

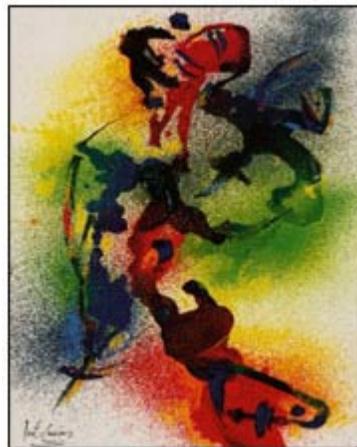
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Comparing Groups by Work Flexibility Across Eight Countries

Pavle Sicherl

SICENTER
Ljubljana, Slovenia

COMPARING GROUPS BY WORK FLEXIBILITY ACROSS EIGHT COUNTRIES

Pavle Sicerl
SICENTER and University of Ljubljana
Email: Pavle.Sicerl@sicenter.si

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Abstract

The paper uses the results from the special surveys undertaken in the project Households, Work and Flexibility (HWF) of the 5. FP of the EU, incorporating Sweden, Netherlands, UK, Slovenia, Czech Republic, Hungary, Bulgaria and Romania. It attempts to form groups of flexibility that provisionally distinguish between desirable and undesirable forms of flexibility. We first grouped respondents into eight categories, combining them later into three major groups; the major criterion was employment status of the respondent, combined with some other 'objective' characteristics of flexibility. These provisional three groups are: flexibility group A (flexible workers for who the flexibility seems to be a preferred pattern of work), flexibility group B (shift and irregular work patterns, temporary jobs and others), and standard employment group C (non flexible full time employment, regular working schedule, one activity). This produces in the case of Slovenia statistically significant differences with respect to work characteristics: e.g. people in flexibility group A undertake more work activities, more hours of work per week, have a more flexible schedule, as well as a more varied type of contract and place of work. This group is more likely to have higher incomes and more household goods, including Internet and PCs. They also have more satisfaction with earnings but less with working hours. On the other hand, flexibility group B is more often disadvantaged. The three flexibility categories show significant differences in ('objective') characteristics related to work and very few significant differences in ('subjective') opinions about possible work/family conflicts or agreement on various household issues. The empirical issue will be examined comparing the eight countries in the HWF project with an interesting range of development levels and past experiences.

Keywords: work flexibility, non-standard employment, candidate countries

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Comparing Groups by Work Flexibility across Eight Countries

PAVLE SICHERL

SICENTER and University of Ljubljana

Introduction

An attempt is made to discuss a provisional categorization of the survey respondents in the HWF project in different categories of flexibility. This grouping will serve the purpose of initiating some hypotheses of how certain aspects of flexibility could be arranged in broader groups that could be more prone to further empirical analysis.

The paper first presents in more detail the results and conclusions of grouping Slovenian survey respondents into selected major flexibility groups. Due to the lack of space and the complexity of the analysis it is not feasible to analyze the situation in other participating countries in the same manner. The comparative analysis thus shows the structure of respondents into the selected eight and/or three categories, as well as the average number of activities and hours of work in the main activity for these categories. Subjective satisfaction with various aspects of work in the main activities is also compared on the basis of the HWF survey. It is followed by the comparison of atypical forms of employment based on secondary sources, and by an analysis of the differences in the level of development and sectoral structure of employment.

Grouping of Slovenian Survey Respondents into Major Flexibility Groups

One possible approach for an operational definition of flexibility is that flexibility is contrasted to a standard form of arrangements. In terms of work flexibility, the standard form of employment, which is seemingly also the most desirable form from the point of view of the job security in Slovenia, is a permanent contract for full time employment with regular working schedule. In combining the empirical importance of such cases with the prevailing subjective preference, we will form the first of the three major categories of employment as those permanently employed full time, with regular working schedule and only one economic activity. This category will be labeled 'standard pattern of employment'. This means that the rest of cases could be labeled flexible forms of employment. Such a dichotomous variable has an advantage of being simple, but the simplicity is outweighed by at least two disadvantages. One disadvantage is that the highest level of aggregation of various flexibility forms encompasses too diverse categories. In general, the greater the level of disaggregation, the more specific conditions can be taken into account; but the price for using many categories is a lack of data (especially in surveys) and problems of using the results for the needed generalization for policy purposes. It is difficult to find the proper balance between these two aspects. The second disadvantage is related to the fact that some forms of flexibility are very desirable from the point of view of the respondent, while some other forms of flexibility might be imposed on him/her as unfavourable conditions, which he/she has to accept to get the job.

In the Analysis of Survey for Slovenia¹ several subdivisions of flexible (non-standard) employment forms are used. The first set of subdivisions breaks down these forms into seven subcategories. There are advantages in doing so, but in many cases it is difficult to draw statistically significant conclusions because of the small number of cases in some of these subcategories. Therefore, the flexible (non-standard) employment forms are then combined into two major groups: flexible employment A and flexible employment B. The flexible employment B category is formed by adding together several forms of flexibility that entail some negative elements attached to them. Of course, it is not possible to be certain whether the breakdown into such categories used in this process (see Tables 1 and 2) is appropriate or not, without knowing subjective evaluations of the persons involved. However, as a first approximation one can start from such assumptions.

The flexible employment category A encompasses flexible categories employed full time with more than one economic activity or having a possibility of flexitime, self-employed, students with additional jobs and retired with additional jobs. This approximation is meant to indicate probable 'voluntary' or 'desirable' forms of flexibility. The flexible employment B category includes those who work shift-work, those who work irregular hours, those working with fixed contracts, part time employment, casual workers, those employed but laid off. In a certain way one can call these forms 'involuntary' or 'undesirable' forms of flexibility.

In the empirical work this categorization into three groups, flexible employment A, flexible employment B and standard employment group C, provides in the case of Slovenia interesting results. It may be tested also by applying this tentative categorization to data from other national surveys and possibly to the comparative stage of research across nations. The initial results can be helpful in searching for a more precise, yet pragmatic definition of flexibility at this level of analysis. Several interesting statistically significant differences between the three groups that were established from the Slovenian survey data can provide new tentative hypotheses. In this article, some results are presented briefly as a rigorous testing on the scale that it was done for Slovenia would undoubtedly exceed its scope.

The results pertain to a subset of respondents, who answered that they had one or more economic activities during the last 12 months and could by this criterion be considered economically active. In the survey it seems that a number of respondents were reluctant to answer questions about their additional kinds of work and additional income, so that some of the respective information might be less reliable. Thus, here we mainly deal with a subset of less than 600 economically active respondents who provided the necessary information. One of the possible subdivisions of this set into eight flexibility categories, in the first round, and into the three above-mentioned categories in the second round, is shown in Tables 1 and 2.

The major criterion for categorization is the employment status of the respondent, which is then combined with some other characteristics of flexibility. As mentioned before, the emphasis here is on 'objective' elements of work status and flexibility, which may or may not correspond to the subjective evaluation of the respondents with

¹ The Analysis of Survey for Slovenia is available in [Sicherl and Remec 2002], a slightly revised version is available in Research Report #3 containing Country survey reports of the participating countries [Wallace 2003].

respect to these characteristics². Thus the approach taken here has the advantage that such ‘objective’ elements could be compared for different social groups or different countries, but obviously should not be considered as a statement of the difficulty or satisfaction with a particular position with respect to a given element of work.

Table 1 Flexibility grouping into eight categories

Category	Frequency	Percent (%)
1. Full time employment, more activities, flexitime	83	14.4
2. Full time employment, shift and irregular work	115	19.9
3. Part time employment	7	1.2
4. Fixed contract	60	10.4
5. Self employed	41	7.1
6. Students and retired with one or more activities	64	11.1
7. Others	27	4.7
8. Employed full time, regular schedule, one activity	181	31.3
	n=578	

Table 2 Flexibility grouping into three categories

Category	Frequency	Percent (%)
Flexibility group A (1+5+6)	188	32.5
Flexibility group B (2+3+4+7)	209	36.2
Standard employment group C (8)	181	31.1
	n=578	

Source: [Sicherl 2003: 50]

Some of the subdivisions in Table 1 are self-explanatory. Part time employment and fixed contract (temporary) employment are two categories of flexible work conditions, which one wishes to compare in time and cross nationally. The same goes for the category self-employed. The major dilemma is how to categorize by their flexibility characteristics those employed full-time, who comprise about two thirds of the subset of economically active respondents analysed. As explained earlier, the first of the three major categories of employment comprises those employed full time, with regular working schedule and only one economic activity. This category will be labelled ‘standard pattern of employment’ and is in tables labelled as ‘standard employment category C’. The other two categories of those employed full time are then considered categories of flexible employment, as distinct from the above-mentioned standard employment category, as they exhibit some ‘positive’ or ‘negative’ elements of flexibility in their work situation. Category 1 in Table 1 comprises those employed full time that have two or more economic activities or are employed full time and have the advantage of flexitime privileges, i.e. they can start or finish their working time in a flexible arrangement. In category 2 in the table those with some ‘negative’ characteristics of work flexibility, here approximated by shift and irregular work schedule, are enumerated. These two categories will be the backbone of the subdivision of those with some flexibility characteristics (as distinct from the standard employment category) into flexibility group A and flexibility group B.

² For instance, we have considered that working in shifts or irregular schedule is a negative element of work; while in some survey by the Statistical Office of Slovenia a rather large number of those working in shifts expressed their satisfaction with such a position. Of course, it is difficult to disentangle whether, in answering that question, they were satisfied that they had a job or whether they were satisfied with the shift arrangement as such.

Grouping of respondents into three categories, presented in Table 2, is done from the eight categories in the Table 1 in the following way. Standard employment group C is a category by itself, which could be in certain instances compared to the rest of the respondents as those with some flexibility characteristics. However, both for policy and for research considerations it is more interesting to subdivide those with some flexibility characteristics at least into the two groups used here, which could be later refined and/or amended. Flexibility group A encompasses those with some ‘objective’ positive characteristics of flexibility, which are in this instance a summation of categories 1, 5 and 6 from Table 1. We consider that in addition to the category 1 explained above, one could add into this group also the self-employed, and students and the retired with one or more activities³. For the self-employed in Slovenia we may consider that this position is in majority of cases a voluntary decision aimed at more independence and flexibility in their work, rather than a consequence of being laid off and being forced in such a status. This may be very different in some other transition countries and in international comparisons one should subdivide the self-employed category accordingly.

Flexibility group B comprises four categories from Table 1 (adding categories 2, 3, 4 and 7). The most important component is category 2 with shift and irregular work as explained above. Part-time employment, which is rather rare in Slovenia, and fixed contract (temporary) employment are placed in this flexibility group with ‘negative’ objective elements on the presumption that in the majority of these cases the employees would prefer a firmer commitment from the employers. The group ‘others’ comprises casual workers, unpaid workers in family business, unemployed with additional job, farmers with one economic activity and those laid off. The greatest majority of those included in the category ‘others’ have ‘negative’ elements of flexibility associated with their work position. To sum up, there are no doubt other possible criteria for categorizing respondents by various flexibility characteristics. Here an attempt is made to bring attention to the ‘objective’ elements of flexibility to initiate a discourse on the positive and negative aspects of flexibility arrangements at work, looking from one side, that can be later connected also with the work-family situations, from the other. As the most important policy issue with respect to work flexibility we see the question of how to balance the positive and negative aspects of work flexibility from both the employees’ and the employers’ side. The analysis of work characteristics, personal and social characteristics, satisfaction and decisions with various aspects of work, possible work/family conflicts and personal perception of well-being across the three chosen flexibility groups will hopefully initiate further discussion and research on a partial aspect of the important policy issue about work flexibility.

Table 3 presents the percentage distribution for the three flexibility groups by the elements of some work characteristics. The number of activities in the last twelve months is distributed as expected. The standard group C is by definition involved only in one economic activity. From the flexibility group A 40% of respondents have two or more economic activities. Similarly, this group is distinctively different from both flexibility group B and even more from the standard group C in working more hours in all activities (i.e. the summation of hours worked in all activities); 41% of them are

³ One could argue that both students and pensioners do not have to engage in an economic activity as far as their basic status is concerned, so that their engagement in one or more economic activities is a voluntary decision.

Table 3 Work characteristics (percent)

	Flexibility group A	Flexibility group B	Standard group C	n
<i>Number of activities in last 12 months *</i>				
1	60	93	100	483
2	29	6		66
3	7	1		15
4	3			5
5	1			2
6	1			1
				572
<i>Hours of work in all activities *</i>				
Less than 36 hours	15	12	2	54
From 37 to 42	21	55	76	287
From 43 to 50	23	17	19	110
More than 50 hours	41	16	4	114
				565
<i>Working schedule *</i>				
Regular working hours: Monday morning to Friday afternoons	25	16	100	257
Shift work	12	51		124
Flexitime	30	3		59
Other regular schedule	6	7		25
Irregular, it varies	27	21		91
Not available	1			1
				557
<i>Type of contract in main activity *</i>				
No contract	9	7		29
Self employed	22	2	2	45
Permanent contract	46	54	95	359
Reduced working time contract	2	2	2	11
Fixed term	3	30		65
"On call" subject to requirements	2	2	1	9
With a temporary work agency	8	1		15
On a fee only basis	5	2	1	13
On a work experience project		1		1
Not available	2	2		7
				554
<i>Place of work</i>				
At home	8	6	1	28
Combined at home and elsewhere	11	2	2	26
Within the locality where you live	31	37	39	199
Commuting to different locality	36	49	50	251
Abroad	1	1	2	6
Always changing	14	5	7	47
Other situation	1			1
				558

Significance level of chi-square tests: * 0.01. Source: [Sicherl 2003: 53]

working more than fifty hours per week. In the standard group C 76% are working the 'standard' working week (the group from 37 to 42 hours), only 21% of flexible group A are working the same hours. For all three aspects of work characteristics in Table 3 (number of activities in the last 12 months, hours of work in all activities and working schedule) the percentage difference distribution among the three flexibility categories is statistically significant at the 0.01 significance level of chi-square tests. Flexibility group A thus works on the average in more activities, works more hours per week and has a more flexible schedule than the other two groups. It also shows higher values in income distribution and household goods distribution.

The type of contract in the main activity also differs significantly among the three groups; it is very concentrated in standard group C as expected and most diversified in flexibility group A. The prevailing type of contract in the main activity is permanent contract at about 65% of the respondents. In the standard group C the percentage of permanent contract is 95%⁴, with 54% for flexibility group B and 46% for flexibility group A. However, the distinction between flexibility groups A and B is pronounced in the other categories of contract, self employment being the most important in flexibility group A and fixed term employment in the flexibility group B. The differences among the three categories with respect to the place of work are somewhat less pronounced; in all categories the highest share commutes to work in a different locality⁵.

Testing the percentage distributions for the three flexibility groups by their personal characteristics and the respective social groups shows significant differences for age group, social class and occupational status; but not for gender, education, type of settlement and family composition [Sicherl and Remec 2002: 37]. For the standard group C 75% belong to the age group 25-49 years, 67% for flexibility group B and 54% for flexibility group A. Flexibility group A has the widest distribution over the age groups, this is most probably a consequence of inclusion of students and retired with one or more activities in the group A. It also shows that some flexibility characteristics can be fruitfully used at both ends of the age distribution⁶. Flexibility group A respondents on the average belong distinctly in the middle and the upper middle class, 67% and 13% respectively. The greatest disparity is between flexibility group A and flexibility group B, where the corresponding percentages are 52% and 3%, respectively, with 45% of the latter group belonging to the working class. If one uses as an approximation of social classes the occupational status (ISCO 1 digit), the differences are statistically significant. Here, the distinction is not very pronounced between flexibility group A and standard group C, but rather between them and flexibility group B, which is heavily concentrated in ISCO groups 5 and 8 (service workers, market sales workers and plant and machine operators). In sum, age, social class, occupational status and education exhibit statistically significant differences for the three categories, gender differences exist but are not very pronounced, while the

⁴ Some small percentages for this group are a consequence of the fact that the variable on employment status that was used for classification purposes was a multi-response variable.

⁵ However, the flexibility group A is characterized also by the widest distribution of other cases, it has distinctly higher percentages in elements 'working at home', 'combined at home and elsewhere' and 'always changing'.

⁶ Gender differences are not so pronounced and are not statistically significant. If we compare the distribution of men between the three categories, the percentage differences are not large. With respect to women the differences are larger with under representation of women in flexibility group A category.

urban/rural classification and family composition with respect to children are not significantly different among the three flexibility categories.

Table 4 Different incomes of respondent by flexibility category (n=578)

	Flexibility group A	Flexibility group B	Standard group C
Wage or salary *	51.6%	82.8%	100%
Self employed earnings *	17.6%	2.9%	
Income from additional jobs (can be occasional and / or casual work) *	34.0%	11.5%	2.2%
Income from own farming or agricultural production (including produce) *	9.0%	3.8%	
Pension *	13.3%	1.4%	0.6%
Unemployment benefit *	0.5%	3.8%	
Grant or scholarship for education and training, including loans *	9.6%		1.1%
Income from investments, savings or rents from properties *	6.4%	0.5%	1.7%
Profit from a business *	8.0%	1.0%	1.1%
Private transfers (e.g. alimony, or payment from others such as parents) *	9.6%	0.5%	0.6%
Other sources	9.0%	3.8%	3.3%
Other social transfers (e.g. child allowance, parental leave)	14.9%	12.4%	21.0%
None, the respondent had no income last month	0.5%	0.5%	

Significance level of chi-square tests: * 0.01. Source: [Sicherl 2003: 27]

When sources of income are cross-tabulated with the three flexibility categories, it can be observed that the situation is quite different among these three flexibility categories. The group ‘full time and regular schedule, one economic activity’ is practically exclusively dependent on wages and salaries (100% of responses), with the addition of other social transfers, which do not depend on the condition of work but on the social security conditions. Flexible employment group B is substantially more diversified with respect to the sources of income, but still very much concentrated in wage or salary category (82.8% of responses). Flexible employment group A has much more incidence of different and additional income categories: wage and salary is reported by 51.6% of respondents, 34% of respondents report income from additional jobs and there are also important categories of the answers (self employed earnings with 17.6% of responses and profit from a business for 8.0% of respondents) which are practically negligible in the other two groups.

The differences with respect to satisfaction with the stability of work are statistically significant as shown in Table 5. As expected, the dissatisfaction is much higher in the flexibility category B, where also temporary jobs and part-time jobs are included, together with a pronounced share of ISCO categories 5 and 8. This is an indirect confirmation of a plausible element for a distinction between flexibility categories A and B. The ‘objective’ elements for such distinction are here confirmed by ‘subjective’ opinions about satisfaction with this aspect of work. Similarly, the differences in satisfaction with duration of contract are statistically significant and again very pronounced in the percentage of dissatisfaction for the flexibility group B.

Satisfaction with respect to hours of work is again statistically significant, but with a different position of the three flexibility categories. In this case, the least satisfaction is expressed in flexibility group A, which was earlier ascertained out as distinctively working more hours. The reverse position is observed with respect to satisfaction with earnings, where differences are statistically significant, but here the level of satisfaction is distinctly higher in the flexibility group A category. Thus, flexibility

category A is more satisfied with respect to earnings and less satisfied with respect to hours of work than the other two categories. The differences with respect to location of work are not significant; the high percentage in the groups ‘satisfied’ or ‘very satisfied’ (between 82% and 90%) is again rather surprising.

Table 5 Satisfaction with various aspects of work (percent)

	Flexibility group A	Flexibility group B	Standard group C	n
<i>General satisfaction with work *</i>				
Dissatisfied / very dissatisfied	8	12	3	44
Neither satisfied nor dissatisfied	20	23	19	117
Satisfied / very satisfied	72	65	78	397
				558
<i>Stability of work *</i>				
Dissatisfied / very dissatisfied	9	23	7	71
Neither satisfied nor dissatisfied	20	20	15	98
Satisfied / very satisfied	72	57	78	368
				537
<i>Duration of contract *</i>				
Dissatisfied / very dissatisfied	2	19	2	37
Neither satisfied nor dissatisfied	11	11	3	36
Satisfied / very satisfied	87	70	95	375
				448
<i>Hours of work *</i>				
Dissatisfied / very dissatisfied	18	17	10	83
Neither satisfied nor dissatisfied	24	13	18	99
Satisfied / very satisfied	59	70	72	373
				555
<i>Location of work</i>				
Dissatisfied / very dissatisfied	3	6	3	24
Neither satisfied nor dissatisfied	13	12	7	59
Satisfied / very satisfied	84	82	90	472
				555
<i>Earnings *</i>				
Dissatisfied / very dissatisfied	21	34	32	160
Neither satisfied nor dissatisfied	28	31	35	172
Satisfied / very satisfied	51	35	33	217
				549

Significance level of chi-square tests: * 0.01. Source: [Sicherl 2003: 56]

With respect to decisions about various aspects of work, there are again statistically significant differences between the groups: the freedom of decision-making about the number of hours of work, general working schedule, overtime and place of work is much larger for flexibility group A than for the other two groups [Sicherl and Remec 2002: 49].

Economic characteristics of the household of the respondents represent important additional information to the information shown in the sections on work characteristics, and personal characteristics and social groups. The differences for income distribution (by sextiles) are statistically significant and show that the

household income is the highest for the flexibility group A and lowest for flexibility category B. A similar conclusion holds for personal income by sextiles. The same holds for the three categories of permanent household goods where the differences among households are still important (second house or flat, internet access, personal computer). Both for income and for these durable goods the ranking is the same: flexible employment group A occupies the most favourable position, followed by standard group C, while flexible group B shows the lowest average income and lowest possession of these household goods [Sicherl and Remec 2002: 41, 23].

The analysis above has shown that for practically all analysed aspects of work characteristics, personal characteristics and social groups, satisfaction with various aspects of work, and decisions about various aspects of work, the differences among the three flexibility categories were statistically significant⁷. Thus on the side of work issues, the applied categorization has no doubt proved as very relevant in bringing up the major differences among the three flexibility categories.

The next important stage of analysis is to look into the question whether the applied categorization implies also significantly different situations with respect to the work/family conflicts, whether such conflicts appear always, often, sometimes, rarely or never. There are two surprising outcomes in analyzing this part of the questionnaire. First, on the general level a surprisingly high level of answers indicate that such conflicts never appeared. Second, of the five aspects of possible work/family conflicts only one, whether one takes work home to finish, shows significant differences among the three flexibility categories, in all other four the differences are not statistically significant. In addition, the same pattern is observed with respect to the degree of agreement about household finances, about allocation of household tasks, about time spent together and about time spent at work, also do not show statistically significant differences among the three flexibility categories. Another set of subjective opinions in the survey was related to the personal perception of well being. Four issues were asked: how the respondent is satisfied with the way of living, with the economic situation of the household, how he/she compares the economic household situation to that of five years ago, and what his/her expectations are about the economic household situation for the next year. First, with respect to the satisfaction with the way of living and the economic situation of the household, the differences among the three flexibility categories are not statistically significant. As in the earlier questions about the level of satisfaction, the level of satisfaction is rather high here too, higher with the way of living than with the economic situation of the household. Second, also for the comparison with the situation five years ago and the expectations for the next year, the differences are not significant. For both questions, the category 'stayed the same' comprises the highest percentage of answers [Sicherl and Remec 2002: 40, 50, 51].

According to the answers in the survey, the three flexibility categories show very significant differences in ('objective') characteristics related to work and practically no significant differences in ('subjective') opinions about possible work/family conflicts or agreement on various household issues.

⁷ Of the important aspects where the differences are not statistically significant, type of settlement (urban/rural) and family composition (defined as families with or without children aged 14 and less) should be mentioned; the differences in gender and education are greater, but still not statistically significant in comparing the three aggregate flexibility categories.

Comparative Analysis for Selected Countries Participating in the HWF Project

In this section some limited comparisons across selected countries participating in the HWF project will be provided, based both on the results of the HWF surveys as well as based on information from some secondary sources to include some general information and to provide some sensitivity analysis.

Countries in Table 6 are ranked by the percentage value of respondents employed full-time in categories 1, 2 and 8. An interesting observation shows that the two developed countries Sweden and the United Kingdom are placed below the HWF7 average, all candidate countries with the exception of Romania are above that average and show a greater number of employed full-time. Thus Sweden, the United Kingdom and the Netherlands⁸ all have a higher level of development, better employment situation and higher earnings, and yet at the same time have a higher share of atypical forms of employment, especially part-time work. Whereas the situation is of course very different in different countries, in the policy discussions it is many times wrongly assumed that atypical forms of employment are necessarily inferior to the standard forms of employment. In the cross-country comparison within the HWF project the opposite is true for various reasons, the higher share of atypical forms of employment is associated with a better employment situation and higher work satisfaction.

There are several evident departures from the average structure of the chosen categories. As far as part time employment is concerned the United Kingdom and Sweden have obviously much higher share than the candidate countries. Romania has a very high share of 'Others', which is generally the most disadvantaged category. Slovenia and Sweden have the highest share of 'Students and retired with one or more activities', Slovenia has also a high share of fixed contracts. For the standard employment group C the highest share is found in Hungary and Bulgaria.

Table 6 Flexibility grouping into eight categories (percent)

	HU	CZ	BG	SI	S	RO	UK	HWF7
1. Full time employment, more activities, flexitime	10	19	7	14.6	11.7	11.1	10.5	12.1
2. Full time employment, shift and irregular work	25.8	20.8	18.7	20.5	13.7	20.5	14.9	18.9
3. Part time employment	4.9	2.6	5.8	1.1	17	5.8	23.8	8.8
4. Fixed contract	0.6	1.3	4.2	10.3	1.2	2.2	0.8	2.6
5. Self employed	11.9	13.8	11.7	6.8	8.4	6.6	10.9	10.1
6. Students and retired with one or more activities	3.3	5	2.4	10.1	9.6	8.6	5.5	6.4
7. Others	3.5	3	4.8	4.4	1.7	17	1.1	5.1
8. Employed full time, regular schedule, one activity	40	34.5	45.4	32.2	36.8	28.3	32.5	36
Employed full time (1 + 2 + 8)	75.8	74.2	71	67.3	62.2	59.9	57.9	67
Flexibility group A (1+5+6)	25.2	37.7	21.1	31.5	29.7	26.3	26.9	28.6
Flexibility group B (2+3+4+7)	34.8	27.8	33.5	36.3	33.5	45.4	40.6	35.4
Standard employment group C (8)	40	34.5	45.4	32.2	36.8	28.3	32.5	36
n	658	1022	898	562	1119	830	631	5720

Source: [Sicherl 2003: 65]

⁸ The latter are not included in the table because of a different categorization of data in the database.

Table 7 Average number of activities reported in the last twelve months (n = 5958)

	S	CZ	SI	HWF7	UK	RO	HU	BG
1. Full time employment, more activities, flexitime	2.19	1.84	1.85	1.89	1.91	1.87	1.89	1.52
2. Full time employment, shift and irregular work	1	1	1	0.98	1	1	1	0.9
3. Part time employment	1.59	1.33	1.33	1.36	1.21	1.58	1.27	0.92
4. Fixed contract	2.38	1.46	1.12	1.15	0.83	1.05	1.4	0.82
5. Self employed	1.48	1.33	1.15	1.28	1.26	1.43	1.14	1.05
6. Students and retired with one or more activities	1.7	1.47	1.46	1.42	1.4	1.08	1.23	1.09
7. Others	1.58	1.56	1.03	1.08	0.73	1.13	0.63	1
8. Employed full time, regular schedule, one activity	1	1	1	1	1	1	1	1
Average	1.37	1.26	1.2	1.2	1.19	1.19	1.11	1.01
Flexibility group A	1.83	1.61	1.57	1.55	1.54	1.5	1.45	1.2
Flexibility group B	1.38	1.13	1.05	1.1	1.11	1.13	0.99	0.91
Standard employment group C	1	1	1	1	1	1	1	1

Source: [Sicherl 2003: 66]

One aspect of work flexibility is the average number of activities reported in the last twelve months. Although there are differences among countries, there is also some clear distinction between the selected categories. By definition the standard employment category C has only one activity. As the respondents with more activities have been shifted into category 1, also the category 2 has only one activity⁹. It is interesting that for category 1, which is the most important subgroup in the flexibility group A, the average number of income activities (1.9 activity) is very similar across the participating countries. This category is followed by category 6 (students and retired with one or more activities) and category 3 (part time employment). On the basis of the survey results Sweden is the most flexible participating country with respect to the average number of income activities in the last twelve months, followed by the Czech Republic, Slovenia, Great Britain and Romania.

Table 8 presents hours of work per week in the main activity for eight categories of flexibility, which shows that the differences for a given category across countries are considerably smaller than the differences in hours of work among different categories within a given country. The self-employed persons are those who work the longest hours in all participating countries, with the exception of the United Kingdom. For the standard employment category C the differences between countries are small, the average is 41 hours per week in the main activity, the upward and downward variations being only one hour. Those, who work substantially fewer hours, are students and retired with one or more activities and those employed part time. This analysis shows that the rather large differences between countries in the average number of working hours per week in the main activity (shown in Table 9) are to a great extent a result of different shares of those who work part time and of students and retired participating in the income activities.

⁹ With the exception of Bulgaria for which there may be some problems in the calculation from the common database.

Table 8 Hours of work per week in the main activity for eight categories of flexibility
n = 4747

	RO	SI	CZ	BG	HWF6	S	UK
1. Full time employment, more activities, flexitime	44.7	43.8	43.3	38.9	42.8	42.2	42.3
2. Full time employment, shift and irregular work	46.9	43.0	43.6	40.9	43.3	41.6	44.4
3. Part time employment	31.5	22.8	26.2	33.5	26.4	28.6	19.5
4. Fixed contract	48.4	40.9	40.1	32.3	38.9	33.3	45.8
5. Self employed	53.7	53.2	52.1	48.6	47.3	44.6	43.0
6. Students and retired with one or more activities	38.7	28.7	18.9	30.5	27.0	21.6	21.9
7. Others	47.9	48.1	43.0	32.0	42.4	29.1	31.2
8. Employed full time, regular schedule, one activity	42.4	41.9	41.3	40.0	41.3	41.9	40.8
Average	44.5	42.0	42.3	40.0	40.6	39.3	35.7
Flexibility group A	45.9	41.9	43.6	44.6	42.6	42.7	38.7
Flexibility group B	45.2	42.2	41.8	37.4	38.2	34.3	29.5
Standard employment group C	42.4	41.9	41.3	40.0	41.3	41.9	40.8

Source: [Sicherl 2003: 75]

Table 9 Hours of work per week in the main activity by gender, n = 4921

	Men	Women	Average
RO	47.76	41.45	44.61
SI	44.03	39.23	41.83
CZ	43.84	39.15	41.69
BG	41.00	39.02	40.01
HWF7	43.00	35.94	39.55
S	41.67	36.54	39.25
UK	43.45	29.14	35.41
NL	40.45	26.16	33.55

Source: [Sicherl 2003: 72]

In Table 9 the differences in working hours per week are substantial: also the grouping is clear, the overall working hours are higher in candidate countries than in the three developed EU 15 countries. These differences are especially striking for women in the UK and in the Netherlands. For all countries (with possible exception of Bulgaria), the number of working hours per week is statistically significantly higher for men than for women. We can conclude that the differences in the average number of working hour per week between countries are to great extent influenced by structural characteristics, i.e. the share of part time employment for women and by the share of students and retired in the income activities.

It is of interest to compare the categorization of survey respondents with income activity in the above tables, which are based on objective elements of their position in work, with the responses with respect to the subjective satisfaction with various aspects of work in the main activity. Table 10 presents the weighted average of responses in the range from 1 (very unsatisfied) to 5 (very satisfied). These responses are of interest in two respects. On the one hand we can compare among countries the results of the satisfaction with a given aspect of work; on the other we can establish the ranking of the six analyzed aspects of work with respect to the degree of satisfaction.

Table 10 Weighted average of responses with respect to the subjective satisfaction with various aspects of work in the main activity

How satisfied are	NL	S	UK	HWF8	SI	BG	RO	HU	CZ
you in general:	4.40	4.21	4.13	3.87	3.76	3.69	3.63	3.61	3.57
Duration of contract	4.64	4.53	4.45	4.11	3.90	3.71	3.77	4.09	3.84
Location of work	4.34	4.39	4.33	4.09	3.98	3.96	3.94	3.95	3.83
Stability of work	4.25	4.17	4.16	3.84	3.65	3.42	3.73		3.60
Hours of work	4.44	3.89	4.03	3.83	3.59	3.87	3.72	3.61	3.48
Earnings	3.85	3.23	3.48	3.08	3.06	2.77	2.63	2.73	2.96

Source: [Sicherl 2003: 83]

At first glance it is noticeable that the degree of the expressed satisfaction with work is high. The ranking of the participating countries is expected; the highest value is that for the Netherlands, followed by Sweden and the United Kingdom. The candidate countries show below the average values of subjective general satisfaction with work. Regarding the subjective satisfaction with work in general for the candidate countries it is unexpected that Hungary and the Czech Republic show a slightly smaller weighted average than Bulgaria and Romania.

In Table 10 the countries are ordered horizontally by the value of the subjective satisfaction with work in general; the other five aspects of work are ordered vertically with respect to the average HWF8 value of the weighted average. In the vertical direction are respondents on the average more satisfied with duration of contract and location of work. The second group with lower degree of satisfaction includes stability of work and hours of work. In all countries the lowest degree of satisfaction expressed is that with earnings (the numerical value for HWF8 of 3.07 means approximately neither satisfied nor unsatisfied).

Comparisons Based on Secondary Sources

The results of the HWF project surveys in participating countries have to be supplemented by information from secondary sources about these countries as well as on the position of these countries over time with respect to the level of development and structure of the economy.

Table 11 is based on statistical data presented in Employment in Europe 2002 [European Commission 2002]¹⁰. The share of self-employment in total employment in 2001 is very similar in all HWF project countries and close to the EU15 average; the only two outliers are Romania on the high side and Sweden on the low side. The case of Romania is easy to explain by the high share of agriculture in total employment, the low value for Sweden is an interesting case for a more detailed inquiry.

The share of part-time employment in total employment is a different case. The Netherlands stands out with 42.2% of part-time employment in total employment, followed by the UK with 24.9% and Sweden with 24.1%. Even the latter two

¹⁰ One should be aware that even within the EU the comparability of employment data across countries and over time is an acute problem stated in European Commission [2000 : 17].

countries have more than four times higher share of part-time work than the candidate countries (excluding the outlier Romania). In this category the most important differences between the group of developed and the group of candidate countries in the HWF project are established. First, the gap between the two groups is the largest here. Second, for the first group this is the largest category of atypical employment, for candidate countries the smallest. Third, in the first group the gender divide is very large, in candidate countries it is not yet of important magnitude. The share of fixed term contracts is the highest in the Netherlands, Sweden and Slovenia; in all these countries there is a marked trend of increase in the last decade.

Table 11 Summary table for the HWF project countries for 2001

Shares of the three atypical forms of employment in total employment									
	NL	S	UK	SI	CZ	HU	BG	RO	
Self-employment as % of total employment	13.8	5	11.7	11.8	14.6	13.9	13.7	25.7	
Part-time employment as % of total employment	42.2	24.1	24.9	6.1	4.3	3.3	3.4	16.8	
Fixed term contracts as % of total employment	14.3	13.5	6.8	10.8	6.9	6.4	5.7	1.6	
Distribution of employment by sectors									
	NL	S	UK	SI	CZ	HU	BG	RO	
Share of employment in services	76.7	74.1	73.7	51.4	54.6	59.4	57.6	29.7	
Share of employment in industry	19.8	23.3	24.8	38.6	40.5	34.5	32.7	25.8	
Share of employment in agriculture	3.4	2.6	1.4	9.9	4.9	6.1	9.7	44.4	
Activity rates total and by gender									
	NL	S	UK	SI	CZ	HU	BG	RO	
Activity rate per population aged 15-64	75.8	75.2	75.6	67.5	70.7	59.7	63.3	68.3	
Male activity rate per population aged 15-64	84.3	76.9	83	72.5	78.5	67.6	67.8	74.3	
Female activity rate per population aged 15-64	67.1	73.4	68.1	62.5	63	52.2	59.1	62.4	

Source: European Commission (2002)

As elaborated in Sicherl [2002] there is also a very substantial gap between the three developed countries and the candidate countries in the distribution of the civilian employment by sectors of activity. The share of agriculture influences the share of self-employment in total employment; in the HWF group of countries the highest value is that of Romania. A much more interesting influence on the share of atypical forms of employment is the relative importance of services in employment. Here there are substantial differences also among developed countries. The leading countries among the developed countries studied are the USA and the Netherlands. Close to them are Sweden, the UK and France. Countries like Germany, Italy and Japan have a distinctly lower share of services in civilian employment [Kalleberg 2002]. The candidate countries have still lower values of this share, mainly because of their high share of industry, in Romania especially because of the high share in agriculture. The EU group of HWF project countries is at the top of importance of service sector in the world perspective, the candidate countries lag in time even more than in GDP per capita. In addition to the lag in the general level of economic development they belong to the type of countries that have because of their emphasis on industry made relatively less advance in developing services.

A major difference between participating EU countries and candidate countries is also in the level of development. With respect to the quantitative indicators of the level of development, GDP per capita at purchasing power parity is the most commonly used indicator of the achieved level of economic development. According to Eurostat¹¹, the level of GDP per capita (at purchasing power parity) in 2001 amounted to 112% of the EU15 average for the Netherlands, 100% for Sweden and the UK, 69% for Slovenia, 57% for Czech Republic, 51% for Hungary, 28% for Bulgaria, and 25% for Romania.

However, in addition to the static measures of disparity the degree of disparity can be measured also in a temporal perspective. Time distance generally means the difference in time when two events occurred. We define a special category of time distance, which relates to the level of the analysed indicator. The suggested statistical measure S-distance¹² measures the distance (proximity) in time between points in time when the two compared series reach a specified level of the indicator X. The time distance approach is a new view of the information, using levels of the variable(s) as identifiers and time as the focus of comparison and numeraire. It is theoretically universal, intuitively understandable and can be usefully applied as an important analytical and presentation tool to a wide variety of substantive fields. Being a new complementary view of the information by adding (n+1) dimension to existing measures, no previous results are replaced, and adding this time dimension to existing analysis can only enrich understanding. As everybody understands time, from ministers, managers to media and general public, time distance is also an excellent presentation and communication tool.

The logic of calculation of the backward looking (ex post) S-distance can be observed if in the historical time series for EU15 one looks for the year in which the EU15 had the same percentage of its 2001 value of GDP per capita as Slovenia had in 2001. This was approximately in the year 1983, which means that the backward looking time distance is about 18 years. In other words, the same value of the analysed indicator was achieved in EU15 18 years ago (1983 compared to 2001 in Slovenia). The corresponding values are for Czech Republic 29 years, for Hungary 32 years. The value for EU15 average in 1960 was 36% of its value in the year 2000, which means that the present values of GDP per capita for Bulgaria and Romania are lower than that and thus the backward looking S-distance is greater than 40 years [Sicherl 2003: 132-136].

¹¹ For the EU15 time series of GDP per capita in constant prices European Commission [2001a], for candidate countries Eurostat [2002]. For an explanation of the derivation see Sicherl [2002: 14-17].

¹² The operational statistical measure of the time distance concept is a special category of time distances S-distance: for a given level of X_L , $X_L = X_i(t_i) = X_j(t_j)$ the time separating unit (i) and unit (j) is $S_{ij}(X_L) = \Delta T(X_L) = T_i(X_L) - T_j(X_L)$. See e.g. Sicherl [1997]. Several other papers of the author of the time distance concept of measuring differences between time series can be found on <http://www.sicenter.si/td.html>. They provide more details on time distance methodology with empirical application to a range of problems. The S-distance distance concept can be generalised to other types of applications - analysis of discrepancy between the estimated and actual values and goodness-of-fit in time series, regressions and models, forecasting and monitoring etc., and extended to variables other than time.

Another important structural difference is the share of employment in services in total civilian employment. The leader in increase in the share of services in the last 30 years is the USA, which was joined by the Netherlands. Of the ten countries analyzed in Sicherl [2002: 10] three groups of countries were observed. In addition to the two leaders mentioned, in the first group Sweden, UK and France were positioned, with values above 71%. The second group with values around 62% was Germany, Italy and Japan. The third group was the HWF candidate countries. The two OECD countries, Hungary with 58.4% and Czech Republic with 47.1% were in the range with values for 2000 for Slovenia 52.7% and Bulgaria 54%, while Romania with 29% being much behind [European Commission 2001]. However, the static measure of difference between the first two groups related to the most developed countries does not convey an impression of a very large difference between e.g. Sweden with 72% and Japan with about 63%. Both of them started at about 28% in 1920 and the difference of 9-percentage points in the share does not look very substantial. However, taking into account the dynamics of the indicator, the ex post time distance between Sweden and Japan is about 18 years, as the value for Japan in 1999 was achieved in Sweden already in 1981. The time lag behind the USA with respect to the share of services in total civilian employment is for Japan, Germany and Italy about 27 years, in the USA their 1999 values were attained in 1972. Among the candidate countries the highest value was in 1999 that of Hungary, the value of which was achieved in the Netherlands already in 1974, i.e. 25 years ago [Sicherl 2002: 9]. The conclusion is obvious, both the conventional static measure of disparity and time distance are to be analysed simultaneously to arrive at a more realistic evaluation of the situation. In the dynamic world of today it is hardly satisfactory to rely only on static measures of disparity¹³.

Conclusions

The issue of flexible employment and of optimal balance between flexibility and security is of a major economic, social and political importance. It is a very complex problem and it will be a permanent issue of continuous adjustments to changing situations and preferences¹⁴.

The issue, whether atypical jobs are good or bad jobs, is to be investigated as an empirical issue¹⁵. The section analysing in more detail the results of the Slovenian HWF survey confirms that in this case study the atypical jobs are not necessarily bad jobs. Moreover, all full-time permanent jobs should not be associated only with the notion of 'good' jobs as there was a great heterogeneity in the work conditions, and in

¹³ Among other problems, the static statistical measures of disparities like ratios or percentage differences (or Gini coefficient, Theil index or coefficient of variation for the case of many units) are insensitive to the changes in the absolute magnitude of growth rates of the indicator (or differences in growth rates among different indicators) and take into account only differences in growth rates between the units. They have to be supplemented by Sicherl distance to incorporate the temporal relative position of a given unit against the benchmark as an essential element of analysis [SIBIS 2003: 211].

¹⁴ There are many aspects of flexibility, the broadest subdivision probably being the flexibility concerns of enterprises and flexibility concerns of households. For the HWF study the latter is more important, although the actual implementation of policies and realizations of intentions of both sides happen only in interaction on the labour and product markets.

¹⁵ McGovern, Smeaton and Hill [2002] analysed the situation in Britain; Kalleberg, Reskin and Hudson [2000] made a similar study in the USA.

the end results in terms of income, flexibility, and freedom of decision-making even in full employment permanent jobs category. There are two sets of criteria that can be used in deciding whether certain arrangements represent good or bad jobs, a set of objective and a set of subjective criteria. We have tried to investigate what conclusions can be reached on the basis of 'objective' elements. The relevant final assessment can only be made by the individual in question on the base of his/her subjective criteria.

The survey respondents in Slovenia were first categorized into eight categories and then later aggregated into three major categories: flexible employment A, flexible employment B and standard employment group C. Flexibility group A, which encompasses the respondents with some 'positive' aspects of flexibility, they work on the average in more activities, more hours per week, have a more flexible schedule than other two groups, and show higher values in income distribution and in household goods distribution. Standard employment group C comprises those employed permanently full time with regular working schedule and only one economic activity. Flexible group B combines those respondents who show some 'negative objective' elements in their employment.

The analysis has shown that for practically all analysed aspects of work characteristics, personal characteristics and social groups, satisfaction with various aspects of work, and decisions about various aspects of work, the differences among the three flexibility categories were statistically significant. With respect to these issues, the applied categorization has no doubt proved as very relevant in bringing up the major differences among the three flexibility categories. Some of the flexible jobs are in chosen aspects better than the jobs in standard employment group and some are worse than those. According to the survey for Slovenia, the three flexibility categories show very significant differences in ('objective') characteristics related to work and practically no significant differences in ('subjective') opinions about possible work/family conflicts or agreement on various household issues.

In international comparisons the definition of atypical work is dependent on the definition of typical work. In developed countries where for the great majority work means paid employment, atypical work is mostly subdivision of paid employment that is not full-time and permanent and that pattern was followed in the study¹⁶. Institutional arrangements differ among the countries and forms, and could significantly influence this outcome. However, there are many general factors like level of development, structure of the economy, technological progress, lifestyles and preferences, which show that the shares of atypical and standard forms of employment are not influenced only by institutional and policy choices resulting in different regulatory instruments. There are very substantial differences among the analysed EU15 and candidate countries in the level of development and economic structure which partly explain the differences in the share of atypical forms of employment. By analysing the differences in the level of development and in the structure of employment a novel time distance methodology was applied to complement the existing measure of disparity. This novel methodology proposes a new perspective to the problem, an additional statistical measure, and a presentation

¹⁶ At a lower level of development other forms of work may be still very important or even predominant.

tool for policy analysis and debate that is readily understood by policy makers, media and general public. This is not a methodology oriented towards a specific substantive problem but an additional view to many problems and applications. In an information age a new view of the existing databases should be evaluated as an important contribution towards a more efficient utilisation of the available information complementing, rather than substituting, the existing methods in extracting the relevant information content and new insights from available data.

While international cross-section comparisons are not to be directly converted into policy conclusions, Sicherl [2002] and the analysis presented is on the other hand an significant warning that one should not start from an assumption, explicit or implicit, that atypical jobs are necessarily substandard jobs. Following such an unwarranted assumption one could jump to the conclusion that the work situation in the three EU developed countries is inferior to that of the participating candidate countries because the former have so much higher share of atypical forms of employment. First, in the EU15 in 2000 59.3% of those employed part-time did not want a full-time job, among women the percentage was 65.1% (the percentage of women came as high as 80.2% in the UK, 79.3% in Germany, 77.8% in the Netherlands, while it is 52.3% in Sweden). In the EU15 only 15.8% answered that the reason for working part-time was that they could not find a full-time job. Second, in the self-reported job satisfaction in the EU15 in 1998 in the category very satisfied voluntary part-time employment reached beyond 60%, while for involuntary part-time employment it was around 30% [European Commission 2002]. Third, as presented in Table 11, all three countries have much higher activity rate than the candidate countries, which have fallen in the transition depression from earlier higher levels comparable with the developed countries and thus substantially worsened their employment position. Fourth, the wage level is very much higher in the participating EU countries. Fifth, the unemployment rate as percentage of labour force aged 15+ is lower in all these three countries as in the candidate countries and especially low in the Netherlands [ibid]. In summary, this study provides abundant evidence that the indiscriminate use of an assumption that atypical jobs are inferior jobs is not warranted [Sicherl 2002].

It is important to repeat that atypical forms of employment are not necessarily inferior to the standard employment group and that they are here to stay as in many cases they help to facilitate dealing with some enterprise and/or household problems. The important issue is to arrive at a social consensus of how to balance the benefits and costs of various forms of work flexibility for all stakeholders so that, together with other aspects and instruments of flexibility, they will serve as important means to address the coming challenges and risks faced by individuals, enterprises and society.

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