	13,9
Luxembourg	21,1	9,5	30,6	14,2	8,0	22,2	16,1	7,5	23,6	8,0	4,1	12,1
Hungary	12,6	27,8	40,4	8,3	19,3	27,6	9,0	16,7	25,7	6,1	10,8	16,9
Malta	33,5	21,4	54,9	18,0	13,5	31,5	21,6	10,2	31,8	13,0	9,1	22,1
Netherlands	29,4	17,1	46,5	17,2	12,1	29,3	32,7	13,5	46,2	12,0	7,5	19,5
Austria	29,9	14,6	44,5	17,3	9,3	26,6	17,0	23,5	40,5	9,5	15,2	24,7
Poland	26,5	47,2	73,7	12,3	26,1	38,4	13,8	40,0	53,8	6,4	21,8	28,2
Portugal*	24,0	30,0	54,0	10,8	14,7	25,5	17,6	25,4	43,0	9,1	13,0	22,1
Romania	39,4	16,3	55,7	19,3	9,4	28,7	19,6	14,1	33,7	7,2	7,1	14,3
Slovenia	25,1	41,6	66,7	15,2	21,5	36,7	21,2	27,9	49,1	10,2	15,6	25,8
Slovakia	29,0	31,1	60,1	22,6	19,0	41,6	24,6	16,0	40,6	20,1	7,6	27,7
Finland	23,4	13,1	36,5	16,7	9,6	26,3	25,7	27,8	53,5	10,6	9,8	20,4
Sweden	12,0	14,0	26,0	10,4	13,7	24,1	15,9	12,3	28,2	6,4	8,5	14,9
United Kingdom	23,6	38,1	61,7	12,2	28,2	40,4	29,5	26,5	56,0	14,2	12,4	26,6

*for this country the value related to people working at evening is estimated

	Saturday			Sunday			Evening			Night		
	Usually	Sometimes	Totally	Usually	Sometimes	Totally	Usually	Sometimes	Totally	Usually	Sometimes	Totally
Females												
Belgium	20,1	16,7	36,8	10,3	12,2	22,5	11,8	16,7	28,5	3,1	5,2	8,3
Bulgaria	20,7	26,2	46,9	9,6	16,5	26,1	16,5	20,8	37,3	3,9	7,5	11,4
Czech Republic	17,0	21,2	38,2	11,5	14,8	26,3	11,4	22,9	34,3	5,1	11,3	16,4
Denmark	25,1	15,4	40,5	19,8	14,0	33,8	22,0	18,2	40,2	5,8	3,6	9,4
Germany	26,7	16,5	43,2	13,3	11,7	25,0	23,7	14,8	38,5	5,8	3,7	9,5
Estonia	19,2	17,3	36,5	13,9	13,0	26,9	17,4	18,2	35,6	5,3	6,1	11,4
Ireland	18,9	24,0	42,9	11,6	17,6	29,2	9,9	17,0	26,9	5,4	7,9	13,3
Greece	32,4	21,3	53,7	9,8	14,9	24,7	23,2	34,6	57,8	2,5	7,6	10,1
Spain	31,2	4,6	35,8	13,9	3,4	17,3	17,6	10,3	27,9	4,1	4,4	8,5
France	33,7	16,8	50,5	14,5	14,1	28,6	14,5	14,1	28,6	3,9	5,3	9,2
Italy	36,8	6,9	43,7	11,9	4,9	16,8	11,4	3,9	15,3	5,4	2,1	7,5
Cyprus	31,1	13,8	44,9	5,7	12,7	18,4	3,5	9,3	12,8	0,7	4,5	5,2
Latvia	28,0	16,0	44,0	16,3	11,7	28,0	10,7	26,4	37,1	3,7	6,3	10,0
Lithuania	16,9	29,5	46,4	12,1	20,0	32,1	10,4	23,9	34,3	2,6	7,1	9,7
Luxembourg	19,8	6,0	25,8	11,0	4,8	15,8	11,3	4,3	15,6	3,9	1,5	5,4
Hungary	10,4	19,1	29,5	6,1	12,2	18,3	6,3	11,0	17,3	3,2	5,7	8,9
Malta	27,0	14,8	41,8	12,4	9,7	22,1	14,5	6,6	21,1	7,0	5,6	12,6
Netherlands	30,3	12,8	43,1	19,2	10,3	29,5	30,3	13,0	43,3	7,2	3,6	10,8
Austria	32,2	11,0	43,2	17,0	7,2	24,2	11,0	15,3	26,3	5,2	8,7	13,9
Poland	21,3	36,2	57,5	10,6	21,3	31,9	10,3	31,7	42,0	2,9	10,9	13,8
Portuga*	25,0	19,5	44,5	11,9	11,8	23,7	14,0	17,5	31,5	5,7	8,1	13,8
Romania	35,4	13,4	48,8	18,0	8,3	26,3	18,6	11,1	29,7	4,1	4,3	8,4
Slovenia	25,4	31,3	56,7	14,9	14,9	29,8	20,4	20,9	41,3	5,0	8,1	13,1
Slovakia	24,9	19,2	44,1	18,4	10,3	28,7	21,0	8,4	29,4	13,9	4,4	18,3
Finland	23,9	11,6	35,5	16,9	8,4	25,3	24,3	20,8	45,1	8,1	4,9	13,0
Sweden	15,3	17,7	33,0	12,9	17,1	30,0	14,4	16,8	31,2	4,7	5,4	10,1
United Kingdom	21,2	23,3	44,5	12,2	17,9	30,1	24,2	18,7	42,9	8,7	5,8	14,5

* for this country the value related to people working at evening is estimated

Table 2 - Population in employment working on unusual time as a percentage of the total employment (ranking)

	Saturday			Sunday			Evening			Night		
	Usually	Totally	Difference	Usually	Totally	Difference	Usually	Totally	Difference	Usually	Totally	Difference
Total												
Belgium	6	6	0	3	6	3	11	11	0	7	10	3
Bulgaria	11	24	13	9	23	14	15	19	4	13	18	5
Czech Republic	4	11	7	11	19	8	7	18	11	11	24	13
Denmark	10	8	-2	25	24	-1	22	20	-2	17	8	-9
Germany	16	16	0	15	14	-1	25	23	-2	22	14	-8
Estonia	5	7	2	16	10	-6	16	17	1	14	12	-2
Ireland	9	23	14	17	20	3	4	9	5	14	20	6
Greece	27	25	-2	8	16	8	23	27	4	3	13	10
Spain	20	3	-17	14	1	-13	17	7	-10	8	3	-5
France	23	20	-3	18	18	0	14	12	-2	16	16	0
Italy	26	13	-13	12	2	-10	10	2	-8	21	4	-17
Cyprus	18	14	-4	1	4	3	1	1	0	1	1	0
Latvia	19	12	-7	20	13	-7	5	16	11	6	10	4
Lithuania	3	15	12	6	21	15	3	14	11	2	6	4
Luxembourg	7	1	-6	12	3	-9	8	2	-6	12	2	-10
Hungary	1	4	3	2	5	3	2	4	2	4	9	5
Malta	24	18	-6	21	15	-6	19	5	-14	25	21	-4
Netherlands	21	10	-11	24	17	-7	27	21	-6	24	15	-9
Austria	22	9	-13	23	8	-15	9	10	1	18	22	4
Poland	13	27	14	5	25	20	6	24	18	4	26	22
Portugal	14	17	3	4	7	3	13	15	2	18	19	1
Romania	25	19	-6	26	12	-14	18	8	-10	10	5	-5
Slovenia	15	26	11	19	22	3	20	22	2	20	23	3
Slovakia	17	21	4	27	27	0	21	13	-8	27	27	0
Finland	12	5	-7	22	9	-13	24	25	1	23	17	-6
Sweden	2	2	0	6	11	5	11	6	-5	9	7	-2
United Kingdom	8	22	14	10	25	15	26	26	0	26	25	-1

	Saturday			Sunday			Evening			Night		
	Usually	Totally	Difference	Usually	Totally	Difference	Usually	Totally	Difference	Usually	Totally	Difference
Males												
Belgium	5	5	0	4	6	2	13	13	0	7	12	5
Bulgaria	15	24	9	16	27	11	16	20	4	16	20	4
Czech Republic	6	15	9	13	21	8	6	19	13	10	22	12
Denmark	8	8	0	23	22	-1	22	20	-2	15	8	-7
Germany	16	16	0	15	15	0	25	23	-2	23	15	-8
Estonia	4	7	3	10	8	-2	15	17	2	13	9	-4
Ireland	14	22	8	20	20	0	5	10	5	12	19	7
Greece	27	25	-2	9	17	8	24	27	3	3	13	10
Spain	18	3	-15	10	1	-9	17	8	-9	4	3	-1
France	21	19	-2	14	18	4	14	14	0	19	21	2
Italy	25	11	-14	12	2	-10	10	2	-8	20	4	-16
Cyprus	12	11	-1	1	4	3	1	1	0	1	1	0
Latvia	19	13	-6	18	11	-7	4	15	11	5	11	6
Lithuania	3	14	11	6	19	13	2	9	7	2	5	3
Luxembourg	7	2	-5	17	3	-14	9	3	-6	14	2	-12
Hungary	2	6	4	2	11	9	2	4	2	5	10	5
Malta	24	18	-6	25	16	-9	20	6	-14	25	17	-8
Netherlands	22	10	-12	22	14	-8	27	18	-9	24	14	-10
Austria	23	9	-14	23	10	-13	11	11	0	18	23	5
Poland	17	27	10	8	24	16	7	25	18	7	27	20
Portugal	11	17	6	4	7	3	12	16	4	17	17	0
Romania	26	20	-6	26	13	-13	17	7	-10	11	6	-5
Slovenia	13	26	13	19	22	3	19	22	3	21	24	3
Slovakia	20	21	1	27	26	-1	21	12	-9	27	26	-1
Finland	9	4	-5	21	8	-13	23	24	1	22	16	-6
Sweden	1	1	0	3	5	2	8	5	-3	7	7	0
United Kingdom	10	23	13	7	25	18	26	26	0	26	25	-1

	Saturday			Sunday			Evening			Night		
	Usually	Totally	Difference	Usually	Totally	Difference	Usually	Totally	Difference	Usually	Totally	Difference
Females												
Belgium	8	7	-1	5	7	2	11	9	-2	5	4	-1
Bulgaria	9	22	13	3	13	10	16	19	3	8	17	9
Czech Republic	4	8	4	8	14	6	9	15	6	15	26	11
Denmark	15	9	-6	27	27	0	22	21	-1	21	9	-12
Germany	17	13	-4	16	11	-5	24	20	-4	21	10	-11
Estonia	6	6	0	17	16	-1	17	17	0	17	16	-1
Ireland	5	11	6	9	20	11	3	7	4	18	21	3
Greece	24	25	1	4	10	6	23	27	4	2	13	11
Spain	22	5	-17	17	3	-14	18	8	-10	11	6	-5
France	25	24	-1	19	18	-1	14	10	-4	8	8	0
Italy	27	15	-12	10	2	-8	9	2	-7	18	3	-15
Cyprus	21	20	-1	1	5	4	1	1	0	1	1	0
Latvia	19	16	-3	21	17	-4	6	18	12	7	12	5
Lithuania	3	21	18	12	26	14	5	15	10	3	11	8
Luxembourg	7	1	-6	7	1	-6	8	3	-5	8	2	-6
Hungary	1	2	1	2	4	2	2	4	2	6	7	1
Malta	18	10	-8	14	6	-8	14	5	-9	23	18	-5
Netherlands	20	12	-8	26	21	-5	27	25	-2	24	15	-9
Austria	23	13	-10	23	9	-14	7	6	-1	16	24	8
Poland	11	27	16	6	25	19	4	23	19	4	22	18
Portugal	14	18	4	10	8	-2	12	14	2	20	22	2
Romania	26	23	-3	24	14	-10	19	12	-7	11	5	-6
Slovenia	16	26	10	20	22	2	20	22	2	14	20	6
Slovakia	13	17	4	25	19	-6	21	11	-10	27	27	0
Finland	12	4	-8	22	12	-10	26	26	0	25	19	-6
Sweden	2	3	1	15	23	8	13	13	0	13	14	1
United Kingdom	10	18	8	13	24	11	25	24	-1	26	25	-1