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On the European readiness for flexicurity: Empirical evidence with OECD/HBS methodologies and reform proposals

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On the European Readiness for Flexicurity: Empirical Evidence with OECD/HBS Methodologies and Reform Proposals[1]

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ABSTRACT

The *Fourth European Working Conditions Survey* (European Foundation 2007) is used to investigate the readiness of Europe to flexicurity labour market reforms proposed by the European Commission (= flexibilization of employment relations compensated by improvements in employment security backed up by lifelong learning). For this purpose, composite indicators of flexibility, precariousness and decentness of work are constructed with the OECD and HBS (Hans Boeckler Stiftung) methodologies which differ in scaling. Then the indices are visualized with specially designed tabular graphs and analysed. Both methodologies give quite similar results.

It is revealed that (1) factual flexibility (as it is practiced) radically differs from institutional flexibility (prescribed by employment protection legislation), (2) flexibility and precariousness of work correlate with statistical certainty, moreover, no country combines high flexibility and low precariousness; (3) flexibilization has the strongest negative effect on employability; (4) there is an acute shortage of learning options, (5) learning makes a negative impact on job satisfaction, at the same time job stability is top esteemed, but not income which is ranked only 6th, and (6) working conditions of flexibly employed is worse than of normally employed, being even below the European average.

It implies that the Commission's conception of flexicurity, neglecting the socio-economic reality, can be hardly efficient and successful. Therefore, an alternative implementation of flexicurity is proposed in the form of *flexinsurance* which assumes that the employer's contribution to social security should be proportional to the flexibility (precariousness) of the employment contract. To stimulate employers to equalize working conditions of normal and atypical employees, it is proposed to introduce a *workplace tax* for bad working conditions which should protect 'the working environment' in the same way as the green tax protects the natural environment.

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Measure what is measurable, and make measurable what is not so

Galileo (1564 – 1642)

1. INTRODUCTION

Recently, the European Commission (2006b; 2007) issued two important documents with arguments in favour of the "flexicurity" approach to labour market reforms: *Green Paper. Modernising labour law to meet the challenges of the 21st century* and *Towards Common Principles of Flexicurity: More and Better Jobs Through Flexibility and Security.* Fexicurity is explained as a policy which makes compatible flexibilization (= deregulation) of labour markets aimed at fostering the competitiveness of European economy with the European tradition of welfare state. For this purpose, flexibilization should be compensated with improvements in social security and employment security, constituting a kind of trade-off.

According to the conception of flexicurity, flexibilization should improve firms' performance, which in turn should foster production and stimulate labour markets, creating 'more and better jobs', as declared at the EU Lisbon summit 2000. The 'better jobs' meet the ILO (1999) concept of decent work, combining promotion of rights at work; employment; social protection; and social dialogue, with employability playing one of central roles. To make the idea of decent work clearer, ILO opposes it to precarious work characterized by lower income, lower employment stability, lower employability, and lower integration in social security schemata; for details see Keller and Seifert (2006) and Seifert and Tangian (2007 and 2008).

The European Commission puts forward the employability as the keystone of the European Employment Strategy and, respectively, flexicurity. As emphasized in *Employment in Europe 2006* by the European Commission (2006a, p. 78): "The main trust of the EU recommendation on flexicurity is to encourage a shift … towards employment security … In particular, investing in human capital is vital both to improve the long-term employment prospects and the employment security of the individual, and also to enhance the competitiveness and adaptability of the labour force." In turn, employment security is "to provide people with the training they need to keep their skills up-to-date and to develop their talent" (European Commission 2007, p. 11).

Previous empirical reports of the Hans Böckler Foundation showed that the current European policy failed to compensate the ongoing deregulation of labour market with social security advantages (Tangian 2005; 2006; 2007d). In other words, the first flexicurity nexus 'flexibility–social security' does not work. Now European policy makers put forward the second flexicurity nexus 'flexibility–employment security'. The compensation is hoped to be attained through a higher employability due to lifelong learning, in particular, company-based training. It is expected to improve the mobility of labour force implying stable employment and broad opportunities to move into better jobs.

Therefore, the consistency of the new flexicurity concept is linked to the impact of flexibilization on the decentness–precariousness of work. According to the flexicurity concept, flexible work should in no case be precarious and imply a lower employability. On the contrary, employability should increase to compensate the negative effects of flexibilization. The second point of the Commission's flexicurity concept is the wide availability of professional training options and the readiness of Europeans to learn.

Empirically testing these conditions as backing the European flexicurity reforms is the aim of the given paper. It starts with defining and operationalizing flexibility and precariousness of work. The next step describes the model for processing data which stems from the Fourth European Working Conditions Survey 2005 (EWCS2005) by the European Foundation (2007). To construct the indices of flexibility and precariousness in 31 European countries, two methodologies, differing in scaling of variables, are applied. The first is developed at the Hans Böckler Foundation (HBS); see Tangian (2005 and 2007a). The second one is due to the OECD (2005).

The empirical analysis with both methodologies reveals that

(1) factual flexibility (as it is practiced in EU countries) radically differs from institutional flexibility (prescribed by the national employment protection legislations), which should be taken into account in European recommendations how to modernise labour law,

(2) the indices of flexibility and precariousness of work correlate with statistical certainty, meaning that flexibility has the opposite effect to the Commission's expectations ('more and better jobs through flexibility and security'), moreover, no country combines high flexibility with low precariousness (the target flexicurity domain is empty), and

(3) flexibility has a significant negative impact just on employability, contrary to Commission's intentions to improve employability under flexibilization.

In the second part of the paper, a composite indicator of quality of work is constructed. Its sub-indicators reflect 15 aspects of working conditions as in the recently published German DGB-index *Gute-Arbeit* (2007). In a sense, the German indicator is extended to European data. It reveals that

(4) there is an acute shortage of learning options, that is, Europe is not really prepared to offer the qualification facilities required for the new labour market strategy;

(5) learning makes a negative impact on job satisfaction, meaning a latent resistance to learning, at the same time job stability is top esteemed, but not income which is ranked only 6th, that is, Europeans unambiguously prefer 'just jobs' to 'better jobs' contrary to Commission's claims that 'individuals increasingly need employment security rather than job security' and that 'there must be…more upward mobility' (European Commission 2007, p. 8), and

(6) working conditions of flexibly employed is worse than of normally employed, being even below the European average, so that flexible jobs are in no case 'better jobs'.

All of these definitively disproves the belief that flexibilization of labour relations can be compensated by high employability based on learning. It turns out that employment flexibility is little compatible with 'better jobs' and high employability. In particular, the shift from job security to employment security suggested by the European Commission cannot be consistently implemented, because it contradicts the social and economic actuality. Our study provides empirical evidence that a high employability can be hardly attained under flexible employment. Besides, Europe is not ready for lifelong learning and Europeans latently resist to it.

Therefore, an alternative conception of flexicurity should be developed. The given paper proposes to implement flexicurity in the form of flexinsurance which assumes that the employer's contribution to social security should be proportional to the flexibility (precariousness) of the contract to the end of compensating social risks and flexibly 'regulate the deregulation'. To motivate employers to equalize working conditions of normal and atypical employees, it is proposed to introduce a workplace tax for bad working conditions

which should protect 'the working environment' in the same way as the green tax protects the natural environment.

2. OPERATIONALISATION

The data structure for the first part of the study is shown in Table 1, where each row consists of answers of an individual to 42 questions: 29 on flexibility, and 13 on precariousness of work. The selection of questions shows how the notions of flexibility and precariousness of work are operationally defined in our study. The answers of every individual are aggregated into individual indices of degree of flexibility and degree of precariousness of his/her work which are put in the right-hand columns of the table. The questions are grouped into three sections.

Table 1. Data structure for constructing composite indicators of flexibility and precariousness of work; question marks '?' show the aggregation of composite indicators

Indi-vi-dual No.	Classifiers		Flexibility			Precariousness				Partial indices		Aggregate indices	
			1. External numerical flexibility	2. Internal numerical flexibility	...	1. Income	2. Employ-ment stability	...					
	countcod Country	...	q3b Type of con-tract	q15a Part-time work	...	ef5 Net month-ly income	q2d Tenure in the organi-sation	...	...	1. External numerical flexibility	...	Flexi-bility	Preca-rious-ness
1	BE	...	2	2	...	3	2	...	...→	?	...→	?	?
2	BE	...	1	2	...	1	3	...	...→	?	...→	?	?
....													
23788	CH	...	2	1	...	4	1	...	...→	?	...→	?	?

Classifiers. This section includes the "demographic" questions on the country of interview, age and sex of the respondent, etc. These data are not used in constructing the individual indices but are necessary to build social groups for comparative analysis. For instance, we use the country classifier (variable countcod) to compute national averages of individual indices considered as country indicators.

Flexibility. This section includes the questions on flexibility of work grouped according to the OECD (1989: 13–20) classification of flexibility types:

1. *External numerical flexibility,* that is, is the ease of 'hiring and firing' which manifests itself in the mobility of workers between employers (external job turnover). This type of flexibility is reflected by the survey variables linked to the following questions:

    •   Type of contract (variable q3b): indefinite contract, fixed term contract, temporary agency work contract, or work with no contract

    •   Duration of contract, in months (q3c)

2. *Internal numerical flexibility*, that is, variability of standard number and of standard distribution of working hours. The relevant survey questions are:

- Number of working hours per week (derivative from variables q15a and q15b): as one will or not as one will

- Overwork (more than 10 hours a day), in number of times a month (q14e)

- Number of working hours every day (q16aa): variable or constant

- Number of working days every week (q16ab): variable or constant

- Starting and finishing hours (q16ac): variable or constant

- Working time arrangements (q17a): set by the company, choice from several option, reasonable adaptability to individual wishes, or full adaptability

- Working time planning (q17b): on the same day, the day before, several days in advance, several weeks in advance, no changes of schedule

3. *Functional flexibility*, that is, the changeability of tasks, of teams, and of the content of work. It is reflected in the mobility of workers within enterprises (internal job turnover). This type of flexibility is reflected by seven questions; here and further see Tangian (2007b) for specific questions.

4. *Wage flexibility*, that is, dependence of salaries and wages on labour market or competitive conditions. This type of flexibility is reflected by seven questions.

5. *Externalization flexibility*, that is, such forms as distance working, teleworking, virtual organisations and self-entrepreneurial activities. This type of flexibility is revealed by six questions.

Precariousness. According to the typology by Keller and Seifert (2006: 239), the relevant survey questions are classified into three groups.

1. *Income,* lower for precarious work than for decent work. To measure the income factor, five questions are considered.

2. *Employment stability,* the certainty to remain at work, characterised by four questions on future prospects and past experiences.

3. *Employability,* capacity to be employed, characterized by four questions on age restrictions for the given work, learning possibilities, health and safety, etc.

The fourth section of Table 1, **Partial indices**, is reserved for five first-level aggregate flexibility indices (External numerical flexibility, Internal numerical flexibility, etc.) and three first-level aggregate precariousness indices (Income, Employment stability, and Employability). These indices are obtained for every individual.

The fifth section of Table 1, **Aggregate indices**, is reserved for second-level aggregate flexibility and precariousness individual indices.

Every variable (23788 answers to a specific question constituting a table column) are re-coded with to respect the rule: the higher the value, the more flexible (precarious) is work.

Then the variables are scaled by two methods which we briefly describe below; for details see Tangian (2005, 2006, and 2007a –b).

Under *normalization* (HBS method), the variable's min and max are reduced to 0 and 1, respectively, and additionally the variable $x = (x_1, ..., x_{23788})'$ is expressed in % of its range:

$$y_i = \frac{x_i - x_{\min}}{x_{\max} - x_{\min}} \cdot 100\%, \quad i = 1, ..., 23788,$$

Under *standardization* (OECD method), the mean and standard deviation of a variable are reduced to 0 and 1, respectively, and optionally is expressed in %:

$$y_i = \frac{x_i - \mu}{\sigma} \cdot 100\%, \quad i = 1, ..., 23788,$$

where

$$\mu = \frac{1}{23788} \sum_{i=1}^{23788} x_i \quad \text{(mean)}$$

$$\sigma = \sqrt{\frac{1}{23788-1} \sum_{i=1}^{23788} (x_i - \mu)^2} \quad \text{(standard deviation)}.$$

The 0 value of *y* corresponds to the mean of the variable *x*, and 100% — to its 'average deviation from the mean'.

To obtain first-level aggregate indices, the recoded and scaled variables (23788-columns of the data table) are summarized within eight groups (five flexibility groups, and three precariousness ones) and the resulting eight column-vectors are either normalized (HBS method) or standardized (OECD method). According to OECD (2005: 21), 'most composite indicators rely on equal weighting, i.e., all variables are given the same weight', and we follow this principle. However, standardization, changing the effective range of variables, implicitly introduces deviation-equalizing weights. The second-level aggregate indices of flexibility and of precariousness of work are obtained from two groups of first-level aggregate indices (five flexibility and three precariousness indices) similarly.

Under normalization, a first-level aggregated index means the average (coded) response of the individual to the relevant questions. 0 and 100 are attained if all questions are answered in the most extreme way. Normalization is not appropriate for data with outliers — few large deviations from 'typical' values, since the latter are getting clustered. The EWCS do not contain outliers, because the answer codes are restricted to a given values. For instance, income is restricted to 10 deciles. Therefore, normalization can be consistently applied.

Unlike normalization, standardization well discriminates between closely located `typical' values even in the presence of outliers, because it 'standardizes' the distance between 'typical' values. Thereby standardization relativizes 'good' and 'bad' values. For example, the flexibility-indicator can have high values and precariousness-indicator — low. After standardization, all the values are neither high nor low but medium, and it is impossible to judge weather flexible work is precarious or not. The only conclusion could be that, for instance, a more flexible work is more precarious. Therefore standardization is adapted rather for benchmarking than for evaluation.

Besides, the standardization is a non-linear non-monotonic function of variables, so that an increase of initial indices can result in a decrease of standardized indices. For example, consider the following increase in all the initial indices:

0		99
0	all answers improve from 'bad' to 'good'	100
0	$\longrightarrow$	100
1		100

After the standardization has been applied, we see no increase from 'bad' to 'good', moreover, two of four codes even decrease (shown by frames):

$\boxed{-50}$		$\boxed{-150}$
-50	some codes decrease	50
-50	$\longrightarrow$	50
$\boxed{150}$		$\boxed{50}$

The successive aggregation of indicators inherit these properties of standardization as well.

Figure 1 depicts the indices of flexibility and precariousness obtained with the HBS method, and Figure 2 — the ones obtained with the OECD method. The contribution of first-level aggregate indices is shown by the size of bars, incorporating the equalizing weights in case of the OECD method. The countries are ordered by the aggregate flexibility and precariousness indicated in % at the right-hand end of bars. The role of externalization flexibility in the aggregate flexibility under the HBS method is the least. It is not seen under the OECD method, which equalizes the role of different factors. Under the HBS method, the aggregate index is the mean of the partial indices, being proportional to the total length of the bars. Under the OECD method, the aggregate index is no longer proportional to the total length of the bars. It is seen in the non-monotonic decrease of the total bar length contrary to monotonically decreasing aggregate index — the side effect of the OECD scaling procedure. For instance, the United Kingdom and Luxembourg have in Figure 2 the flexibility indicators -7 and -11, respectively, but the first total bar is shorter than the second.

Note that regardless of particularities, both methodologies imply similar country rankings, as with regard to flexibility (rank correlation $\rho = 0.9182$), as with respect to precariousness (rank correlation $\rho = 0.9335$); see Table 2.

Table 2. Correlation coefficients ρ for rankings of EU-31 countries according to HBS and OECD method. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)

Flexibility	**Aggregated flexibility**	0.9182
	External numerical flexibility	0.9994
	Internal numerical flexibility	0.9774
	Functional flexibility	0.9902
	Wage flexibility	0.9237
Precariousness	**Aggregated precariousness**	0.9335
	Precariousness of income	0.7161
	Precariousness of employment stability	0.9921
	Precariousness of employability	0.9365

3. ANALYSIS

3.1 Difference between institutional and factual flexibility of work

Table 3 displays indices of institutional and factual flexibility of work in European countries. The institutional index is the indicator of strictness of employment protection legislation (EPL) of the OECD (2004, p. 117). The factual indices are derived from the data of EWCS2005 by either HBS or OECD method as described above.

Note that Turkey is bottom-ranked with respect to the institutional flexibility and top-ranked with respect to factual flexibility. This contradiction is explained as follows. The EPL-evaluation is based on institutional arrangements, showing that the Turkish employment protection legislation is the most rigid among the OECD countries. The empirical survey reveals that 302 of the sample of 454 employees work with no contract, meaning that 67% of all employees are not under labour market regulation and are working in the most flexible way. A similar situation is inherent in some other countries as well. Thereby factual and institutional situations drastically differ.

3.2 Flexibility increases the risk of precarious employment

Figures 3–4 show the location of European countries on the flexibility–precariousness coordinate plane. No country is located in the bottom-right corner of the plot, where high flexibility coexists with low precariousness. This main target of the European Commission's flexicurity concept looks hardly attainable in practice. The reality is still far from theoretical considerations.

The regression line in Figure 3 computed by the HBS method for 31 European countries also shows that the precariousness of work grows as flexibility increases. The slope of the regression line is 28% (the first regression equation beyond the plot). The negligible small P-value $P_F=0.0034$ excludes the null hypothesis, that the real slope of the line is zero. The regression line in Figure 4 computed by the OECD method for 31 countries has the slope 26%, but the countries are located somewhat differently, and the P-value $P_F=0.1584$.

The second regression line in both plots is fitted to 23788 individuals. It is less steep, having the slope 12% and 7% for the indices computed by the HBS and OECD methods, respectively; see the second equation over the plots. However, due to a much larger number of observations than for countries, the P-value $P_F=0.0000$ is negligibly small, so that the fact of positive correlation between flexibility and precariousness of work is statistically certain both under HBS and OECD methods.

Thus, the regression analysis reveals a positive dependence between aggregate flexibility and aggregate precariousness of work all over Europe. No country fulfils the flexicurity condition of high flexibility and low precariousness.

Flexibility, % (0-min, 100-max)

Legend:
- External numerical flexibility
- Internal numerical flexibility
- Functional flexibility
- Wage flexibility
- Externalization flexibility

Country	External numerical	Internal numerical	Functional	Wage	Externalization	Total
Turkey	71	53	52	22	16	43
Cyprus	48	55	53	23	12	38
Malta	46	52	57	22	12	38
Greece	41	53	56	27	11	38
Ireland	33	50	55	25	10	35
United Kingdom	27	47	55	23	8	32
Finland	11	44	59	37	8	32
Poland	17	52	55	25	7	31
Denmark	13	41	66	26	10	31
Portugal	20	55	50	25	5	31
Austria	19	44	56	28	8	31
Spain	22	52	46	27	7	31
Slovenia	9	45	64	28	7	31
Slovakia	9	49	54	35	6	31
Luxemburg	7	49	56	34	6	30
Romania	9	51	54	33	5	30
Bulgaria	19	53	52	24	5	30
France	12	47	52	35	6	30
Croatia	12	52	57	23	8	30
Netherlands	9	43	62	28	9	30
Czech Republic	11	48	52	31	8	30
Belgium	8	45	58	29	8	30
Germany	9	48	54	30	6	29
Estonia	13	44	54	28	7	29
Norway	7	46	62	25	8	29
Italy	17	47	51	26	6	29
Latvia	10	48	53	28	7	29
Sweden	9	41	60	27	8	29
Switzerland	7	41	60	26	9	28
Lithuania	13	48	47	24	6	27
Hungary	11	51	47	23	5	27

Precariousness, % (0-min, 100-max)

Precariousness of:
- Income
- Employment stability
- Employability

Country	Income	Employment stability	Employability	Total
Turkey	78	55	47	60
Latvia	77	57	43	59
Greece	71	53	49	58
Lithuania	76	56	41	58
Cyprus	80	48	44	57
Romania	75	53	44	57
Poland	77	50	45	57
Luxemburg	71	54	45	57
Denmark	72	54	44	57
Spain	73	56	41	57
Malta	78	46	45	56
Bulgaria	72	54	43	56
France	68	59	43	56
United Kingdom	71	58	40	56
Portugal	71	51	46	56
Ireland	72	53	42	56
Slovakia	73	53	42	56
Croatia	74	48	45	56
Estonia	71	58	38	56
Hungary	75	53	38	56
Sweden	73	48	46	55
Slovenia	72	46	47	55
Austria	71	53	40	55
Czech Republic	74	53	36	54
Netherlands	74	50	37	54
Finland	67	50	44	54
Switzerland	69	52	39	54
Germany	74	52	34	53
Italy	69	51	38	53
Norway	68	51	39	53
Belgium	69	47	42	52

Figure 1. Flexibility and precariousness indices constructed by the HBS method. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)
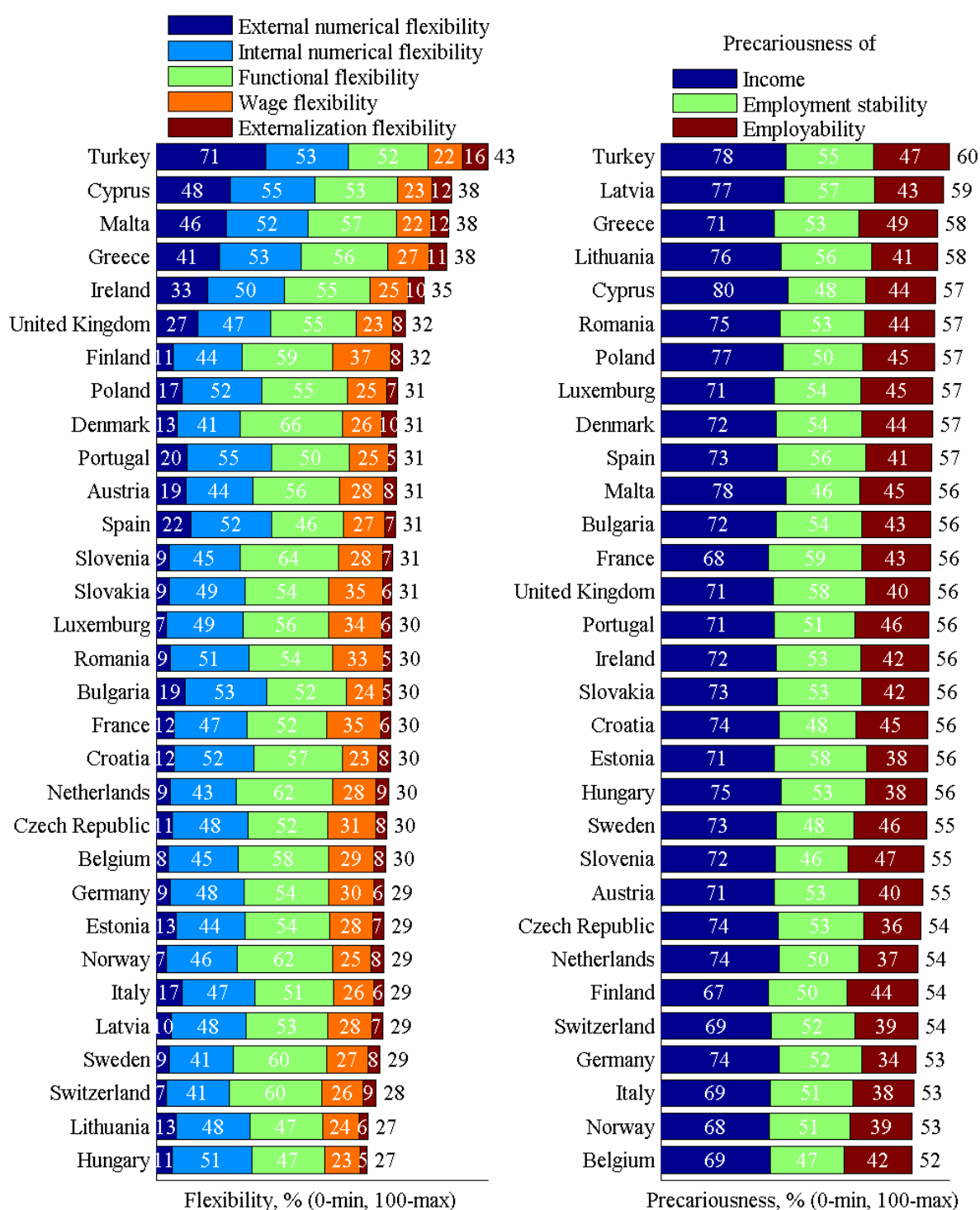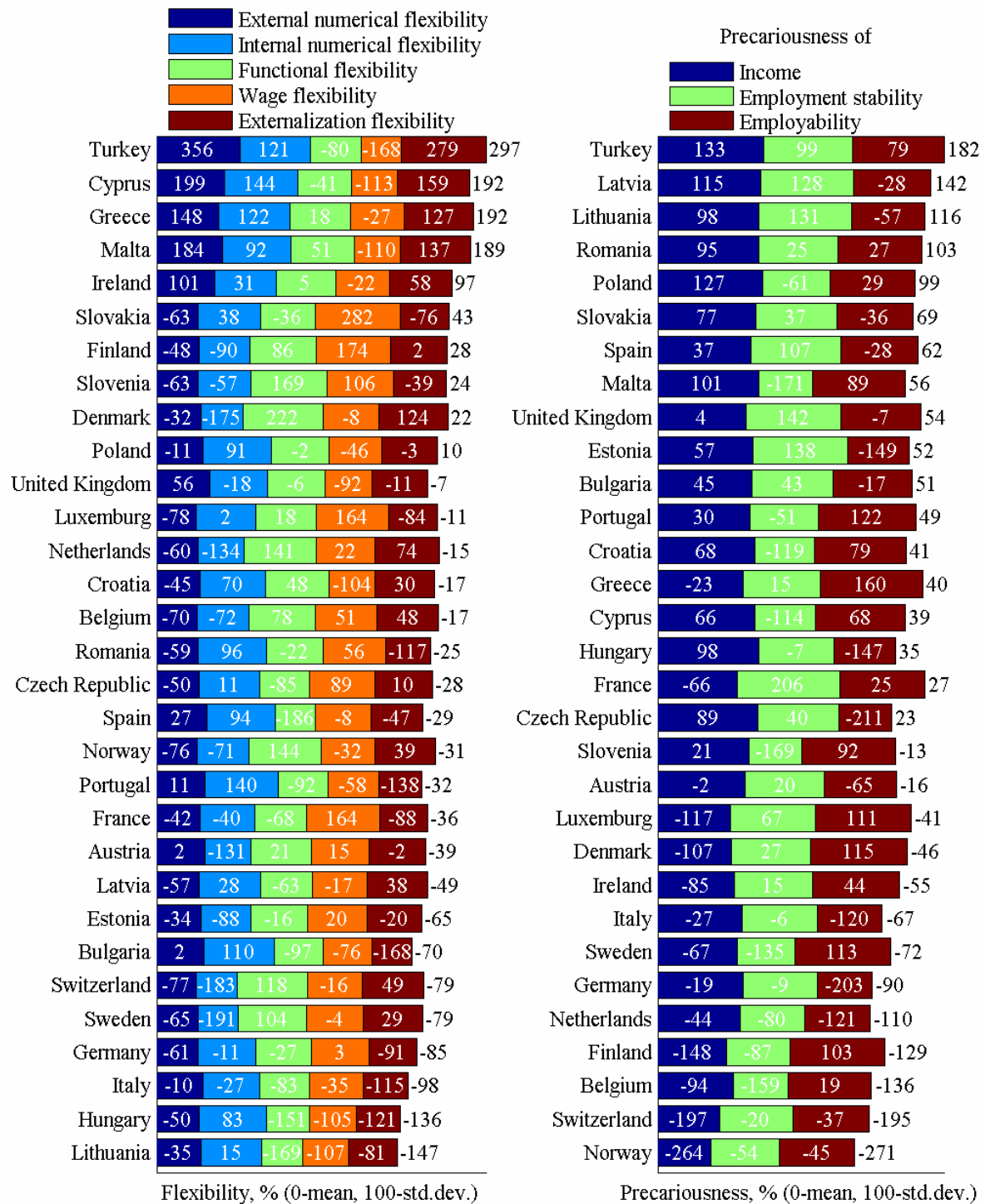
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Figure 2. Flexibility and precariousness indices constructed by the OECD method. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)

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Table 2. Institutional and factual external numerical flexibility for employees in European countries / ranks. Source: First column — OECD (2004: 117); columns 2–4 — author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)

	Institutional flexibility (OECD 2004, for 2003)	Factual flexibility (derived from the data of EWCS 2005)		
	Strictness of employment protection legislation ~ the opposite to the external numerical flexibility; the ranking relates to flexibility	External numerical flexibility (HBS method)	External numerical flexibility (OECD method)	Employment with no contract
	OECD score 0–5	Normalized %	Standardized %	%
United Kingdom	0.7 / 1	27 / 6	56 / 6	15 / 6
Ireland	1.1 / 2	33 / 5	101 / 5	25 / 5
Switzerland	1.1 / 2	7 / 31	−77 / 30	4 / 20
Denmark	1.4 / 3	13 / 13	−32 / 13	8 / 11
Hungary	1.5 / 4	11 / 20	−50 / 19	4 / 18
Poland	1.7 / 5	17 / 12	−11 / 12	6 / 13
Czech Republic	1.9 / 6	11 / 19	−50 / 20	2 / 27
Italy	1.9 / 6	17 / 11	−10 / 11	9 / 8
Austria	1.9 / 6	19 / 9	2 / 9	11 / 7
Slovakia	1.9 / 6	9 / 25	−63 / 25	2 / 29
Finland	2.0 / 7	11 / 18	−48 / 18	3 / 24
Netherlands	2.1 / 8	9 / 23	−60 / 23	2 / 26
Belgium	2.2 / 9	8 / 28	−70 / 28	3 / 23
Germany	2.2 / 9	9 / 24	−61 / 24	3 / 21
Sweden	2.2 / 9	9 / 27	−65 / 27	1 / 30
Norway	2.6 / 10	7 / 29	−76 / 29	3 / 22
Greece	2.8 / 11	41 / 4	148 / 4	32 / 4
France	3.0 / 12	12 / 16	−42 / 16	5 / 16
Spain	3.1 / 13	22 / 7	27 / 7	9 / 10
Portugal	3.5 / 14	20 / 8	11 / 8	9 / 9
Turkey	3.7 / 15	71 / 1	356 / 1	67 / 1
Estonia	–	13 / 14	−34 / 14	7 / 12
Cyprus	–	48 / 2	199 / 2	42 / 2
Latvia	–	10 / 21	−57 / 21	4 / 19
Lithuania	–	13 / 15	−35 / 15	5 / 15
Luxemburg	–	7 / 30	−78 / 31	1 / 31
Malta	–	46 / 3	184 / 3	41 / 3
Slovenia	–	9 / 26	−63 / 26	2 / 28
Bulgaria	–	19 / 10	2 / 10	6 / 14
Croatia	–	12 / 17	−45 / 17	2 / 25
Romania	–	9 / 22	−59 / 22	5 / 17

Figure 3. Dependence between aggregated flexibility and precariousness indices normalized (HBS methodology) for European countries. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)

Regression on 31 European countries: PREC = 0.00 + 0.26*FLEX R^2 = 0.0674 F = 2.0964 P_F = 0.1584
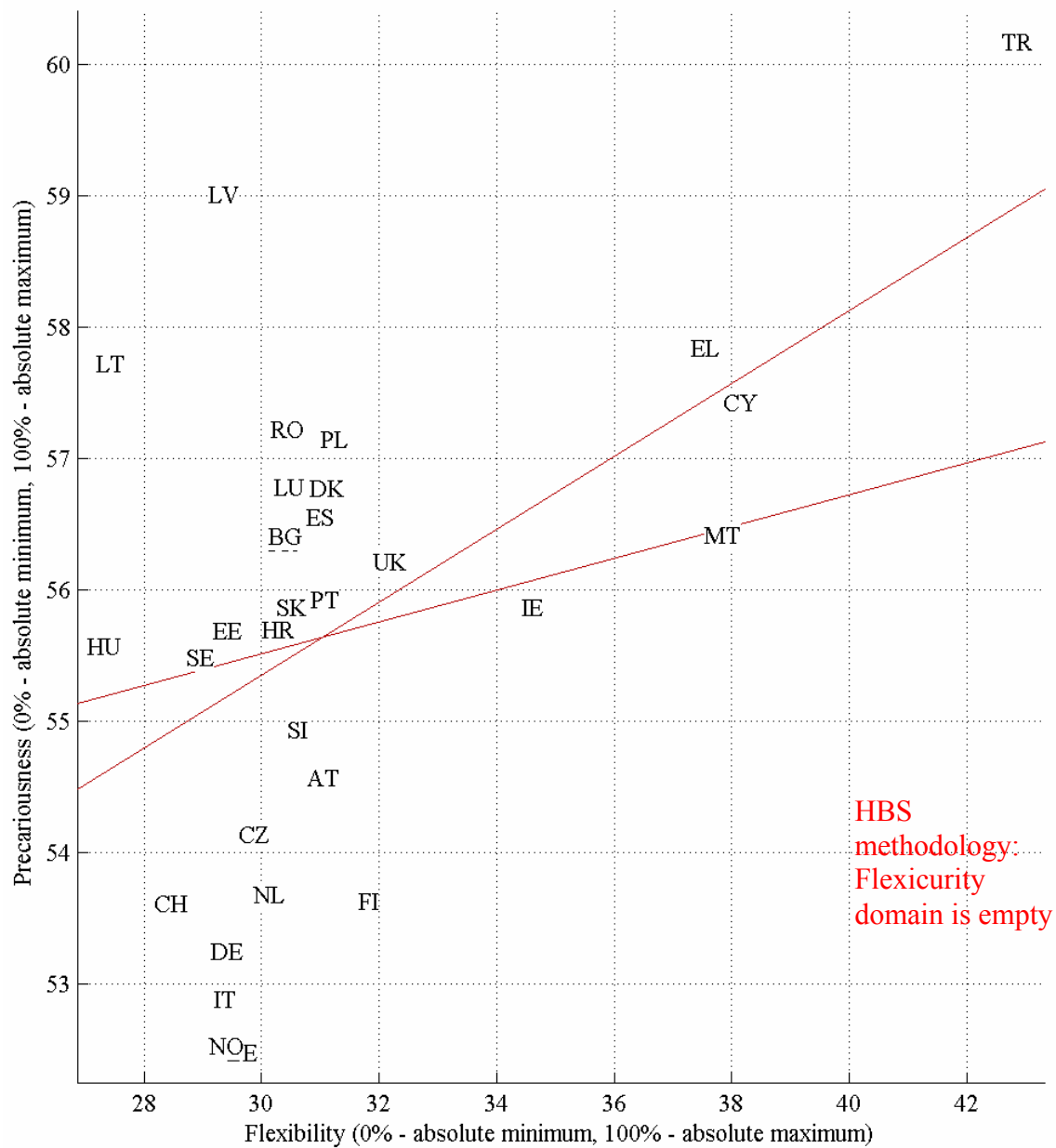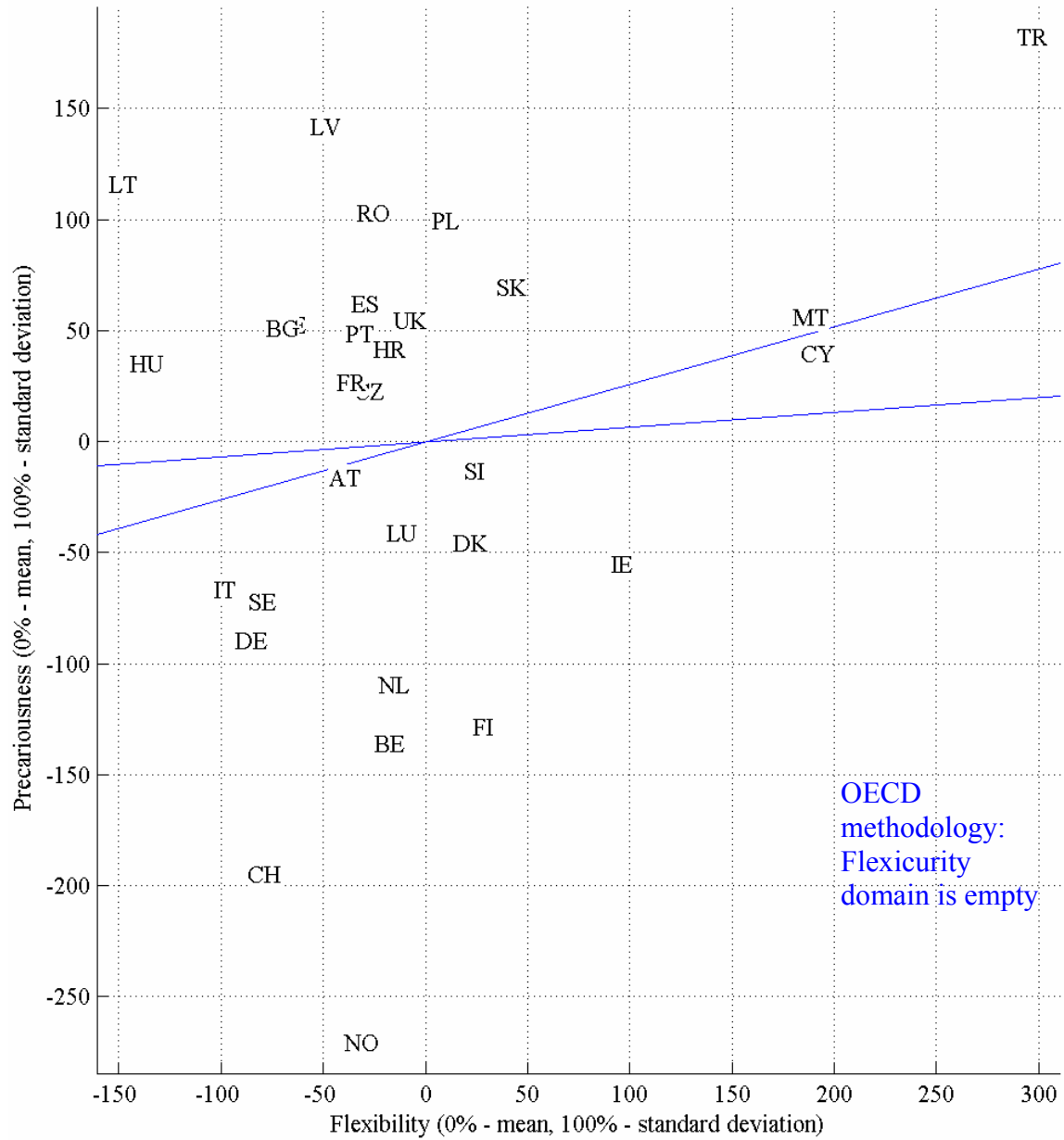Regression on 23788 individuals: PREC = -0.00 + 0.07*FLEX R^2 = 0.0044 F = 105.3472 P_F = 0.0000

Figure 4. Dependence between aggregated flexibility and precariousness indices normalized (OECD methodology) for European countries. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)
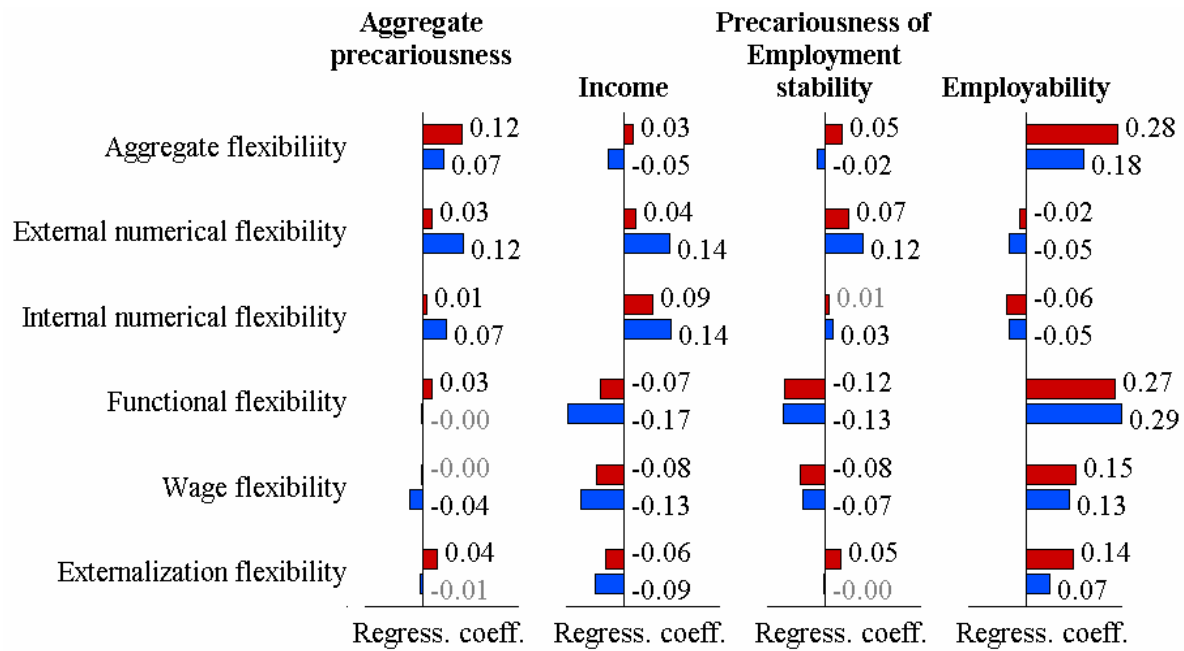
	Aggregate precariousness	Income	Precariousness of Employment stability	Employability
Aggregate flexibiliity	0.12 / 0.07	0.03 / -0.05	0.05 / -0.02	0.28 / 0.18
External numerical flexibility	0.03 / 0.12	0.04 / 0.14	0.07 / 0.12	-0.02 / -0.05
Internal numerical flexibility	0.01 / 0.07	0.09 / 0.14	0.01 / 0.03	-0.06 / -0.05
Functional flexibility	0.03 / -0.00	-0.07 / -0.17	-0.12 / -0.13	0.27 / 0.29
Wage flexibility	-0.00 / -0.04	-0.08 / -0.13	-0.08 / -0.07	0.15 / 0.13
Externalization flexibility	0.04 / -0.01	-0.06 / -0.09	0.05 / -0.00	0.14 / 0.07
	Regress. coeff.	Regress. coeff.	Regress. coeff.	Regress. coeff.

Figure 5. Regression coefficients for the dependence of aggregate indices of precarious work on aggregate indices of flexible work computed for 23788 individuals by the HBS and OECD methods (upper and lower bars, respectively); non-significant deviation of coefficients from zero (P-value > 0.05) is shown by grey font colour. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)

3.3 Negative impact of flexible work on employability

A more detailed analysis of the impact of flexibility on precariousness is displayed in Figure 5. The bars depict the regression coefficients for the dependence between first-level aggregate indices. The upper bars are obtained by the HBS method, and the lower ones — by the OECD method (the top-left two bars show the regression coefficients 0.12 and 0.07 from Figures 3–4). Figure 5 shows the following:

- External numerical flexibility has a low and often statistically non-significant influence on all precariousness dimensions except for employment stability which precariousness increases as flexibility grows

- Internal numerical flexibility implies a somewhat precarious income but improves the employability which is not surprising

- Functional flexibility increases the aggregate precariousness, especially the precariousness of employability, but has a positive influence on income and employment stability. The relative strong correlation between flexibility and precariousness of employability can be explained by a reciprocal influence of precariousness of employability on flexible employment. One can imagine that those with low employability are often employed flexibly rather than normally, finding themselves in the vicious circle of flexible–precarious work with little chances to escape

- Wage flexibility has little influence on the aggregate precariousness of work, decreases employability, but makes some positive impact on income and employment stability

- Externalization flexibility improves income, does not much affect employment stability, and decreases employability

- As one can see, HBS and OECD methods give similar results. The regression coefficients show that the impact of functional flexibility on precariousness of employability is by far stronger than any other impact.

3.4 Insufficient qualification possibilities and learning facilities

To investigate the second crucial point of the Commission's conception of flexicurity, a comprehensive indicator of working conditions based on 126 questions of the Fourth European Working Conditions Survey is constructed in a similar way as indicators of flexibility and precariousness. The data structure for the indicator is shown in Table 3; for details of the construction see Tangian (2007c).

Table 3. Data structure for constructing the hierarchical composite indicator of working conditions; question marks '?' show the aggregation of composite indicators

Indi-vi-dual No.	Classifiers		A. Resources			B.		C. Stability & income		First-level → aggregate indices		Second-level → aggregate indices			Third-level → aggre-gate index
			1.Qualifi-cation and develop-ment pos-sibilities	2.Creati-vity		...	...	14. Job stability	15. In-come						
	countcod Country	...	q28a Train-ing paid by emp-loyer	q20a Non-repe-titive tasks	...	...	...	q35 Ability to do the work after 60	q37b Fair pay	→ 1 ...	15	$A=$ 1 $+$ $\vdots$ $+$ 10	$B=$ 11 $+$ 12 $+$ 13	$C=$ 14 $+$ 15	A + B + C
1	BE	...	2	...	2	...	...	... 3	... 2	→ ? ...	?	→ ?	?	?	→ ?
2	BE	...	1	...	3	...	...	... 1	... 2	→ ? ...	?	→ ?	?	?	→ ?
....															
23788	CH	...	1	...	3	...	...	... 1	... 2	→ ? ...	?	→ ?	?	?	→ ?

Figure 6 shows the composition of the aggregate indicator of working conditions constructed with the HBS method (which enables to evaluate the situation); for the similar results reflected by the indicator constructed with the OECD methodology see Tangian (2007c). The figure is a hybrid of bar graph, table, and map: the tabular values are emphasized by colours of geographic maps used to show the relief: low–medium–-high altitude levels are shown by blue–green–brown. The 'bad–good' interpretation of the index values are taken from the DGB indicator *Gute Arbeit*. In Figures 6, the countries are arranged in the decreasing order of the top-level aggregate indices displayed at the right-hand side of each row.

Two observations are of particular importance:

- (Bad qualification and development possibilities all over Europe) The corresponding first column in Figure 6 is dark blue, meaning a bad evaluation. It is a serious warning signal for the European Employment Strategy oriented towards flexible employment which requires life-long learning.
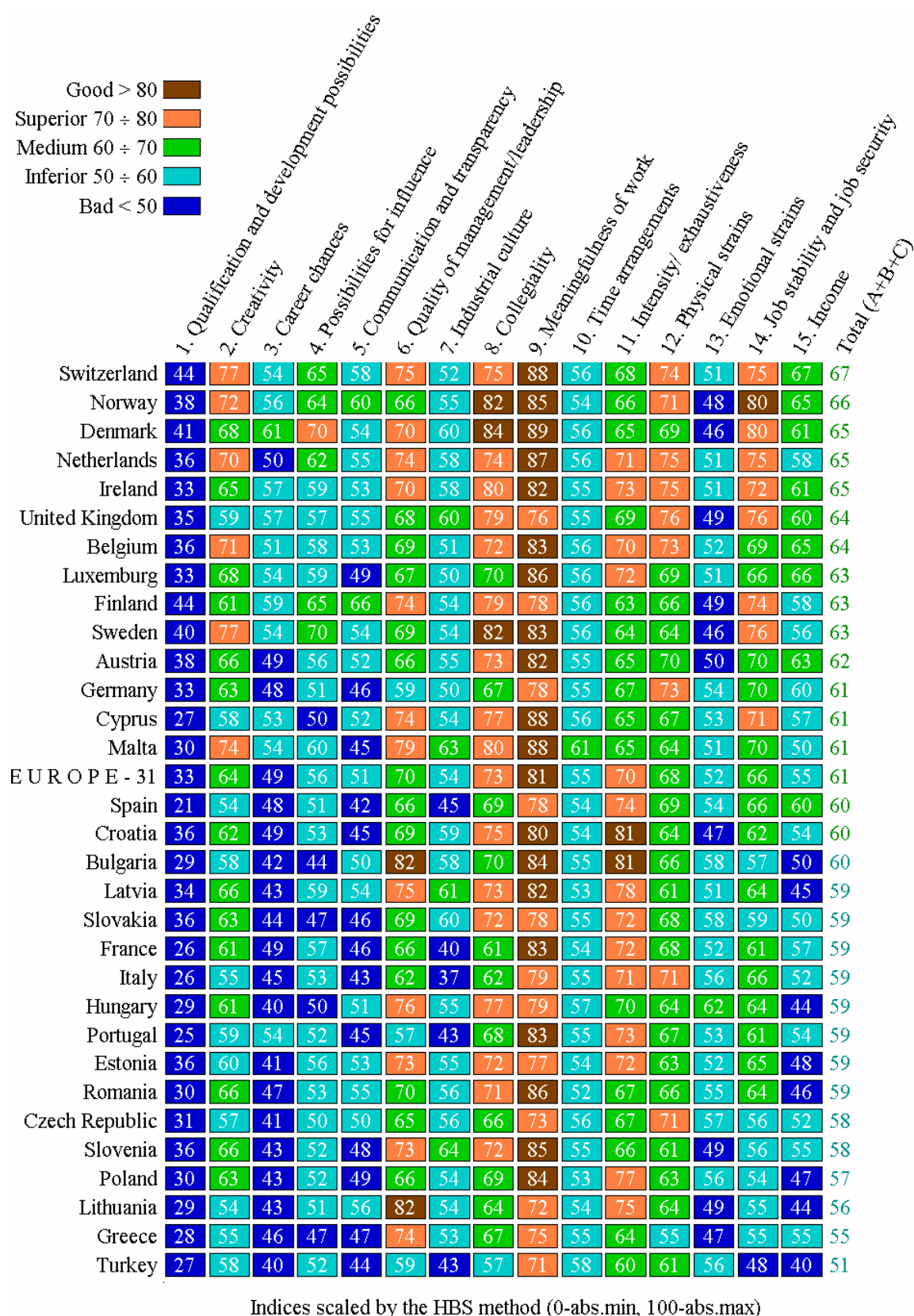
Figure 6. Composition of aggregate indices 'Total quality of work' computed with the HBS method. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)

- (Poor career chances all over Europe and modest income) The third column in Figure 6 exhibits a bad or inferior evaluation with respect to career chances of all countries except Denmark with 61 points (lowest medium level). The income evaluation does not surpass the medium threshold as well. It does not meet the claims for 'better jobs' in the European Agenda 2010.

3.5 Importance of different aspects of working conditions

The Survey question on general satisfaction of working conditions Q36 enables to investigate the influence of the 15 sub-indicators on the job satisfaction by means of stepwise regression. At first the independent variable is found which provides alone the best fit (= the sub-indicator which has the greatest impact on the satisfaction with working conditions) and includes it into the regression model. Then the next variable is found which, being included into the model, improves the fit best (= the partial indicator which has the next greatest impact on the satisfaction with working conditions), and so on. Figure 7 computed with the HBS method (which enables to evaluate the situation in non-relativized 'bad–good' terms) displays the rankings of different factors by country with the ranks shown explicitly and by colours to emphasize the 'relief' of the graph.

Which conclusions can be derived from Figure 7?

- (Most important aspect: job stability) The aspect 14 'Job stability' gets the top European rank and is also highly ranked in all the European countries. Comparing to Figure 6, some countries with relatively high job stability (Northern countries like Denmark, Finland, Sweden, Norway, as well as former socialist countries and Malta) do not show the top interest in job stability.

- (Income is relatively low important) The income is ranked only as the 6th important aspect of working conditions. The general satisfaction with working conditions in 10 of 31 countries does not significantly depend on income, although many Europeans find it insufficient.

- (Negative attitude to qualitative management, training, and creativity) The quality of management and qualification and development possibilities have a negative, although not strong, impact on the general satisfaction with working conditions all over Europe (often non-significant, as in Germany). Creativity is also perceived rather as a disadvantage, and possibilities for influence are ranked quite low. At the same time, training is highly desired by 70% persons in the direct German inquiry (DGB Index *Gute Arbeit* 2007, p. 24). A similar response is cited by European Commission (2007, p.8). It means that there is a difference between rational understanding shown in answers to explicit questions and unconscious reaction revealed in our indirect analysis. It looks that Europeans are stressed by managerial attention, learning, and necessity to show initiative rather than enjoy them. A latent resistance to learning can be the cause its low efficiency, and, consequently, of low motivation of employers to invest in training, resulting in poor training possibilities demonstrated by Figure 6.
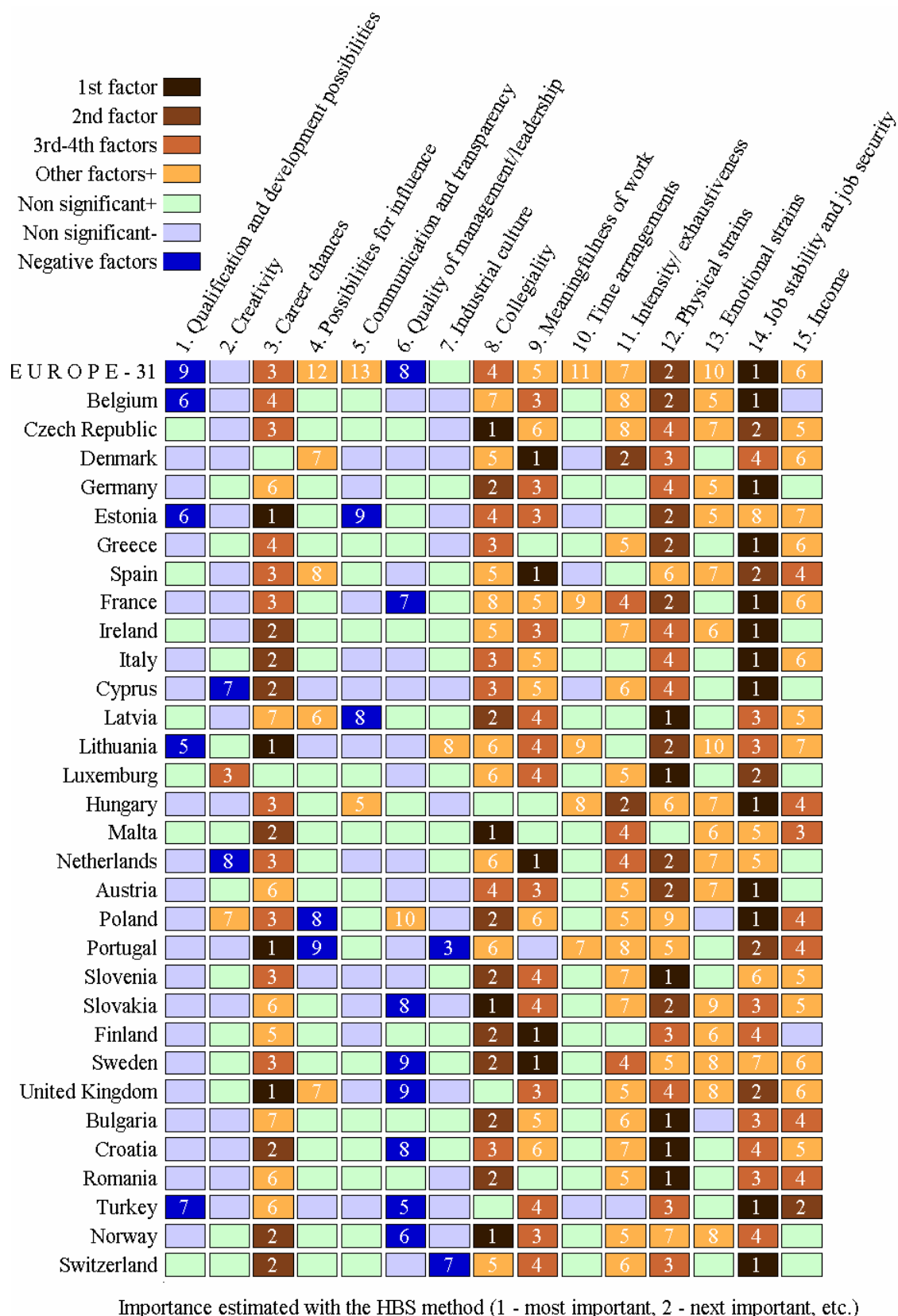
22

Figure 7. Importance of different aspects of working conditions for general satisfaction by the HBS method. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)
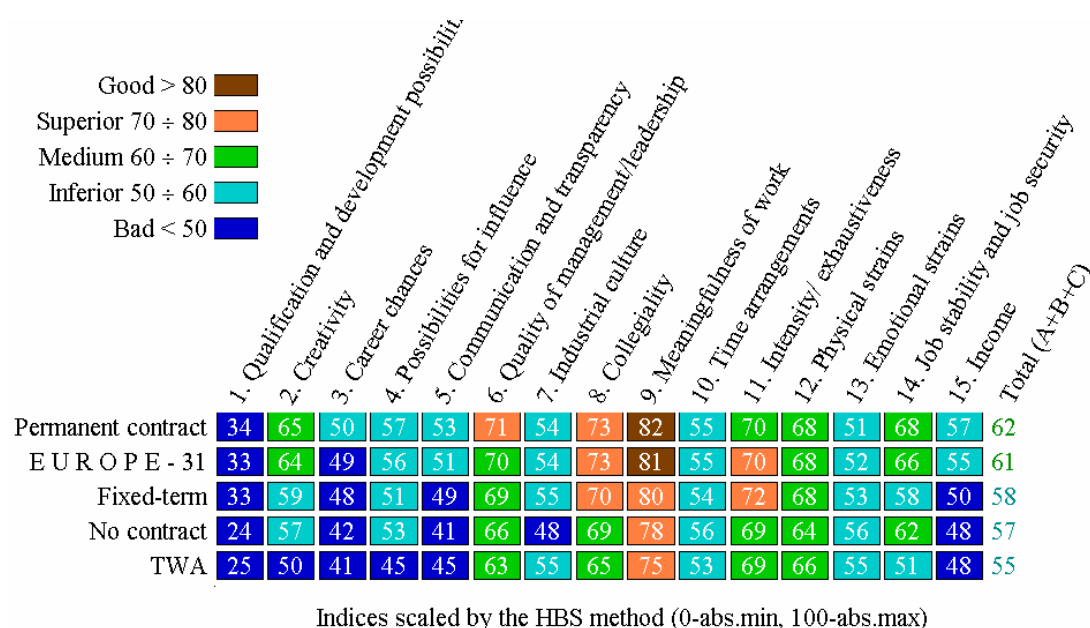
Legend:
- 1st factor
- 2nd factor
- 3rd-4th factors
- Other factors+
- Non significant+
- Non significant-
- Negative factors

Columns:
1. Qualification and development possibilities
2. Creativity
3. Career chances
4. Possibilities for influence
5. Communication and transparency
6. Quality of management/leadership
7. Industrial culture
8. Collegiality
9. Meaningfulness of work
10. Time arrangements
11. Intensity/ exhaustiveness
12. Physical strains
13. Emotional strains
14. Job stability and job security
15. Income

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
E U R O P E - 31	9		3	12	13	8		4	5	11	7	2	10	1	6
Belgium	6		4					7	3		8	2	5	1	
Czech Republic			3				1		6		8	4	7	2	5
Denmark				7			5	1		2	3		4		6
Germany			6				2	3			4	5		1	
Estonia	6		1		9		4	3			2		5	8	7
Greece			4				3			5	2			1	6
Spain			3	8			5	1			6		7	2	4
France			3			7	8	5	9	4	2			1	6
Ireland			2				5	3		7	4		6	1	
Italy			2				3	5			4			1	6
Cyprus		7	2				3	5		6	4			1	
Latvia			7	6	8		2	4			1			3	5
Lithuania	5		1			8	6	4	9		2	10		3	7
Luxemburg		3					6	4		5	1			2	
Hungary			3		5				8	2	6	7		1	4
Malta			2			1				4		6	5	3	
Netherlands		8	3				6	1		4	2	7		5	
Austria			6				4	3		5	2	7		1	
Poland		7	3	8		10	2	6		5	9			1	4
Portugal			1	9		3	6		7	8	5			2	4
Slovenia			3				2	4		7	1		6		5
Slovakia			6		8		1	4		7	2	9	3		5
Finland			5				2	1		3	6	4			
Sweden			3		9		2	1		4	5	8	7		6
United Kingdom			1	7		9		3		5	4	8	2		6
Bulgaria			7				2	5		6	1		3	4	
Croatia			2			8	3	6		7	1		4	5	
Romania			6				2			5	1		3	4	
Turkey	7		6			5		4			3		1	2	
Norway			2		6		1	3		5	7	8	4		
Switzerland			2				7	5	4		6	3		1	

Importance estimated with the HBS method (1 - most important, 2 - next important, etc.)

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	1. Qualification and development possibilit.	2. Creativity	3. Career chances	4. Possibilities for influence	5. Communication and transparency	6. Quality of management/leadership	7. Industrial culture	8. Collegiality	9. Meaningfulness of work	10. Time arrangements	11. Intensity/ exhaustiveness	12. Physical strains	13. Emotional strains	14. Job stability and job security	15. Income	Total (A+B+C)
Permanent contract	34	65	50	57	53	71	54	73	82	55	70	68	51	68	57	62
E U R O P E - 31	33	64	49	56	51	70	54	73	81	55	70	68	52	66	55	61
Fixed-term	33	59	48	51	49	69	55	70	80	54	72	68	53	58	50	58
No contract	24	57	42	53	41	66	48	69	78	56	69	64	56	62	48	57
TWA	25	50	41	45	45	63	55	65	75	53	69	66	55	51	48	55

Indices scaled by the HBS method (0-abs.min, 100-abs.max)

Figure 8. Composition of aggregate indices 'Total quality of work' computed with the HBS method by the type of contract. Source: Author's computations derived from the *4th European Working Conditions Survey* (European Foundation 2007)

3.6 Working conditions of atypically employed are worse than that of normally employed

Figure 8 depicts the indices of working conditions computed with the HBS method by the type of contract. Those with permanent contracts have the best conditions, and others have inferior working conditions which are even worse than the European average. It shows that the Commission's claim for 'more and better jobs through flexibility and security' finds no confirmation in reality.

4. REFORM PROPOSAL: FLEXINSURANCE AND WORKPLACE TAX

As follows from the empirical studies, the Commission's recommendations for flexicurity are little compatible with actuality, implying difficulties in the policy implementation. A possible solution could be flexinsurance together with elements of the basic minimum income model and workplace tax.

Flexinsurance assumes that the employer's contribution to social security should be proportional to the flexibility of the contract (Tangian 2006, 2007a). Progressive charges to constrain dismissals are already used in the US unemployment insurance based on *experience rating* (Graser 2002). The experience rating is the frequency of dismissals in the enterprise which determines the employer's contributions to unemployment insurance: the more frequent the dismissals, the higher the contributions. It is analogous to motor insurance whose price is influenced by the frequency of accidents. The US practice has two important properties: (1) it operates on the financially fair risk-compensation basis, and (2) it constrains the general freedom of the employer to dismiss. The shortcoming of the US experience rating is that the risk of becoming unemployed is linked to dismissals only, and pays no regard to the duration and other particularities of the work contract.

Another example of bridging legislation with taxation/insurance is the Austrian Severance Act 2002 (*Abfertigungsrecht*) recognized to be a good practice both by the European

Commission (2006b) and the OECD (2006). The severance payment is accumulated throughout the whole career of employees at special severance accounts which are accessible upon dismissals or retirement. Employers make obligatory contributions to these accounts of 1.53% of salaries paid and are no longer charged with severance payments in case of dismissals. Since dismissals were relatively easy in Austria, severance pay was the major constraint. After the reform, dismissals became a quite formal procedure, and employers got freedom to make quick labour force adjustments for the flat 1.53%-'flexibilization tax'.

From the employees' viewpoint, the *Abfertigungsrecht* is a kind of firing insurance. European Commission (2006b) argues that its advantage is that a benevolent change of a job does not mean loosing the severance entitlement for a long tenure. The weakness of the *Abfertigungsrecht* is that it is case-independent and does not constrain firings. The interests of employers are little affected by dismissals, because they are seldom charged with severance payments extra to the obligatory social contributions.

Comparing to these prototype practices, flexinsurance has the following advantages:

- (Financial fairness) A higher risk of atypical employees becoming unemployed is fairly compensated, depending on every particular contract, and contributions to social security correspond to the expectation of unemployment benefits.

- (Reasonable employment flexibility) Social security contributions conditioned by the type of the contract affect employers' labour costs. Flexinsurance thereby motivates employers to hire employees on more favourable conditions, but does not rigidly restrict labour market flexibility.

- (Legislative advantages) Flexinsurance is a flexible instrument for 'regulating the labour market deregulation'. Adjusting the employers' contributions needs no new legislation but just administrative decisions. It is similar to regular changes in payments to statutory health insurance.

- (Social justice) Providing advantages from flexibilization to employers is not socially just, especially in the background of increasing inequality. Indeed, every step towards a higher level of labour flexibility meets the interests of employers. The business world gets rid of restrictions, managers improve performance by rotating and squeezing personnel, and firms gain higher profits. All expenses are covered by the state — costly reforms and additional social security expenditure. This type of flexibilisation scenario therefore turns out to be a long-term indirect government subsidy/gift to firms. Since the state budget originates from taxpayers, employees contribute considerably to this subsidy/gift through the sophisticated money loop supported by legislation, social security and tax systems.

  Therefore, flexinsurance is also a policy measure to meet the principle of social justice: employers get no one-sided advantages free of charge. The importance of social *feelings* is also emphasized in *Common Principles* (p. 14): 'Active labour market policies, too, have a positive effect on the *feeling* of security among workers'.

The **basic minimum income** assumes a flat-rate income paid by the state to all residents, regardless of their earnings and property status (Polanyi 1944). Examples of this model appear in some social security branches, such as childcare allowances or old-age provisions. For instance, *Kindergeld* in Germany is paid to all parents. Several basic minimum options apply to retirement in Switzerland (Brombacher-Steiner 2000), and legislation on solidarity pensions is currently underway in Chile (Chile Presidential Advisory Council 2006). In a

sense, the concept of a basic minimum income is incorporated into the minimum wage (Schulten *et al.* 2006). The additional budget expenditure incurred in the basic minimum income can be covered by:

- flexinsurance,

- higher taxation of high earners (to cover the flat-rate income), and

- funds released from reducing the number of civil servants currently working in social security (since the system becomes simpler).

The **workplace tax** is supposed to be imposed on the employers who offer bad working conditions. Similarly to the green tax in the environment protection which stimulates enterprises to consider the natural environment, the workplace tax should stimulate enterprises to consider the working environment. Indexing working conditions can be regarded as measuring the 'social pollution' and used to determine the tax amount. A fraction of the tax can be paid directly to the employee as a bonus for bad working conditions. However, its significant fraction should be paid to the state to keep the situation under the statutory control.

The workplace tax is particularly topical for atypical employees who, as has been shown, have worse working conditions. If 'more and better jobs' should be attained 'through flexibility' then their quality should be controlled and secured.

Additionally, the regulation of atypical employment can also learn from the **analogy with regulation of immigrants**, who are 'less integrated' in the mainstream that the nationals. For instance, there can be quotas for atypical contracts (like immigration quotas), employers can be required to justify their necessity (like the obligation to employ own nationals in the first turn), issuing a permanent contract after a number of successive temporary contracts (like the permanent residence permit after a few years of temporary residence), etc. These measures are aimed at reasonably constraining employment flexibility without excluding it in case of its real necessity.

The last factor − but not the least − in preserving the European welfare state is **action to constrain the European financial markets**. In fact, foreign investments actually mean export of jobs from Europe to other countries. Employers are given a legal instrument for exerting pressure on European governments: 'If you do not relax employment protection according to our requirements, we shall move jobs abroad'. Having liberalised financial markets, European governments paved the way to loss of control over labour markets. Since the way out is generally through the same door as the way in, financial markets must be constrained to some extent in order to restore control − if social priorities are to be respected.

5. CONCLUSIONS

- Composite indicators of flexibility, precariousness, and decentness of work are constructed from the data of *4th European Working Conditions Survey* for 31 European countries by two methodologies differing in scaling (OECD and HBS). Both families of indicators give similar results visualized by means of specially designed table graphs, combining properties of tables, graphs, and geographic maps.

- Benchmarking countries with respect to the flexibility indicators shows that the institutional regulation of employment reflected by the EPL-index of the OECD does not necessarily imply the adequate factual effect.

- The analysis of interaction of flexibility and precariousness indices shows that the more flexible employment, the more it is precarious. The employment flexibility has the most negative effect just on the employability.

- The indicator of decentness of work based on 15 composite sub-indicators shows (1) acute shortage of learning options, and (2) worse working conditions of flexibly employed comparing to that of normally employed, which are even below the European average.

- The indicator of job satisfaction regarded as a function of 15 composite sub-indicators of working conditions shows that (1) learning makes a negative impact on job satisfaction and (2) job stability is top esteemed for job satisfaction, but not income which is ranked only the 6th (HBS methodology) or 5th (OECD methodology),

- It implies serious arguments against the recent proposals of the European Commission to implement flexicurity as based on lifelong learning. A shift from job security towards employment security within such a strategy cannot be consistently implemented. Our study provides empirical evidence that flexibility increases the risks of precarious employment and that a high employability is hardly attainable under flexible employment. Moreover, no European country provides sufficient facilities for lifelong learning which is intended to back up employment security under flexibilization.

- An alternative implementation of flexicurity might include flexinsurance and workplace tax with some other social and economic measures.

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