

Six families of flexicurity indicators developed at the Hans Boeckler Foundation

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Abstract

The paper is an overview of over 30 publications on six models with flexicurity indicators developed at the Hans-Böckler-Foundation for monitoring and analysis of flexicurity. The latter is a new European labour market policy which should compensate the ongoing flexibilization of employment relations (resulting in easy dismissals, adjustable working time, and variable wages) by advances in employment security and social security. Flexibility is promoted by employers, whereas trade unions are concerned with security.

The models are aimed at analyzing flexicurity from the following viewpoints: (1) neo-liberal, (2) trade-unionist, (3) of the European welfare state, (4) regarding precarious work, (5) regarding professional training and lifelong learning, and (6) regarding trends in collective agreements. All the six models provide empirical evidence of increasing flexibility together with decline of social security and rise of precarious employment. This is a serious warning against improper implementation of flexicurity and one-sided use of this policy in favor of employers.

Finally six policy proposals are made: (1) to introduce flexinsurance, (2) to impose workplace tax, (3) to provide basic income, (4) to constrain financial markets, (5) to politicize and restructuralize trade unions, and (6) separate politics from economy.

Keywords: labour market policy, flexicurity, composite indicators, trade unions.

JEL Classification: C43—Index Numbers and Aggregation, C51—Model Construction and Estimation, C78—bargaining theory; Matching theory, H55— Social security and Public Pensions, J5—Labor–Management Relations, Trade Unions, and Collective Bargaining, J21—Labor Force and Employment, Size, and Structure, J88—Public Policy

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1 Introduction¹

1.1 Flexicurity

In most of post-war Europe, employment relations have been regulated by rather restrictive employment protection legislation and by collective agreements between employers and trade unions. The contradiction between the current flexibilization pursued by employers and the existing strict labour market regulation, which the trade unions defend, has generated debate on the impact of flexibilization and employment protection legislation on economic performance and employment. Many policy makers and scholars argue that employment flexibilization improves the competitiveness of firms and consequently stimulates production, which in turn provides more jobs; see Coats (2006) for criticism of this viewpoint.

The notion of flexicurity was introduced in order to reconcile the public with the increase in flexible employment relationships entailing less job security and reducing eligibility for social security benefits. Wilthagen and Tros (2004) ascribe its conception to a member of the Dutch Scientific Council of Government Policy, Professor Hans Adriaansens, and the Dutch Minister of Social Affairs, Ad Melkert (Labour Party). In the autumn of 1995, Adriaansens launched this catchword in speeches and interviews, having defined it as a shift from job security towards employment security. He suggested compensating the decreasing job security (fewer permanent jobs and easier dismissals) by improving employment opportunities and social security.

For instance, relaxation of the employment protection legislation would be counterbalanced by providing better conditions for temporary and part-time workers, supporting lifelong professional training to facilitate job changes, and introducing more favourable regulation of working time and additional social benefits. In December 1995, Ad Melkert presented a memorandum entitled *Flexibility and Security*, proposing that employment protection legislation be relaxed for permanent employees, provided that temporary workers were granted regular employment status, without, however, adopting the concept of flexicurity as such. By the end of 1997, the Dutch parliament had accepted the flexibility/security proposals and shaped them into laws, which came into force in 1999.

The OECD (2004b, p. 97–98) ascribes the origins of flexicurity to Denmark with its traditionally weak employment protection, highly developed social security, and high job availability; see Madsen (2003); Bredgaard et al. (2005). It is often concealed, however, that the role of employment protection legislation in Denmark is in a sense replaced by the intermediation of the trade unions, which are the strongest in Europe with a density of 80% in 2004 (European Foundation 2007, p. 6).

Regardless of the origins of the expression flexicurity, both the Netherlands and Denmark are recognised as 'good-practice examples' (Braun 2001; van Oorschot 2001; Kok et al. 2004) and have inspired the international flexicurity debate. Although some authors still consider flexicurity a specifically Dutch/Danish phenomenon (Gorter 2000), the idea spread throughout Europe within a few years; see Jepsen and Klammer (2004) for a selection of international contributions. The EU referred to this concept at the Lisbon summit in 2000 (Vielle and Walthery 2003, p. 2; Keller and Seifert 2004, p. 227; Kok et al. 2004), and

¹ Based on Tangian (2007a, 2007c, 2008a, and 2009a)

flexicurity became a top theme in the European Commission after the minister meeting in Villach in January 2006 (European Commission 2006a).

Recently the DG Employment, Social Affairs, and Equal Opportunities of the European Commission published two strategic 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* (European Commission 2006c) and
- *Towards Common Principles of Flexicurity: More and Better Jobs Through Flexibility and Security* (European Commission 2007a), first published as a Commission's Communication.

The *Common Principles of Flexicurity* are already accepted by the Business Europe-CEEP-CES-UEAPME on November 29, 2007, and by EU Employment and Social Affairs Ministers Council on December 5/6, 2007, whose decision has been endorsed by the European Council on December 14, 2007.

After that a public initiative *Mission for Flexicurity* has been launched for promoting flexicurity as an official European labour market policy (European Commission 2008a). It was followed by the flexicurity-relevant communication *New Skills for New Jobs* of (European Commission 2008c) with the Council Conclusions *New Skills for New Jobs: Anticipating and matching labour market and skills needs* adopted on 9 March 2009. After that the Council of the EU (2009) issued *Council Conclusions on Flexicurity in times of crisis*, and the DG Economic and Financial Affairs joined its voice to promoting flexicurity, having published communication *A Shared Commitment for Employment* (European Commission 2009b).

As one can see flexicurity is adopted seriously and for a long perspective. An official flexicurity webpage has been launched by the European Commission (2009c), and two web pages are dedicated to flexicurity research and are regularly updated (IAB 2009 and Flex Work Research Center 2009); see also Viebrock and Clasen (2009) for a state-of-the-art review.

1.2 Trade-unions response to flexicurity

Demands for flexibilization have met with strong resistance, especially in countries with a long tradition of struggle for labour rights. With reference to Korver (2001), Wilthagen and Tros (2004, p. 179) report that the *Green Paper: Partnership for a new organisation of work* (European Commission 1997) 'which promoted the idea of social partnership and balancing flexibility and security' met with a very negative response from French and German trade unions because 'the idea of partnership represents a threat to the independence of unions and a denial of the importance of worker's rights and positions, notably at the enterprise level'. The International Labour Organisation (ILO) has reported that 'the flexibilization of the labour market has led to a significant erosion of workers' rights in fundamentally important areas which concern their employment and income security and (relative) stability of their working and living conditions' (Ozaki 1999, p. 116).

European trade unions did not express any enthusiasm about adopting the flexicurity concept by the European Commission with no clear definition, with no monitoring instruments, and with no consultation with social partners. According to the European Trade Union Institute, the European Commission's flexicurity is just a modern label for the long promoted deregulation issue already fixed in the 3rd guideline for European Employment Strategy

(European Commission 2005), and can be considered 'old wine in a fashionable new bottle' (Keane and Jepsen 2007, p. 16). Several reports of the Hans-Böckler-Foundation (affiliated with DGB — the German Confederation of Trade Unions) confirm this opinion empirically; see Tangian (2005–2009) and Seifert and Tangian (2007–2008).

During all these debates, flexibilization is propagating all over Europe whereas the proposed security measures, especially employment security ones, do not look sufficiently efficient and sufficiently compensating. A relaxation of employment protection legislation can be done overnight but cannot be that easily compensated by security measures. The latter take much more time and their efficiency is often little predictable, to say nothing about questionable exchangeability of labour rights for security benefits. The European Commission (2009b) has still no proposal to compensate flexibilization better than by lifelong learning. It is at least naive to think that training of the European aging population can solve employment problems and restrain firms from moving jobs to countries with cheap and young labour. The Commission's arguments about improving the competitiveness of firms due to flexibilization are valid only in case of single privileged firms, but their advantages will vanish as the conditions will be made equal for all.

There are also doubts as to the social fairness of flexicurity. Every step towards a higher level of labour flexibility meets the interests of employers who receive this legislative commodity free of charge, although it provides a number of advantages, including financial advantages. 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 flexibilization 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. From the purely economical viewpoint, such a latent redistribution of income decreases the total demand of the working population, results in overproduction and unemployment, and finally leads to a crisis.

An innovative feature of this type of industrial relations is active intermediation by the state. Industrial relations were formerly restricted to the employer–employee axis. At the early stages of capitalism the employer simply underpaid workers. The employer used the advantage of having the means of production and purchased the employee's ability to work rather than the results of work and used this device to obtain added value. Now industrial relations no longer constitute an axis but a circle employer–employee–state–employer with a sophisticated money loop through legislation, social security and tax systems. Now the relationship between an individual employer and an individual employee is extended to all employer–employee relations, the added value being redistributed through all these systems.

From the trade union viewpoint, sustainable development — the main argument for flexibilization — is necessary as long as it improves the living and working conditions of employees. If a worker's well-being is not enhanced under 'sustainable development' and better labour market performance (if any) is achieved at the price of stress and lack of confidence in the future, 'sustainable development' can be called into question. Are higher industrial productivity and competitiveness in fact the primary human goals? Why is sustainable development placed above social values? In other words, is it more important to be economically rich rather than to be socially healthy?

1.3 Enhancing the trade unions' position under flexicurity

According to Pedersini (2008, p. 23), 'flexicurity loses its potential for clearly guiding the social partners: almost any possible topics of negotiation can be interpreted in the framework

of flexicurity, from working time to wages or collective dismissals.' It implies that discussions on flexicurity can be regarded pragmatically, with the focus on content rather than wording, and be used as a starting point to deepen the social dialogue for improving the trade unions' position.

For instance, the *Dutch Flexibility and Security Act* of 1999 mentioned suggests a new role of trade unions in applying labour laws. According to Houwing (2009), it entails new regulations as only 'three-quarter mandatory', meaning that collective agreements can deviate from legislation norms in either direction. This unique feature of the Dutch flexicurity gives collective bargaining a pivotal role in regulating employment relations and an additional legal room for new trade unions' demands.

However, handling flexicurity is difficult because of its multi-factor nature with reciprocal interactions of social and economic issues. To keep the situation under control, the Employment Committee (2008, 2009) is developing a list of indicators for monitoring flexicurity policy with statistical figures. There are already academic studies in flexicurity which illustrate their statements with macro statistics; for reviews see European Foundation (2007a), Muffels (2008), and Bertozzi and Bonoli (2009).

All these indicators are however insufficient for a comprehensive policy analysis, to say nothing of collective bargaining. Macro figures do not capture the dependence between flexicurity components at the level of single cases like family situations, individual contracts, or collective agreements. For instance, the relation between flexibility and security is studied with estimates of strictness of labour laws and social expenditures (European Commission 2006a). It is neglected that the normative rules are sometimes quite far from the actual practice, and that the efficiency of social expenditures varies considerably, depending on national implementation. Moreover, macro figures are usually considered for a few countries, and conclusions based on a few observations are statistically unreliable, which is additionally aggravated by heterogeneity of national cases. Nevertheless, conclusions or even recommendations are generalized to all the countries considered. Of course, they require reservations, because what is good for one country is not necessarily good for another. For instance, the impact of almost the same flexibilization measures on easing restrictions on the use of fixed-term contracts 'was sharply different' in Germany and Spain (OECD, 1999b, p. 71).

The given paper suggests an overview of six families of flexicurity indicators developed at the Hans-Böckler-Foundation in 2004–2009. Unlike most of flexicurity indicators, these ones are derived from micro (individual) survey data and are constructed with dedicated models. The micro approach has two advantages. First, the number of observations is sufficient to obtain statistically significant conclusions, both general and within single countries. Second, it is possible to analyse interdependence, like correlation, between different aspects of the trends considered.

Each of the following chapters is devoted to a particular topic, methodological outline, then six chapters on six families of flexicurity indicators, all starting with an explanation of the specific political motivation for the given type of indicators and ending with political conclusions, and finally a chapter with flexicurity implementation proposals. Thus a quick reading can be reduced to introductory and summary paragraphs of every chapter with omitting technical details between them.

Chapter 2, 'Operationalization of the concept of flexicurity', describes the representation of flexicurity with matrices and vector spaces.

Chapter 3, 'Indexing flexicurity from the neo-liberal viewpoint', is devoted to flexicurity understood as compensation of flexibility with social security benefits.

Chapter 4, 'Indexing flexicurity from the trade unionist viewpoint', analyses the case when labour rights are not regarded as tradable issues against benefits.

Chapter 5, 'Indexing flexicurity from the viewpoint of the European welfare state', demonstrates a decline of European welfare due to flexibilization of employment relations.

Chapter 6, 'Flexicurity and precarious work', investigates risks of precarious employment under flexicurity.

Chapter 7, 'Flexicurity from the viewpoint of professional training', shows that flexicurity can be hardly backed up by professional training.

Chapter 8, 'Flexibility and security in collective agreements', considers flexibility and security trends in Dutch collective agreements.

Chapter 9, 'Reform proposals', suggests four policy instruments for an alternative implementation of flexicurity.

To summarize, in all the cases a flexibilization bias of flexicurity is revealed. The predominance of flexibility at the price of security is a serious warning against improper implementation of flexicurity and one-sided use of this policy in favour of employers.

2 Operationalization of the concept of flexicurity²

2.1 Definition and main dimensions

Flexicurity can be metaphorically characterized by analogy with the motto of Prague Spring 1968 "socialism with a human face" (Tangian 2006e, p. 12):

Flexicurity is flexibilization (= deregulation) of labour markets with 'a human face', that is, compensated by some social advantages, particularly for the groups affected.

The main distinction captured by this definition is that disadvantageous groups should be compensated. Therefore, flexicurity differs from unconditional deregulation by introducing compensatory measures in social security and employment activation. Specific definitions of flexicurity may depend on the flexibilization steps suggested, the pace of deregulation, the nature of the social advantages proposed, and estimates of their compensatory equivalence. Consensus as to how these factors can be balanced is not a purely academic matter but, rather, an issue for negotiation between governments, employers, and trade unions, as is the case with collective agreements.

A distinction can also be made between *static* and *dynamic flexicurity*. Static flexicurity means weak labour market regulation combined with generous social security entitlements and employment activation measures ('golden triangle' – see Madsen 2003; OECD 2004b, p. 97); this is found in Denmark. Dynamic flexicurity refers to a flexibilization process that is compensated by some social advantages and activation programmes, as is found in the Netherlands. It can be said that the Netherlands is not as 'flexicure' as Denmark but that the country pursues a more intensive flexicurity policy.

The most cited definition of flexicurity is due to Wilthagen and Tros (2004, p. 169, see also Wilthagen 1998) who however consider flexibilization with no negative attitude but rather as a positive factor:

[Flexicurity is] a policy strategy that attempts, synchronically and in a deliberate way, to enhance the flexibility of labour markets, work organization and labour relations on the one hand, and to enhance security — employment security and social security — notably for weak groups in and outside the labour market on the other hand.

It is emphasized (Wilthagen and Tros 2004, p. 170) that flexicurity is not 'simply social protection for flexible workforces as Klammer and Tillmann (2001), Ferrera *et al.* (2001) and many others tend to perceive it'. According to Wilthagen and Tros (2004, p. 167), flexicurity policies aim to increase the competitiveness of European economies through further liberalisation. This requires a compromise between employers, who seek labour market deregulation, and employees, who want to protect their rights. This manifests itself explicitly in the description of flexicurity as a flexibility–security trade-off (Visser and Hemerijck 1997, p. 44; Wilthagen and Tros 2004, p. 171; Kronauer and Linne 2005; Ramaux 2006).

Let us consider the notions of *flexibility* and *security* more closely with a view to better understanding the nature of the trade-off proposed. *Flexibility* refers to a multivariate aggregate which, according to the OECD (1989, p. 13–20), includes:

- *External numerical flexibility, or employment flexibility* – Standing (1999, p. 101–

² This chapter is based on Tangian (2004a–b, 2005a, 2006c–e, and 2007a)

114); *numerical flexibility* – Regini (2000, p. 16); *external quantitative flexibility* – Vielle and Walthery (2003, p. 8), which is defined as the employer’s ability to adjust the number of employees to current needs. In other words, it is the ease of ‘hiring and firing’ which manifests itself in the mobility of workers between employers (external job turnover).

- *Internal numerical flexibility*, or *work process* or *functional flexibility* – Standing (1999, p. 114–116); *temporal flexibility* – Regini (2000, p. 17); *internal quantitative flexibility* – Vielle and Walthery (2003, p. 8), which is the employer’s ability to modify the number and distribution of working hours without changing the number of employees. It covers shift work, seasonal changes in the demand for labour, weekend/holiday work, overtime and variable hours; see also Keller and Seifert (2004, p. 228).
- *Functional flexibility*, or *job structure flexibility* – Standing (1999, p. 117–124); *internal-functional flexibility* – Keller and Seifert (2004, p. 228); *internal qualitative flexibility* – Vielle and Walthery (2003, p. 8), that is, the employer’s freedom to move employees from one task or department to another or to change the content of their work. It is reflected in the mobility of workers within enterprises (internal labour turnover); see also Regini (2000, p. 16).
- *Wage flexibility*, or *flexible* or *variable pay* by Wilthagen and Tros (2004, p. 171), which enables employers to alter wages in response to changing labour market or competitive conditions. Typically, employers prefer performance-linked remuneration systems combined with (or instead of) the usual collective agreements, which are independent of individual performance; see also Regini (2000, p. 16–17, 19–21).
- *Externalisation flexibility*, or *external functional flexibility* – Keller and Seifert (2004, p. 228); one of the constituents of *job structure flexibility* – Standing (1999, p. 123); *external qualitative flexibility* – Vielle and Walthery (2003, p. 8), which is the employers’ ability to engage the services of external workers or firms without employment contracts but with various forms of commercial contracts such as distance working, teleworking, virtual organisations, and *entreployees*, i.e. self-entrepreneurial activities; see Pongratz and Voß (2003).

The notion of *security* also includes several issues. For instance, Standing (1999, p. 52) defines seven types of security. However, not all of them are relevant to the flexicurity debate, as is the case of *labour market security* through state-guaranteed full employment in socialist countries. Dupeyroux and Ruellan (1998) and Vielle and Walthery (2003, p. 18–19) focus on the compensatory function of security in the event of unemployment, illness, advancing age, maternity or invalidity, and in cases of exceptional medical or family burdens (decommodification in the sense of Esping-Andersen 1990). More specifically, Wilthagen, Tros and van Lieshout (2003, p. 4) restrict their consideration to the following four types of security:

- *Job security*— in the terminology of Standing (1999, p. 52) *employment security*,— ‘the certainty of retaining a specific job with a specific employer’. It is guaranteed by the protection of employees against dismissal and against significant changes to working conditions. This is the main objective of employment protection legislation.
- *Employment/employability security*— in the terminology of Standing (1999, p. 52) *job security*,— the ‘certainty of continued work (not necessarily with the same employer)’. It implies the availability of jobs for workers who have been made redundant and for the unemployed, according to their qualifications and previous employment circumstances. The employability of jobseekers can be improved by lifelong vocational training, which can be provided both by employers and by training schemes

in the context of active labour market policies; see Keller and Seifert (2004, p. 235). Tros (2004, p. 5) also mentions *entreplooyees*, firm-firm job pools, and facilities for work-work transitions.

- *Income (social) security*, ‘income protection in the event that paid work ceases’. Standing regards this more generally as protection of income through a minimum wage, wage indexation, comprehensive social security, including progressive taxation, and provisions for old age, or post-employment security – Keller and Seifert (2004, p. 236–238).
- *Combination security* (Tros 2004, p. 5; not considered by other authors cited), ‘the certainty of being able to combine paid work with other social responsibilities and obligations’. Tros explains this further as a work-life balance, work-family balance, early flexible part-time retirement, flexible working hours and leave facilities.

Thus, a flexicurity policy is conceived as an increase in several types of flexibility compensated by improvements in several types of security.

2.2 Tracing flexibility-security trade-offs with matrices

The so-called Wilthagen matrix, such as Table 1, is often suggested ‘as a heuristic tool empirically to trace flexicurity policies as specific trade-offs’ (Wilthagen and Tros 2004, p. 171). The cells of the table show policy measures in relation to various types of flexibility and security. Some measures have multiple relevance and are therefore found in several cells, e.g. *entreplooyees*. Such tables clearly illustrate the complex structure of *flexibility* and *security* but on closer inspection fail to describe the trade-offs between them.

First, the matrix makes no provision for measures that relate solely to deregulation (flexibility) or solely to security. In particular, the *Dutch Flexibility and Security Act* summarised in Table 2 by the same authors (Wilthagen and Tros 2004, p. 175) cannot be accommodated in Table 1. The Dutch law includes a number of items that contribute either to flexibility *or* to security. However, Table 1 only makes provision for measures that are of simultaneous relevance to both flexibility *and* security, because the table elements are cross-sections of flexibility rows and security columns.

Secondly, Table 1 classifies policy measures as types of flexibility/security rather than describing the flexibility/security compensation (trade-off). Simultaneous classification of this nature makes policy measures ambiguous (in favour of flexibility or security?), conceals the compensation issues and creates the illusion of a balanced solution, along the lines of the proverb ‘Every cloud has a silver lining’.

For instance, ‘firm-firm job pools’ are considered to be a flexibility measure (classed in the ‘External numerical flexibility’ row), which facilitates dismissal. At the same time they are located in the ‘Employment security’ column, meaning that they are regarded as a security measure. However, ‘firm-firm job pools’ are not really compensatory for employees because they provide poorer career opportunities than those employees would have if they retained the same job. In fact ‘firm-firm job pools’ are a personnel rotation device to ‘softly dismiss’ workers rather than a flexicurity measure with fair social/employment security compensation.

Table 1. Wilthagen's matrix for tracing flexibility–security trade-offs for older workers

	Job security	Employment security	Income security	Combination security
External numerical flexibility		Firm-firm job pools Facilities for work-work transitions Older <i>entremployees</i> , that is, self-entrepreneurial activities; see Pongratz and Voß (2003)	Retirement arrangements	
Internal numerical flexibility	Part-time work Flexible retirement Part-time <i>entremployees</i>		Flexible retirement	Part-time retirement Flexible age (pre-pension) Flexible working hours Leave facilities
Functional flexibility	Education/training Adaptation of working hours/tasks	Education/training Seniority/bridge work (= reduced hours, lower loads) Job rotation Age-aware career and job structures		

Source: Tros (2004, p. 5)

Table 2. The Dutch Law on Flexibility and Security (extraction) from 01.01.1999

Flexibility	Security
<ul style="list-style-type: none"> • Adjustment of the regulation of fixed-term employment contracts: after 3 consecutive contracts or when the total length of consecutive contracts totals 3 years or more, a permanent contract exists (previously this applied to fixed-term contracts that had been extended once). • The obligation of temporary work agencies (TWA) to be in possession of a permit has been withdrawn. The maximum term for this type of employment (formerly 6 months) is abolished as well. • The notice period is in principle 1 month and 4 months at maximum (used to be 6 months). 	<ul style="list-style-type: none"> • Introduction of so-called presumptions of law which strengthen the position of atypical workers (regarding the existence of an employment contract and the number of working hours agreed in that contract); the existence of an employment contract is more easily presumed. • A minimum entitlement to three hours' pay for on-call workers each time they are called in to work. • Regulation of the risk of non-payment of wages in the event of there being no work for an on-call worker: the period over which employers may claim that they need not pay wages for hours not worked has been reduced to six months. • A worker's contract with a TWA is considered a regular employment contract; only in the first 26 weeks are the agency and the agency worker allowed a certain degree of freedom with respect to starting and ending the employment relationship. • Special dismissal protection has been introduced for employees engaged in trade union activities.

Source: Wilthagen and Tros (2004)

Another way of classifying (static) flexibility/security combinations has been used by Sperber (2005) with a reference to ILO (Auer 2005; Auer and Cazes 2002) and by the OECD (2004b). The countries in Table 3 are classified with respect to two indicators: strictness of employment protection legislation (EPL) and level of social protection (UIB – unemployment insurance benefits) listed in table cells together with unemployment rates. Each dimension of this matrix represents *grades of one criterion* in contrast to Wilthagen’s matrix, whose dimensions represent *several flexibility and several security criteria*. In addition, the unemployment rate in the ILO matrix indirectly suggests an evaluation measure for combinations of flexibility-security indices. For instance, Denmark, where employment and social protection are indexed at 8 and 27 respectively, is ‘socially evaluated’ as having 4.4% unemployment. Instead of the unemployment rate, one could use GDP growth (Pissarides 2000, 2001; Blanchard 2006), job security (Auer and Cazes 2002), or some political criterion.

Unlike Wilthagen’s matrix, Table 3 is not appropriate for displaying several types of flexibility or security. It can also be misleading, indirectly suggesting that ‘the less regulation and the less security the better’ (unemployment is lower), which is certainly not true for most countries.

Thus, Wilthagen’s matrix emphasises the many-sidedness of flexibility and security but does not present flexibility/security compensation rates in a manner that allows us to identify the trade-offs. The ILO matrix is designed to evaluate flexibility/security interactions, but it fails to consider more than one dimension of flexibility or of security, and the given evaluation is quite tendentious.

Table 3. Institutional arrangements and unemployment rate

Social security: UIB (unemployment insurance benefits)	Flexibility: strictness of EPL (employment protection legislation)	
	Low	High
High	Denmark Employment protection 8 Social protection 27 Unemployment rate 4.4%	France Employment protection 21 Social protection 20 Unemployment rate 9.3%
Low	USA Employment protection 1 Social protection 3 Unemployment rate 4.0%	Japan Employment protection 14 Social protection 4 Unemployment rate 4.7%

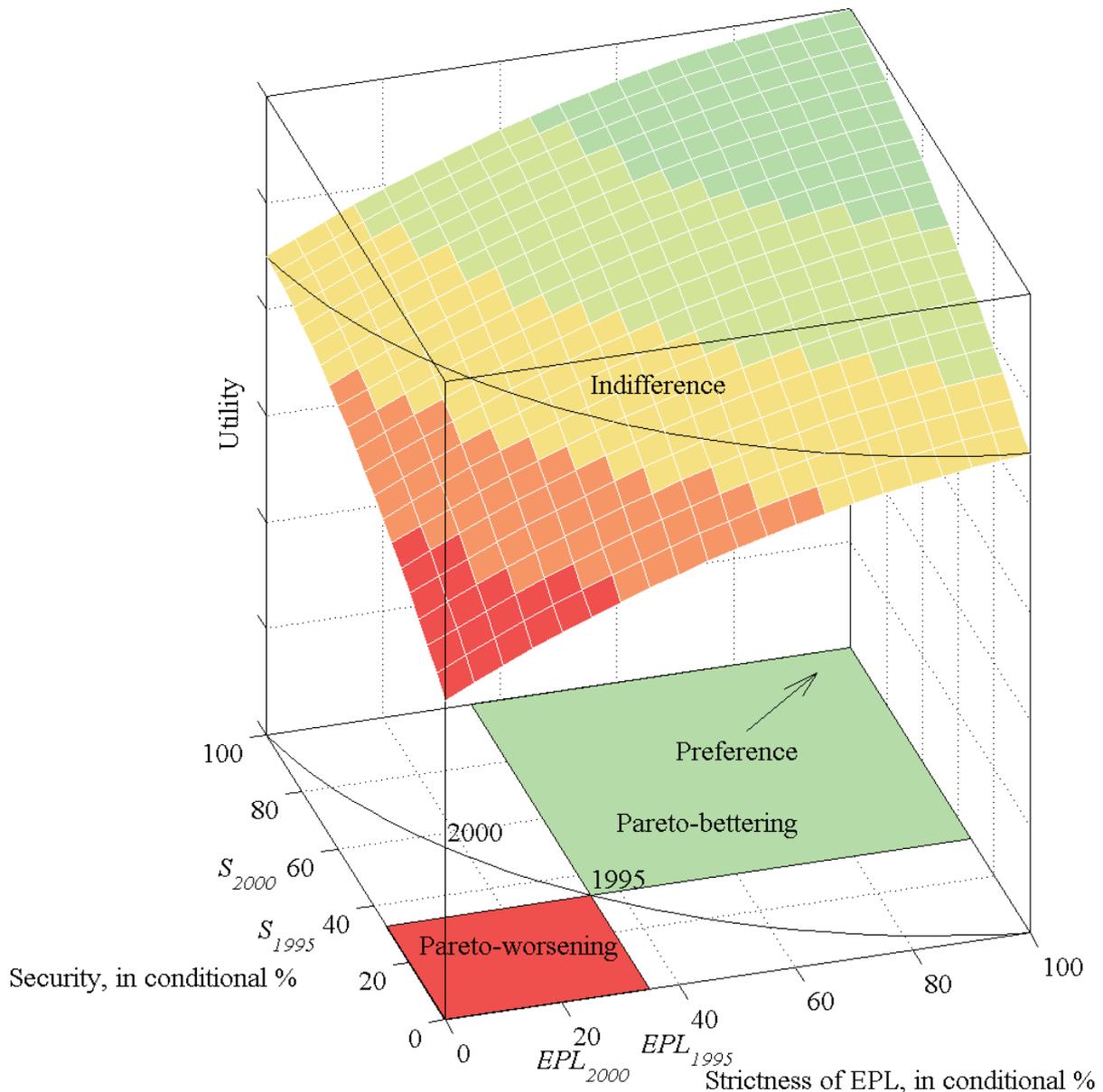
Source: Sperber 2005

2.3 Flexicurity trade-offs in a policy space

A practical instrument for tracing flexicurity policies should combine the advantages of both matrices displayed in Tables 1 and 3 and at the same time enhance the dynamic aspect of flexicurity. A monitoring instrument of this nature has been proposed by the HBS; see Tangian (2004b and 2005a). It has been suggested to convert two dimensions of Table 3 into continuous axes.

The resulting two-dimensional plane is shown in Figure 1. The frontal horizontal axis *Strictness of EPL* displays the strictness of employment protection legislation measured in conditional % (= conditional units in the range 0–100). The strictness increases from left to right, implying flexibility on the left and rigidity on the right. The second axis *Security* shows the aggregated social security, also measured in conditional %. States of society are expressed by two figures, index of strictness of EPL and security index. Each country can thereby be depicted as a point (vector) in the *Strictness of EPL – Security* two-dimensional plane for a given year.

Figure 1. A flexicurity trajectory in the flexibility-security space as an indifference curve



Source: Tangian (2004b, p. 13, and 2005a, p. 17)

If five types of flexibility and four types of security are to be considered as in the Wilthagen matrix, the horizontal axes in Figure 1 split into five flexibility and four security axes respectively. The dimensionality of vectors increases correspondingly, the horizontal axes in Figure 1 then becoming aggregates of several dimensions. The multidimensional vector representation therefore holds, although its visualisation becomes conditional.

For simplicity, two main factors of flexicurity are considered – *strictness of EPL* and *social (income) security*. Since the flexicurity debate has originated from the call for relaxation of EPL, the *strictness of EPL* can be taken as an indicator of the *external numerical flexibility*. The strictness of EPL and the generosity of social security benefits are often regarded as the principal regulators of labour markets (Blanchard and Tirole 2004).

To speak of a trade-off, one has to assume that there is a social preference. A preference is usually represented by a utility function that takes greater values at more preferable points and remains constant at equivalent points, which constitute *indifference curves* (= trade-offs), in other words, isocurves of the same altitude on the utility hill (see Figure 1). The utility function incorporates some social evaluation measure, and moving along an indifference curve means that a decrease in employment protection is fairly compensated by an increase in social security.

Suppose, for instance, that a country is characterised by the following vectors for 1995 and 2000: $1995 = (EPL_{1995}, S_{1995})$ and $2000 = (EPL_{2000}, S_{2000})$. If the flexicurity policy has been implemented correctly, both vectors 2000 and 1995 would lie on the same indifference curve, as in Figure 1. If the vector for 2000 lies in the Pareto-worsening domain (more flexibility without an improvement in security), it would mean that a deregulation-only policy was predominant.

This type of representation allows us to introduce an operational definition of flexicurity (Tangian 2006e, p. 20).

A 'flexicure' country (with static flexicurity) is one whose vector is close to the 'high flexibility-high security' edge of the flexibility-security rectangle. A flexicurity policy (dynamic flexicurity) means movement of the country's vector along an indifference curve of social utility towards higher flexibility and higher social security.

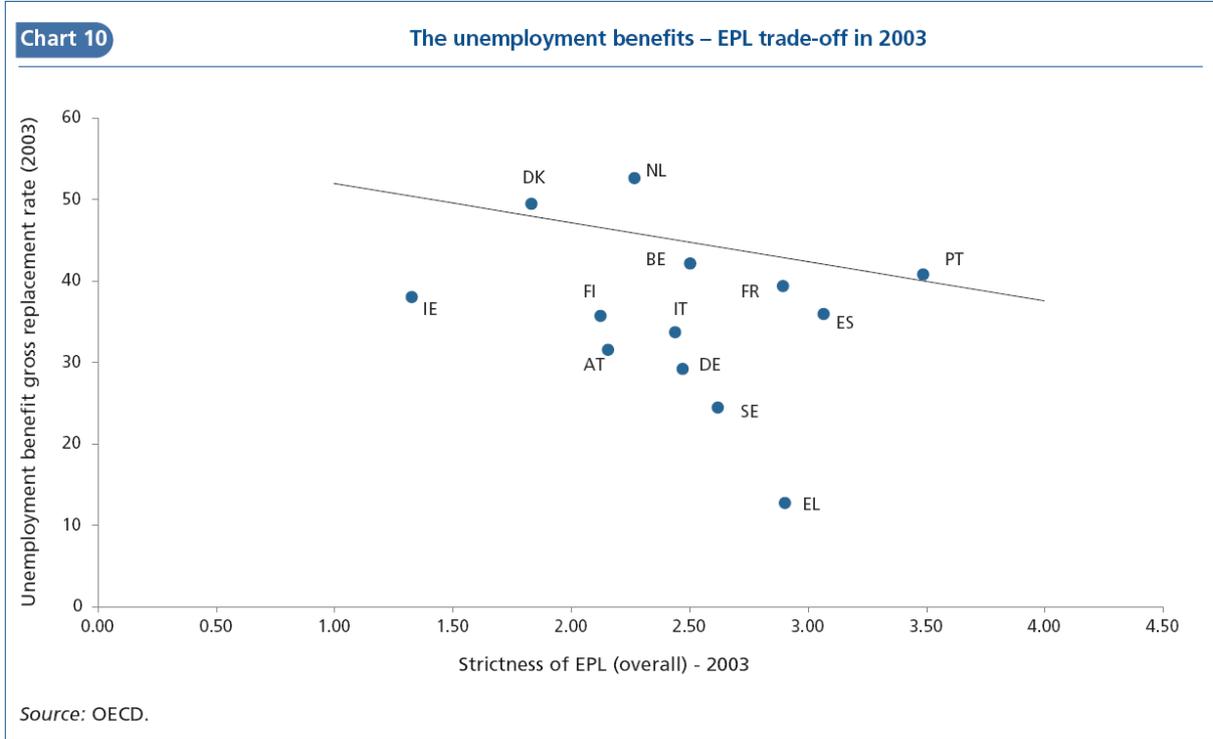
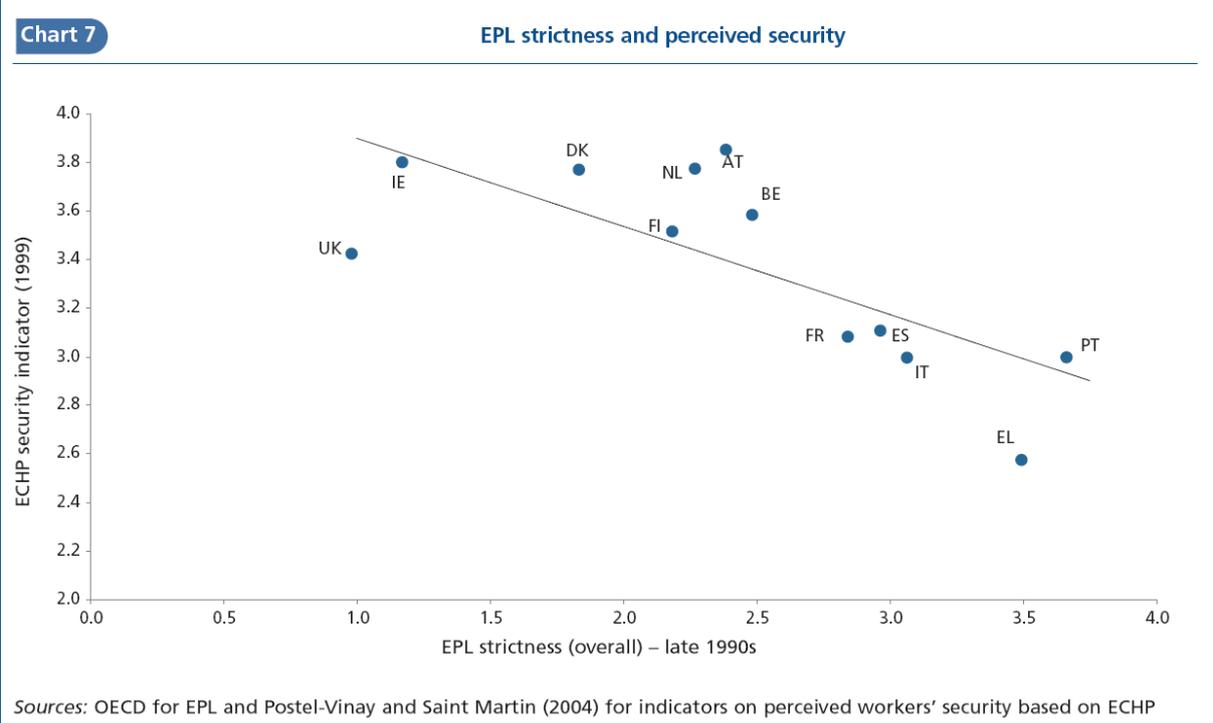
Indifference curves incorporate the flexibility-security compensation rates. The social utility function can reflect different viewpoints with particular compensation rates (= trade-offs, as construed either by the EU, national governments, or trade unions), emphasise certain aspects of social protection, or be a macroeconomic indicator that depends on both factors, such as unemployment rate or GDP growth.

The agreement that flexibility must be compensated by security implies that the more employment and social protection there is, the better (otherwise what is the compensation for?). And it implies in turn that the Pareto-worsening and Pareto-bettering domains (directions of simultaneous deterioration or simultaneous improvement) are common to all countries, since they are independent of the shape of the utility hill. This holds even if the utility function of the society is not specified.

This type of policy space has been considered in *Employment in Europe 2006* by the European Commission (2006a, pp. 88, 95). The upper plot of Figure 2 depicts 12 European countries located in the plane flexibility (= strictness of EPL) – subjectively perceived security. The dependence between flexibility and security is estimated by regression analysis. The conclusion is that the countries with weak employment protection well compensate it with some additional security, so that the security feeling in the society even increases. The bottom plot locates 13 European countries in the plane flexibility–social security (understood as in Table 3, strictness of EPL – replacement rate of unemployment benefits). It also suggests a trade off, showing how a weak employment protection is compensated by a more generous social security system. The rigour of both considerations is questionable, because the observations are too heterogeneous and too few. Nevertheless, the use of a vector space instead of a matrix in the Commission's representation of flexicurity is noteworthy.

To conclude, matrix representations of flexicurity were illuminating but could not accommodate all the dimensions of flexicurity and reflect substitution rates. Representations as vector spaces are not restricted by two dimensions and have continuous axes to reflect fractional values. Therefore, vector space representations will be considered.

Figure 2. Flexicurity spaces from *Employment in Europe 2006* by European Commission (2006a)



Source: European Commission (2006a, pp. 88 and 95) with reference to the OECD

3 Indexing flexicurity from the neo-liberal viewpoint³

3.1 Commodification of labour rights

In Polanyi's (1944) terminology, the distinction of the neo-liberal philosophy is commodification of labour, that is, consideration of labour as a market commodity. Under this philosophy, flexibilization of employment relations is regarded as a tradable option which can be 'purchased' with pay-offs to employees in the form of social security benefits and other services like lifelong learning to improve employability. In fact, the very idea of flexicurity was coined under this default assumption of total exchangeability of labour rights against social security and employment security advantages.

Correspondingly, the neo-liberal viewpoint at flexicurity assumes the existence of trade-offs in the flexibility–security space, similarly to the ones shown in Figures 1 and 2. The only technical question is accounting flexibility and security with establishing their replacement rate (compensation). Therefore, for modeling the neo-liberal viewpoint, we first of all need both indicators of flexibility and of security.

3.2 Social security indicator

The indicator of social security is derived from the OECD (2002b) summary of social security benefits updated from the *Mutual information system on social protection* (MISSOC) of the European Commission (2004). The OECD considers social security as a compound of five benefits:

- unemployment insurance,
- public pensions,
- paid sick leave,
- paid maternity leave, and
- paid holidays.

Note that we include the entitlement to paid holidays which is usually not considered within the flexicurity debate. The reason is as follows. Securities are aimed at compensating income losses and exceptional medical and family burdens, including vacations. Therefore, no entitlement to paid holidays discriminates those flexibly employed who work few hours, under short-time contracts, or self-employed.

The eligibility to the benefits depends on the country's laws and on the employment status (= adherence to a particular employment group). For example, normally employed are better secured than atypically employed. If the first group is large and the second is small then the "average" social security in the society is quite high. However, if the first group is small and the second is large then, under the same jurisdiction, the social security level is considered low. Therefore, the social security in a country is accounted as the weighted sum of social security indicators of employment groups with the weights proportional to their size. In a sense, **we consider the micro-data (individual data) on eligibility to security benefits and process them in homogeneous groups.**

³ Based on Tangian (2004b, 2005a, 2006c—2007a) and Seifert and Tangian (2006)

Box 1: Why composite indicators are (un)weighted sums of variables

A *composite indicator* in the general form is a formula with n entries (for first-level indicators), in other words, a function f in n variables which to each set of input values x_1, \dots, x_n puts into correspondence the indicator value $y = f(x_1, \dots, x_n)$. Usually a composite indicator is not expected to abruptly change its behaviour, meaning the differentiability of f . Then its Taylor expansion in a neighbourhood of some reference point (x_1^0, \dots, x_n^0) gives the first-order approximation of f :

$$\begin{aligned} f(x_1, \dots, x_n) &\approx f(x_1^0, \dots, x_n^0) + \sum_{i=1}^n \frac{\partial f(x_1^0, \dots, x_n^0)}{\partial x_i} (x_i - x_i^0) \\ &= \underbrace{f(x_1^0, \dots, x_n^0) - \sum_{i=1}^n \frac{\partial f(x_1^0, \dots, x_n^0)}{\partial x_i} x_i^0}_{\text{Constant } C} + \underbrace{\sum_{i=1}^n \frac{\partial f(x_1^0, \dots, x_n^0)}{\partial x_i} x_i}_{\text{Weighted sum } \sum_{i=1}^n a_i x_i} \\ &= C + \sum_{i=1}^n a_i x_i \end{aligned}$$

Since composite indicators are primarily used for comparisons and tracing relative progress, the constant C is omitted. The remaining weighted sum of variables is, consequently, the general composite indicator to within its first-order approximation.

According to OECD (2005b, p. 21), ‘most composite indicators rely on equal weighting, i.e., all variables are given the same weight’, and we follow this principle, putting $a_i = 1/n$. Indeed, if no information is available, equal weights have maximal statistical likelihood (Kendall and Moran 1963). Another reason for equal weighting is that if certain variables get higher weights then the persons for whom these variables are of particular importance are overrepresented. For instance, young women with small children may pay more attention to paid maternity leave, and middle-aged men may be most interested in unemployment insurance. Therefore, a higher weight for unemployment insurance favours middle-aged men and discriminates women with children. It means that unequal weights of variables result in an inequality of individuals. Since individual weights are usually assumed equal, regardless of education, experience, or intelligence (one voter—one vote), the weights of variables are assumed equal as well.

Of course, if some specific information on importance of factors is available it can be implemented in weighting. There are even models where each agent can define individual weighting; see for instance Wahl-o-Mat (2009).

The interaction of institutional and mobility factors can be illustrated with a simplified example. Suppose that short-time unemployed get 700 EUR a month, long-time unemployed get 300 EUR a month, and that these groups constitute 90% and 10% of all unemployed, respectively. Thus the average aid is $700 \times 0.9 + 300 \times 0.1 = 660$ EUR/month. Suppose that after an institutional improvement, all get 10% more aid, but now both groups are of equal size 50%. Then the national average is equal to $770 \times 0.5 + 330 \times 0.5 = 550$ EUR/month. It plainly appears that, contrary to the general institutional improvement by 10%, the national average, due to mobility, decreases from 660 to 550 EUR/month, that is, by 16.6%. Our account just captures this effect.

Within the flexicurity debate, Klammer and Tillmann (2001, p. 514) and Hoffmann and Walwei (2000) provide a classification of employment types with respect to four dichotomous distinctions:

- permanent/fixed-term,
- full-time/part-time,
- employed/self-employed, and
- in agriculture/not in agriculture.

Some combinations make little sense, like "fixed-term self-employed", so we consider only 8 employment groups (see Table 4) in each of 16 countries, totally 128 groups. The authors cited do not refer to labour market outsiders as suggested by Wilthagen and Tros (2004). We do not include them either, not the least because flexicurity deals with the flexibility of *employment* relations.

Thus, each social security benefit (of the five) is evaluated for each of 128 employment groups. To illustrate the procedure, consider unemployment insurance. Table 4 shows the ranks of employment groups with respect to eligibility for unemployment benefits; see Tangian (2005a) for the full table. Missing data '?' are replaced by the mean value, as common in statistics. The indicator of unemployment insurance for employment groups is derived from the ranks. For changing social security norms, the *method of total ranks* is applied; see Box 2 and Tangian (2005a, p. 30) for mathematical propositions and formulas. The indices of other social security benefits are derived from similar evaluations.

The social security indicator of an employment group is the mean of five indicators for particular benefits. The national indicator is the weighted sum of the indicators of the relevant employment groups with the weights proportional to their size. The size of employment groups is provided by the *Labour Force Survey* of Eurostat (2004). Table 5 illustrates the accounting procedure for Germany in years 1990–2003. For each year, the size of an employment group corresponds to the width of its color rectangle. The indices of five social security benefits are shown by color layers, so that the social security index of an employment group is the height of its color rectangle. The black remainder indicates the "deficit of security" to attain the 100%-level. Thus, the national indicator is the ratio of the total color area to the total rectangle of the year. Note the decreasing share of normally employed with the highest social security level. Already this trend alone lowers down the average social security level in the country.

Box 2: Method of Total Ranks

The OECD (2005b) guide-lines for constructing composite indicators assume that the input first-level indicators are metrical which can be too restrictive, like in case of qualitative issues which can be only ranked. According to the OECD (1999b, p. 115), the major problem of rank-based scales is the dependence of new alternatives:

One limitation of a summary indicator based on ranking is that a given country's ... score could either rise or fall over time, even though its ... practice were completely unchanged, for the simple reason that other countries changed their policies. Even more fundamentally, it would be invalid to compare rank-based score for the late 1980s, which was based on an analysis of 16 European countries, with a rank-based score for the late 1990s based on a sample of 27 countries. Quite independently of any changes in EPL, the maximum rank score has nearly doubled.

To illustrate this effect, consider Denmark (DK) and Netherlands (NL) with regard to the duration of unemployment insurance in 1994–2004. In 1994 the duration of Danish insurance was 30 months, and in the Netherlands it was 6–54 months, depending on the length of service and age. In 2004 Denmark extended the duration unconditionally to 48 months. Although the practice remains unchanged, the rank of Netherlands changes, implying the change of its rank-based score:

Rank	1994		2004	
	Country	Insurance duration	Country	Insurance duration
1	NL	6–54 months, conditioned	DK	48 months, unconditioned
2	DK	30 months, unconditioned	NL	6–54 months, conditioned

To overcome this effect, the ranking method can be modified as follows. Rank all the pairs 'Country/Year'. For this purpose consider Denmark in 1994 and Denmark in 2004 as two different issues (as they actually are) and the Netherlands in 1994 and in 2004 as two copies of the same issue. Hence, the total ranking is

Rank	1994		2004	
	Country	Insurance duration	Country	Insurance duration
1			DK	48 months, unconditioned
2	NL	6–54 months, conditioned	NL	6–54 months, conditioned
3	DK	30 months, unconditioned		

which implies the constant rank of the Netherlands and changing ranks of Denmark. Thus the undesired property of rank-based indicators is overcome.

The second OECD's concern is that the first-level indicators based on ranks are invalid when the number of countries changes (e.g. the top rank of 27 countries almost doubles the top rank of 16 countries). This problem can be resolved by proportionally reducing all the ranks to the standard scale 0–1.

Table 4. Ranking employment groups in European countries with respect to eligibility to unemployment insurance benefits

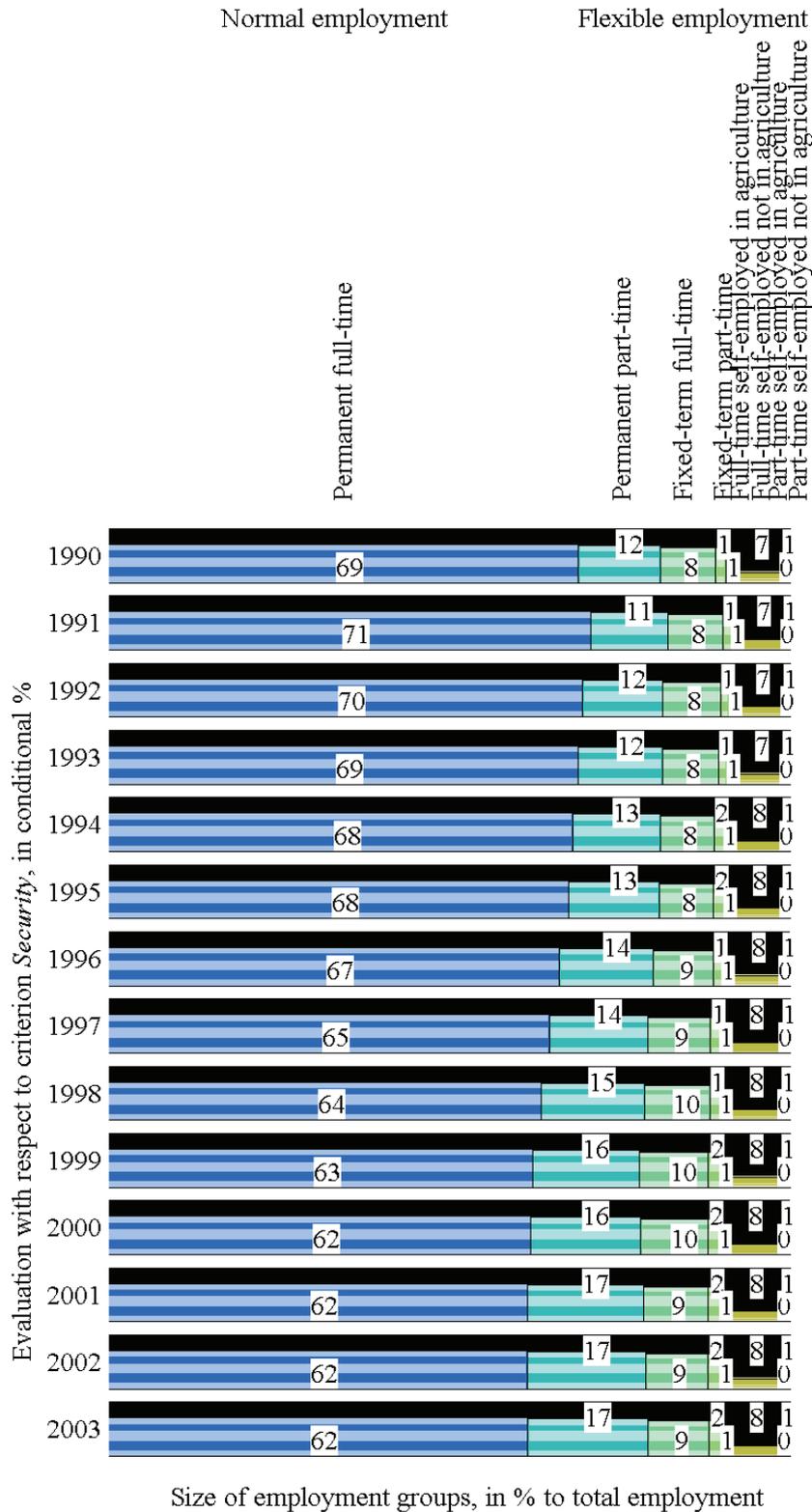
	General conditions		Employment type							
	Statutory right	Conditions	Permanent full-time	Permanent part-time	Fixed-term full-time	Fixed-term part-time	Full-time self-employed in agriculture	Part-time self-employed in agriculture	Full-time self-employed not in agriculture	Part-time self-employed not in agriculture
Germany	Yes	12 months in last 3 years or 6 months if a seasonal worker	5	5	6	6	12	12	12	12
Austria	Yes	52 weeks in past 24 months and earnings > 309 EUR	5	6	8	8	12	5	12	6
Belgium	Yes	312 days in past 18 months for < 36 years old and more days for older age groups	8	10	8	10	12	12	12	12
Switzerland	Yes	6 months in past 2 years; 12 months for repeat claim	3	3	4	4	? (7)	? (7)	? (7)	? (7)
Czech Republic	Yes	12 months in past 3 years	5	5	7	7	? (7)	? (7)	? (7)	? (7)
Denmark	Voluntary	52 weeks in past 3 years; 34 weeks for part-timers	5	5	7	7	6	6	6	6
Spain	Yes	360 days in past 6 years	5	5	6	6	12	12	12	12

Source: Tangian (2004b, p. 30–31 and 2005a, p. 36–37) with data from OECD (2002b, p. 146–148) and MISSOC (European Commission 2004)

Figure 3. Construction of German social security indicator for eight employment groups

Colour layers:

1. Unemployment insurance
2. Public pensions
3. Paid sick leave
4. Paid parental leave
5. Paid holidays



Source: Tangian (2005a, p. 43) computed with data of *Labour Force Survey* of Eurostat (2004)

3.3 Flexibility indicator

The starting point for estimating flexibility is the OECD (1999b, 2004b) indicator of strictness of employment protection legislation (EPL). The latter is based on three sub-indicators: strictness of EPL for permanent employees, strictness of EPL for temporary employees, and restrictiveness of collective dismissals; see Table 5. The OECD approach is purely institutional, and the national indices are just sums of the three sub-indicators.

Table 5. Summary indicators of the strictness of employment protection legislation (EPL)

	Regular employment			Temporary employment			Collective dismissals	
	Late1980s	Late 1990s	2003	Late 1980s	Late 1990s	2003	Late 1990s	2003
Austria	2.9	2.9	2.4	1.5	1.5	1.5	3.3	3.3
Belgium	1.7	1.7	1.7	4.6	2.6	2.6	4.1	4.1
Czech Republic	...	3.3	3.3	...	0.5	0.5	2.1	2.1
Denmark	1.5	1.5	1.5	3.1	1.4	1.4	3.9	3.9
Finland	2.8	2.3	2.2	1.9	1.9	1.9	2.6	2.6
France	2.3	2.3	2.5	3.1	3.6	3.6	2.1	2.1
Germany	2.6	2.7	2.7	3.8	2.3	1.8	3.5	3.8
Italy	1.8	1.8	1.8	5.4	3.6	2.1	4.9	4.9
Netherlands	3.1	3.1	3.1	2.4	1.2	1.2	3.0	3.0
Norway	2.3	2.3	2.3	3.5	3.1	2.9	2.9	2.9
Poland	...	2.2	2.2	...	0.8	1.3	4.1	4.1
Portugal	4.8	4.3	4.3	3.4	3.0	2.8	3.6	3.6
Spain	3.9	2.6	2.6	3.8	3.3	3.5	3.1	3.1
Sweden	2.9	2.9	2.9	4.1	1.6	1.6	4.5	4.5
Switzerland	1.2	1.2	1.2	1.1	1.1	1.1	3.9	3.9
United Kingdom	0.9	0.9	1.1	0.3	0.3	0.4	2.9	2.9

Source: OECD (2004b, p. 117)

For our purposes, we need yearly indices. Since Table 5 contains only three reference years, the yearly indices are obtained by linear interpolation.

Note that employment protection is usually conditioned by the employment status. For instance, permanently employed are generally better protected than temporary employed. To reflect the factual situation in the countries considered, we take institutional norms and quasi apply them to every employee. The national indicator, regarded as the national average, is computed by taking the weighted sum of the indicator values of groups of permanent and temporary employed which size are used as weighting factors. The indices of collective dismissals are equally applied to both groups. Similarly to the case of social security indicator, the dynamics of employment groups is provided by the *Labour Force Survey* of Eurostat (2004). Thereby our national EPL yearly indicator accounts both institutional aspects

(labour laws) and mobility between employment groups. For computational details see Tangian (2005a).

3.4 Findings

Figure 4 is a map of our policy space. It corresponds to the horizontal plane of Figure 1 ‘*Strictness of EPL – Security*’. The flexicurity compass at the bottom of Figure 4 shows the cardinal points. The indicators of strictness of EPL and social security provide a kind of navigation instruments for locating European countries. In particular, they enable tracing the country dynamic trajectories (up to 2003, starting however from different years and with possible interruptions, depending on data availability).

The *flexicure* countries with high flexibility and high security are located at top left (Denmark and Finland). The *inflexicure* countries with low flexibility and high security are located at top right (Sweden and the Netherlands). The United Kingdom with high flexibility and low security is located at bottom left and can be called *flex-insecure*. Spain, Portugal, and the Czech Republic, which have strict employment protection and low security, are located at bottom right and can be called *inflex-insecure*.

Recall that the third element of the flexicurity concept is the flexibility-security trade-off determined by the country's social utility function. In the given case it is not necessary to define it. Except for short periods in Denmark, Norway and the Netherlands, all trajectories run ‘westwards’ or ‘south-westwards’ into the Pareto-worsening domain (see Figure 1), which location is independent of the shape of social utility function. It means deregulation with no compensation. It should be noted that Figure 4 includes countries with different levels of employment and social protection, implying quite rough axis scaling. Even minor displacements in Figure 4 are therefore significant for each particular country.

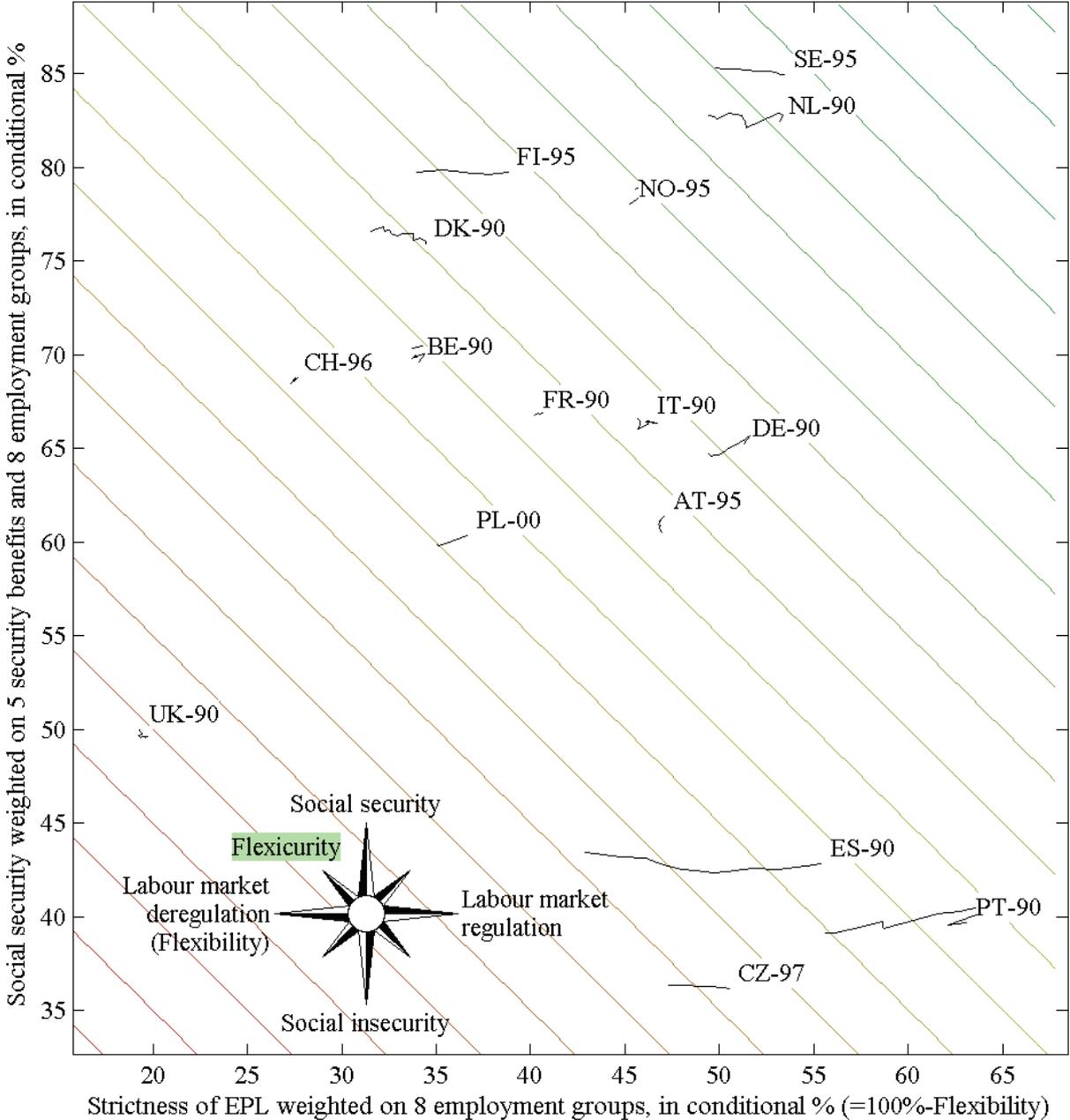
Just for orientation, the simplest social utility function

$$u = (\textit{strictness of EPL} + \textit{security})/2$$

is shown by indifference lines in Figure 4. The social preference increases ‘north-eastwards’, decreases ‘south-westwards’, and remains constant along the diagonal indifference lines. The pursuit of a flexicurity policy is reflected in a country’s trajectory moving ‘north-westwards’. It is characteristic of Denmark and Norway in the 1990s and the Netherlands in the late 1990s, when the flexicurity debate began. Since the exact slope of indifference curves is not known, it is unclear whether the flexibility-security compensation was ‘deliberate’, but at least a flexicurity development cannot be denied.

With minor reservations we conclude that deregulation-only policies are thus unambiguously prevalent, whereas the much promoted flexicurity is practically non-existent.

Figure 4. Country trajectories in the flexibility–security space. All the trajectories end in 2003 but start in different years (indicated), depending on the data availability. The diagonals in the background show conditional indifference lines



Source: Tangian (2004b, p. 41 and 2005a, p.19) computed with data from OECD and Eurostat

4 Indexing flexicurity from the trade unionist viewpoint⁴

4.1 Alternative understanding of flexicurity

Unlike neo-liberals, trade unions – primarily the French and German unions – do not agree to exchange labour rights for social benefits. Even if each particular compromise seems more or less fair, a succession of compromises could lead away from the social status quo and employees might ultimately get nothing, or very little, for their pains. The consequences could be similar to those in the familiar tale of the man who exchanges a horse for a cow, then the cow for a sheep, and so on until he finds himself with nothing but a needle, which he loses on the way home.

Trade unions doubt that better social guarantees can adequately compensate a higher *risk* of job loss. The ensuing disadvantages can never be fully compensated. Besides, it is unreliable to entrust workers' welfare to the welfare-giver, the state. Any political change can result in social cuts. Employment protection, on the other hand, guarantees jobs and consequently a stable income, even during recessions and political crises (Bewley 1999).

The concept of flexicurity as proposed by the neo-liberals may appear adequate: one commodity (labour rights) is exchanged for another commodity (social security), and the exchange rate should be negotiated. This apparently natural prerequisite leaves trade unions with no chance of winning. In fact, the default assumption that everything can be bought and sold does not always hold! In a sense, it is suggested that workers' social health (= the right to remain at work) be exchanged for a treatment (= social care, e.g. in the form of advanced social security benefits). In other words, give your working hand and get a prosthesis instead. But can a prosthesis, whatever its value, replace a healthy hand?

Therefore, trade unions are inclined to regard flexicurity rather as a measure for protecting weak workforces but not at the cost of disadvantages for 'normal' employees. The specificity of the trade union perspective of flexicurity is reflected by the definition criticised by Wilthagen and Tros (2004, p. 170):

[Flexicurity is] social protection for flexible workforces, understood as 'an alternative to pure flexibilisation' (Keller and Seifert 2004, p. 226), and 'to a deregulation-only policy' (Klammer 2004, p. 283; see also WSI 2000)

The reaction of the European Trade Union Confederation (ETUC) to the Commission's flexicurity proposals is summarised by Keune (2008a, p. 97–98, repeated in 2008b):

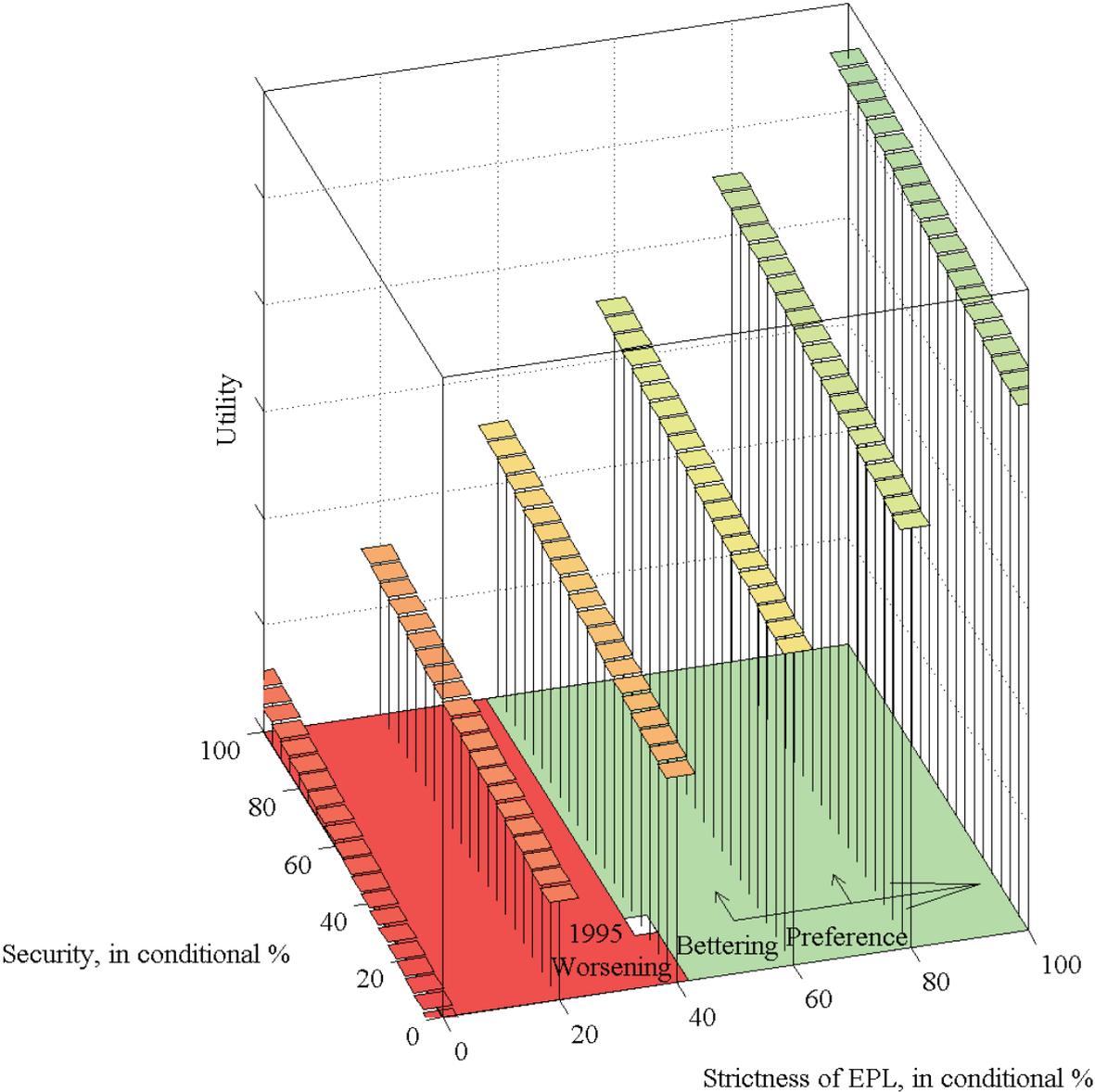
[ETUC] argues in a position paper that business in Europe already enjoys high adaptability, that the European economy is already flexible and that job creation has the upper hand over job destruction (ETUC, 2007). Rather, the ETUC identifies the prevalence of precarious employment and excessive flexibility as key problems and puts forward the improvement of the quality of jobs as a key objective. Also, like the European Parliament, it argues for employment security as a complement to, rather than an alternative for, job security, for open-ended contracts as the general rule and for upgrading the rights of atypical workers.

⁴ Based on Tangian (2004a–2005a, 2006c–2007a)

4.2 A social welfare function with no trade-offs

Thus, the preference of trade unions is determined primarily by labour rights (in our study by the strictness of EPL), and the second factor, security, is considered *ceteris paribus*, if only the first factor remains intact; see Figure 5. This preference can be imagined as a staircase with floors being the EPL strictness levels and each flight of stairs being the full-range ascent along the social security scale. This type of preference is called *lexicographic* by analogy with a lexicon which words are ordered alphabetically letter-by-letter (here, by the strictness of EPL and then by the security level). The lexicographic preference has no indifference curves which degenerate into single points. It means that a shortage of a high-priority factor cannot be compensated by any surplus of a lower-priority factor.

Figure 5. Lexicographic preference of trade unions with no trade-offs to follow



Source: Tangian (2004b, p. 15, and 2005a, p. 23)

The principal problem is that social preferences of neo-liberals and trade unions more than just differ, they differ in the *type* of preference. The former have a hill-shaped utility with gradual ascents/descents in every direction. Trade-unions have a stair-like utility with gradual ascents/descents only along the ‘flight of stairs’ but with leaps in all other directions. The

subject for bargaining— determining the slope of social trade-off—is questionable for trade unions whose preference has no indifference curves which might have a slope.

As mentioned by Wilthagen and Tros, (2004, p. 169): "some recent studies are pessimistic that appropriate trade-offs can be found between flexibility and security". The problem is in the very existence of trade-offs: "If these levels ... do not exist, negotiations and trade-offs are hard to envisage, because there is 'no more/or less' situation'" (Op. cit, p.181).

4.3 Indicators of flexibility and security for flexible employees

According to the trade-unionist concept of flexicurity, the focus should be made at improving the employment and social security of flexible workers. Therefore, the indicators of flexibility and security should be restricted to these types of employees. These indicators should not be defined anew. They can be extracted from the ones defined in Sections 3.2 and 3.3. It suffices to exclude normally employed from computations.

4.4 Findings

Figure 6 is analogous to Figure 4 with the difference that the indicators along the axes are restricted to flexible employees. The vertical lines in the background show the trade-unions indifference with respect to the first-priority dimension — flexibility, meaning that up-downward changes of security are of little importance comparing to changes of labour laws. Any deviation of a country trajectory to the left is unfavorable for trade unions, and an upward increment is appreciated if only the horizontal increment is negligible.

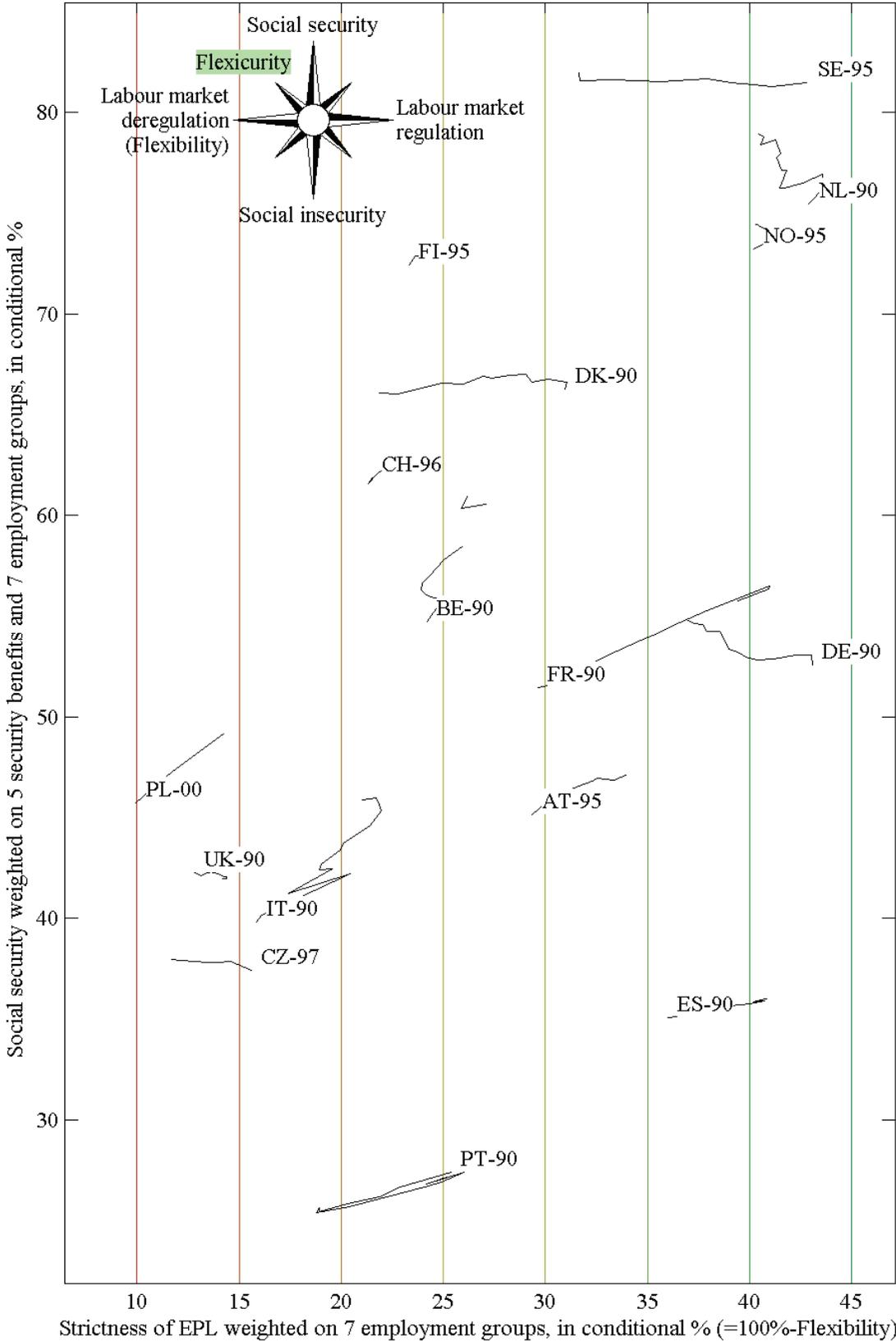
A growth of security index does not necessarily mean improvements in social protection of flexibly employed. It is often caused by the increasing share of temporary and part-time employed at the price of that of normally employed (Austria, France, Belgium, Poland). Indeed, more and more young people and women, entering labour market, sign part-time and temporary contracts. Since these employees are better secured than other flexibly employed, the growth of their share *within the flexibly employed* creates an impression of advantages. It is not true; they are only getting to be more numerous. Another factor of security growth of flexibly employed is the decreasing share of low-secured self-employed, who close their businesses and become employees (France, Austria, Belgium); see Tangian (2004a). This comparative security of all, normal and flexibly employed with reciprocal effects is traced by means of parallel indicators of so-called *All-security*, *Norm-security*, and *Flex-security*; see Tangian (2004a).

As for particular figures, the greatest decline of the first-priority indicator *Strictness of EPL* (recall that we speak exclusively of flexibly employed!) is inherent in Sweden (from 42.8 to 31.6%), Denmark (from 31.0 to 21.9%), Germany (from 43.1 to 36.9%), Czech Republic (from 15.6 to 11.7%), the Netherlands (from 42.9 to 40.5%), and Portugal (from 25.4 to 24.9%).

In some countries the decline is caused by changes in the structure of flexible employment. In Sweden the share of best-protected permanently part-time employed decreased from 18.3 to 14.1%, and in Denmark from 19.5 to 17.3%. In Czech Republic the share of well-protected permanent part-timers decreased not much (from 3.1 to 2.3%) but the share of self-employed, who are not covered by labour laws, increased from 10.7 to 15.3%.

To conclude, the growth of the security indicator of flexibly employed should not be misinterpreted. Its growth is mainly due to the reduction of normal employment. It is not necessary to emphasize that such a trend does not make trade unions very happy.

Figure 6. Country trajectories in the flexibility–security space restricted to flexible employees. All the trajectories end in 2003 but start in different years (indicated), depending on the data availability. The verticals in the background show trade unions’ indifference lines of first priority



Source: Tangian (2004b, p. 45 and 2005a, p. 25) computed with data from OECD and Eurostat

5 Indexing flexicurity from the viewpoint of the European welfare state⁵

5.1 Discussion on the welfare state

One of pillars of flexicurity is social security, both in neo-liberal and trade-unionist understanding. Both sided agree that the tradition of European welfare state should continue, securing income in case of loss of earnings and providing means of existence for those who do not work. Nevertheless, the foundations of the European welfare state are being reconsidered. The adherents of the economically more competitive and socially more "hard" Anglo-Saxon model are becoming more influential. Employers wish to share the burdens of competition with employees, and politicians seek to shift the responsibility for employment from the state to individuals.

This political philosophy led to deregulation of labour markets with a disproportional growth of atypical employment. It resulted in a new labour market situation. For low-paid atypical employees, "net incomes gained [are often] smaller than the loss of out-of-work benefits" (OECD 2004a, p. 14). In other words, the Anglo-Saxon model transferred to the continental Europe discouraged a significant fraction of labour force from active labour market participation.

To resolve this paradox, the policy "make work pay" (8th guideline for European Employment strategy, European Commission 2005) had been launched to adjust the "trade-off between income protection and maximizing the financial gain from work" (OECD 2004a, p. 92). The idea was boosting employment by different work incentives, in particular by reducing "the part of the in-work earning that is, upon entering employment, 'taxed away' by the combined effect of higher taxes and lower benefits" (OECD 2004a, p. 13). On the other hand, the policy "make work pay" prescribed to reduce social security benefits for those unemployed who did not participate in training and, more generally, who were inactive in looking for a new job. In particular, these principles were implemented in the German *Harz IV*-reform.

Indeed, generous social security protects unemployed from the necessity of accepting any job offer. In many cases out-of-work benefits are more attractive than poor earnings from occasional jobs. Therefore, a generous social security system keeps unemployed from becoming "strikebreakers" in the trade union struggle for labour rights. Moreover, a generous social security backs up collective bargaining on wages, working hours and other issues. Therefore, the pressure on social security, whose generosity is an obstacle to making work pay, is at the same time weakening the trade unions' position.

Keune (2008a, p. 97–98, repeated in 2008b) summarizes the opinion of European trade unions expressed in 'a position paper' on flexicurity (ETUC 2007):

Where labour market policies are concerned, the ETUC argues for a high level of benefits combined with active labour market policies, including training, as well as for including groups presently not covered in social security schemes.

To conclude, the unconditional generosity of social security, that is, independent of behavior of unemployed, is an important factor in the balance of interests of social partners within flexicurity. Therefore, evaluation of social security is more than just an academic question but rather a political instrument.

⁵ Based on Tangian (2005b–2006b, and 2007f)

5.2 Normative evaluation of social security

In spite of a visible roll-back of European welfare from the level of 1980s, most empirical studies fail to detect a substantial decline in public support (Pettersen 1995, Taylor-Gooby 1998, Roller 1999, Van Oorschot 1999, and Mau 2001). The illusion that social solidarity remains in force weakens the position of European welfarism, making an impression that minor improvements are sufficient to adjust social security to current needs. The focus made on governmental expenditures for social support (for references see Adema and Ladaique 2005) is misleading because it does not take into account increasing living costs and flexibilization of employment relations with longer periods of unemployment and lower specific payoffs per capita/months.

A standardized description of national social security systems is made in the OECD series *Benefits and Wages* (formerly *Benefit Systems and Work Incentives*) and annual “Country chapters” in *Internet* (OECD 1998, 1999, 2002a, 2004a, 2005a). Moreover, national social security and taxation rules are coded in the OECD *Tax-Benefit Models*, also available from the OECD web-page. They derive social security benefits, net incomes, and other social security parameters for 28 OECD countries.

The income reference of the OECD (as well as of the Eurostat) is *Average Production Wage* (APW). It is calculated on yearly basis for manufacturing workers in full-time employment. A summary of the calculation procedure can be found in OECD (2004a, p. 131); for details see OECD (2003). The APW enables to express social benefits in terms of national standards of “normal wage” which gives a more adequate picture than if it were expressed in money units.

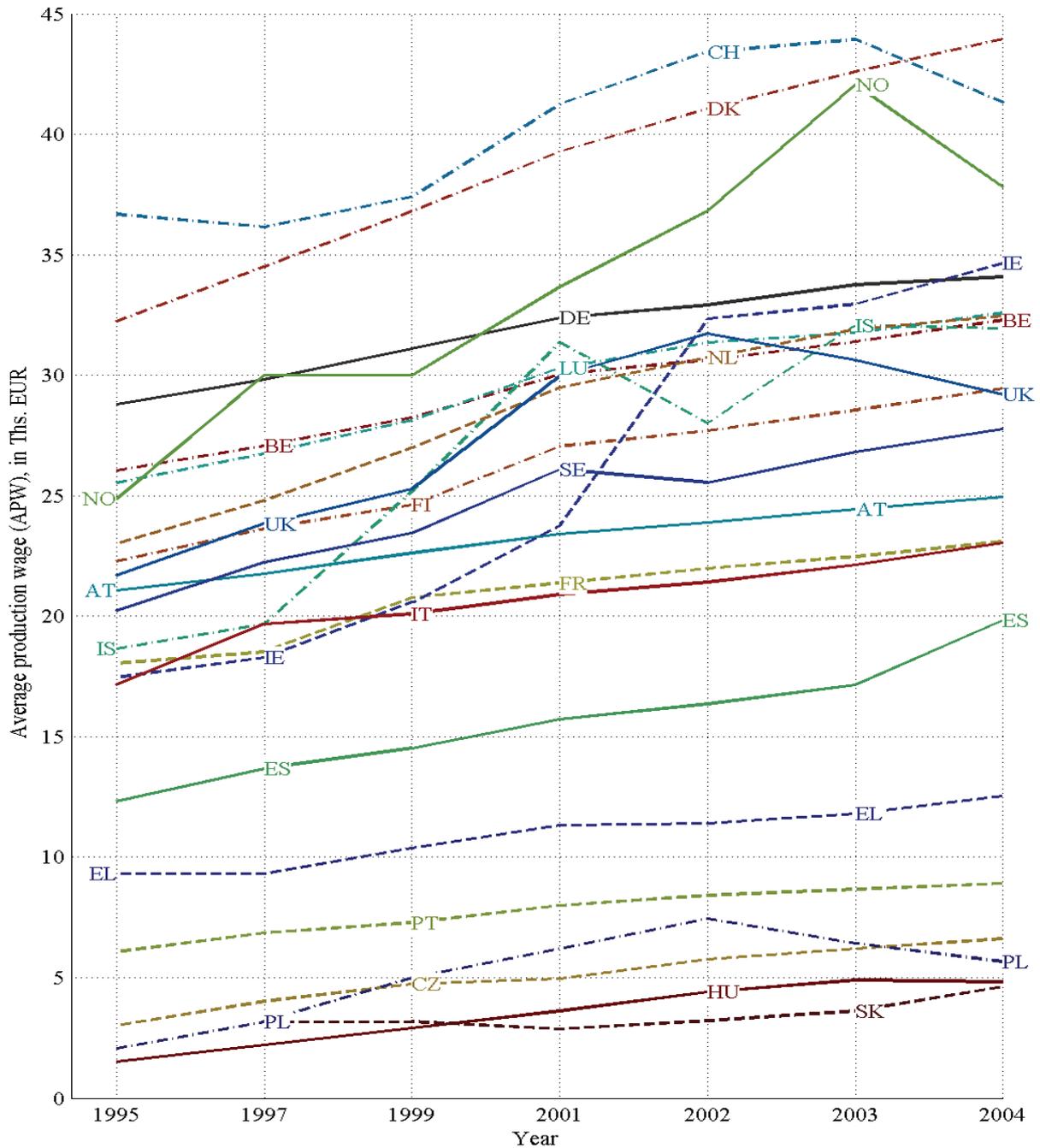
The dynamics of national APW in 1995–2004 is shown in Figure 7, demonstrating a sustainable growth of wages all over in Europe with a few exceptions in years 2002–2004 for Switzerland, Norway, United Kingdom, and Poland. Poland has the decline of about 24%, whereas for the other countries it is much smaller (6, 11, and 8%, respectively). Note that a decrease in APW implies an increase in social benefits if expressed in APW. This is the case of Poland with the 24% wage reduction in 2002–2004. It implies that the social benefits, having remained untouched, seem “more generous”. The effect is similar to the price growth for imported goods after a devaluation of national currency.

The generosity of social security for unemployed is usually measured in *Net Replacement Rate* (NRR), that is, the net income of unemployed expressed in percent of previous net earnings. The NRR tends to decrease with the duration of unemployment, but in some countries like Denmark can increase due to transition from unemployment insurance to a more generous social assistance.

The dynamics of NRR depends on previous earnings, age, working record, and family situation. Figure 8 computed with the OECD *Tax-Benefit Model* 2004 shows the main reference case (one-earner couple with 2 children, 40 year-old earner, 22 years working record, earnings before unemployment 100% APW). This plot is an updated version of Figure 3.1b for 2002 from OECD (2004a, p. 101). The curves are normative, that is, rule-based and are derived from national eligibility conditions with no use of any empirical data. For instance, the black solid line for Germany exhibits a decrease after the first year of unemployment. It indicates a reduction of social benefits caused by transition from unemployment insurance to a less generous social assistance.

The OECD evaluates national social security systems by the unweighted average NRR on four family types and on 60 month of unemployment, characterizing the *normative average* NRR-coverage during this period (OECD, 2004a, Table 3.3a, p. 102):

Figure 7. Growth of the Average Production Wage (APW) in European countries.

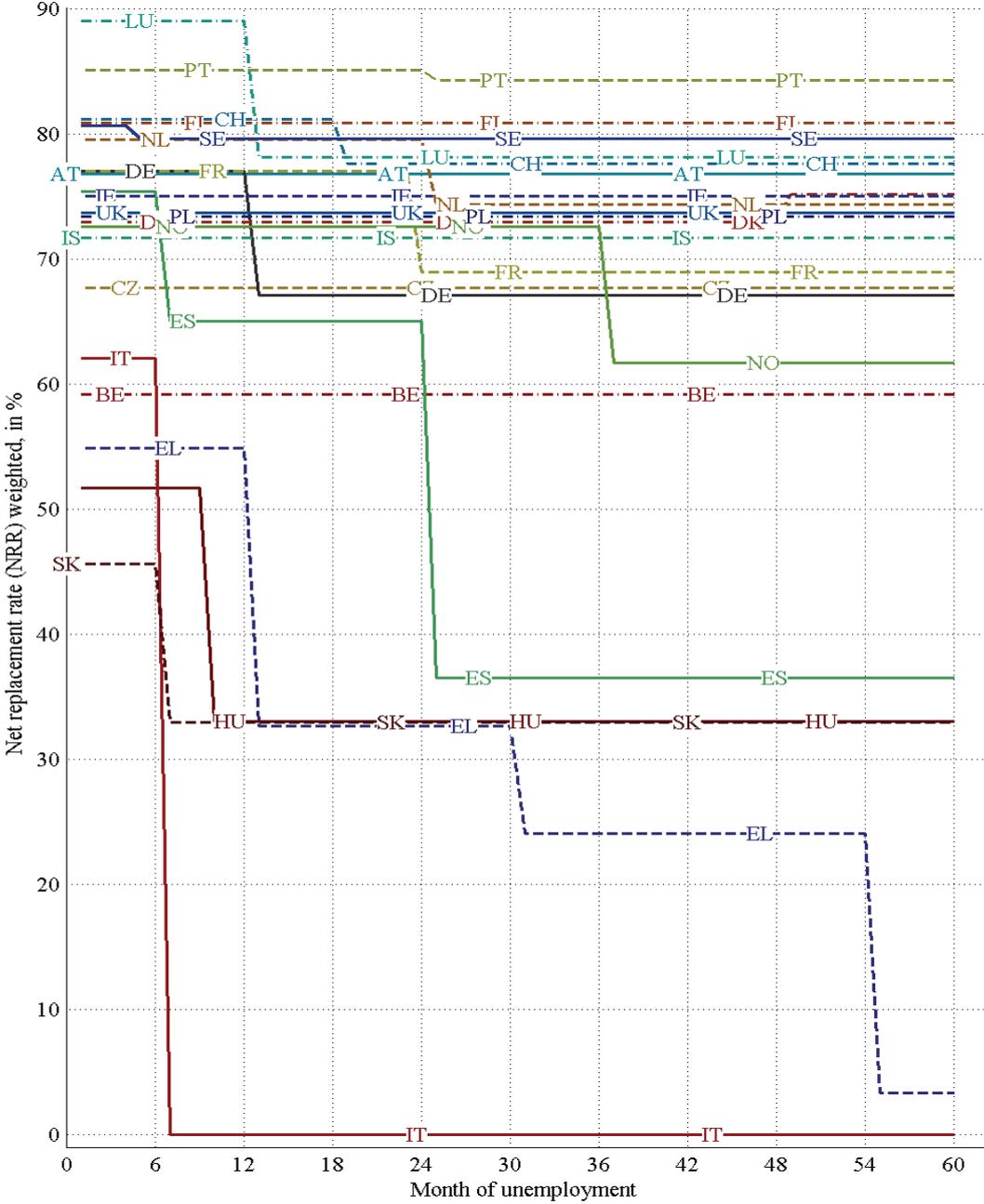


Source: Tangian (2004b, p. 11) with the use of the OECD *Tax-Benefit Models*

"As in previous editions of this publication, NRR calculations for different family types, earning levels and unemployment durations are combined to derive an overall measure of the generosity of benefits relative to net earnings. The resulting measure is a simple average of the NRRs with each family type and month of benefit receipt weighted equally. This global indicator does not intend to cover all existing salary levels and family types and is not meant to take into account the relative numbers of each of the family types considered. When using this measure for international comparisons, it is therefore important to keep in mind that population structures differ across countries."

OECD (2004a, p. 99)

Figure 8. Normative NRR-curves (Net Replacement Rate) for one-earner couple with 2 children(40 year-old earner, 22 years working record, earning before unemployment 100 percent APW) in 2004



Source: Tangian (2004b, p. 13) with the use of the OECD *Tax-Benefit Models*

5.3 Quasi-empirical evaluation of social security by survey simulation

An empirical evaluation of social security which takes into account the OECD's remark "that population structures differ across countries" could be based on interviewing unemployed on their in-work and out-of-work net income. This way the net-income replacement rates (NRR) could be determined, and their national average could be used as an indicator of welfare system. However, even if such a survey existed, it is unlikely that unemployed could give accurate answers because of complex reciprocal tax-benefit interactions. Besides, a number of persons might refuse to answer questions on their income.

Box 3: Survey simulation

There can be no available survey to study a given problem. Among other things, not all questions can be answered reliably. For instance, income-tax-benefit interactions are so complex that it is unlikely to obtain accurate answers of unemployed about their Net Replacement Rates (that is, their total out-of-work net income expressed in percent of their total in-work net income). Luckily, in certain cases the answers required can be derived from personal situations recorded in other surveys. For instance, the amount of taxes and benefits can be derived by official formulas from household data, exactly as it is done in corresponding governmental offices with computer programs.

Therefore, instead of interviews one can interface the known formulas to the data from existing surveys and obtain quite reliable "responses". For instance, tax-benefit formulas with which taxes and benefits are computed can be interfaced to the data of the Labour Force Survey of the Eurostat. These techniques of replacing real surveys by computational models will be called *survey simulation*.

A possible solution is survey simulation. It is based on the observation that unemployment benefits and taxation for every individual are in any case computed by normative rules, even with office computers, depending on personal data. Therefore, one can take the demographic data with the statistics of personal situations from the Eurostat's *Labour Force Survey* and apply the OECD models to derive 'individual answers' of unemployed from their personal situations. These 'quasi empirical' personal data can be used to build 'quasi empirical' national indices.

Thus, the survey simulation model includes the following steps:

- The unemployed are divided into demographically homogeneous groups with equal eligibility to social security benefits and with equal tax liability. Namely, we consider 103950 groups of unemployed resulting from their cross-tabulation by:
 - 22 European countries
 - seven control years: 1995, 1997, 1999, 2001, 2002, 2003, 2004
 - five age levels: 20 ± 5 , 30 ± 5 , 40 ± 5 , 50 ± 5 , 60 ± 5 years
 - three types of family: single, one-earner couple, two-earner couple
 - different number of children: 0–4
 - six earnings levels: 40, 50, 67, 100, 150, and 200% of the national average production wage (the OECD reference)
 - nine unemployment duration levels: just become unemployed, < 1 month, 1–2, 3–5, 6–11, 12–17, 18–23, 24–47, over 47 months (as in variable DURUNE of the Eurostat *Labour Force Survey*), see Tangian (2005b) for more details.
- The social benefits, equal for all members of the group, are calculated according to the actual national rules, with the OECD *Tax-Benefit Models* which input data on personal situations and output the normative net social benefits. Recall that the OECD models replace individual interviews. Since the groups are homogeneous, it suffices “to interview one single representative”, meaning that the results hold for the whole group. The social benefits taken into account by the OECD model include
 - unemployment insurance
 - unemployment assistance
 - social assistance

- housing benefits
- family benefits
- lone-parent benefits
- employment conditional benefits
- childcare benefits
- The resulting social security coverage of each group of unemployed is characterized by the net replacement rate (NRR). The OECD model computes the net income by adding earnings and social benefits and by subtracting taxes, depending on earnings and family status. The national NRR is calculated as the weighted average of the NRRs of all the 103950 unemployment groups. Their sizes are given by the Eurostat cross-tabulation of the population. In other words, the Eurostat provides the statistics on individual interviews.
- The national average NRR is used as the 'quasi empirical' indicator of social security. It shows the average degree with which social benefits compensate the loss of earnings all over the country.

5.4 Findings

The quasi-empirical national NRR-curves for 22 European countries are displayed in Figure 9. In spite of a quite irregular development, all of them have one common property: no curve attains its maximum in the last year 2004, meaning that all social security systems declined by 2004 after a certain peak before, indicating that “the good times are over”.

This viewpoint is illustrated by Figure 10, showing the change of the national NRR by 2004 with respect to its maximum in some previous year. The only exception is Poland which exhibits a minor progress of 0.8%. However, the growth of Polish indicator occurs in the background of devaluation of the APW by 24% (see Figure 7). It implies that the Polish social system actually declined by about 23%, so that the real position of Poland in Figure 10 should be at the bottom next to Slovak Republic.

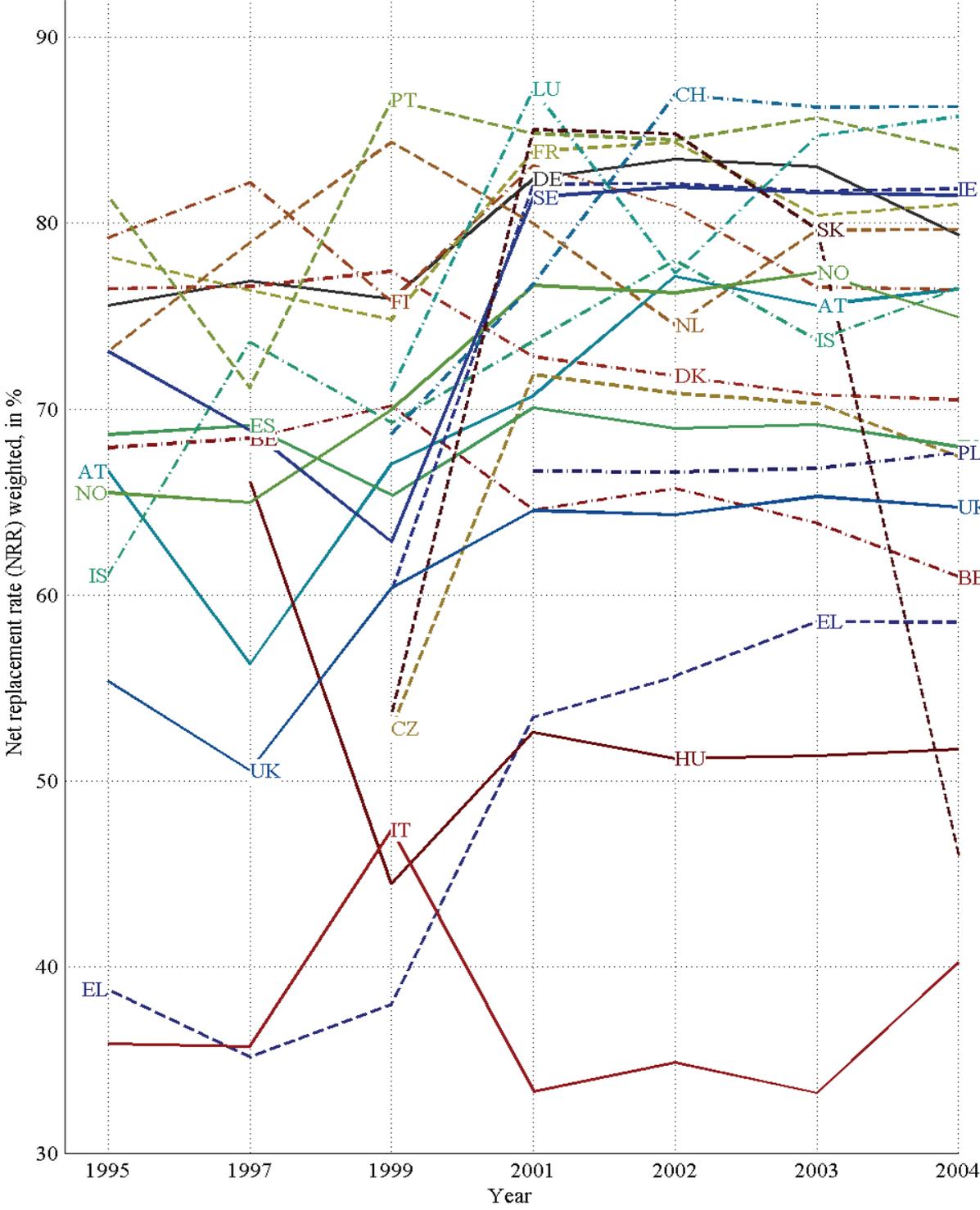
Estimate the statistical significance of the null-hypothesis, that such a decline for all the 22 countries is just a random coincidence. As usual, assume that the countries are independent, and every year can be the peak of a national curve with probability 1/7 (we consider seven years). Compute the probability that none of 22 curves attains its peak in 2004:

$$\text{Prob}\{\text{No country has peak in 2004}\} = \left(1 - \frac{1}{7}\right)^{22} = 0.0337 < 3.4\%.$$

The low probability obtained means that such a coincidence is very unlikely to occur by chance alone, so that the social security decline is statistically significant.

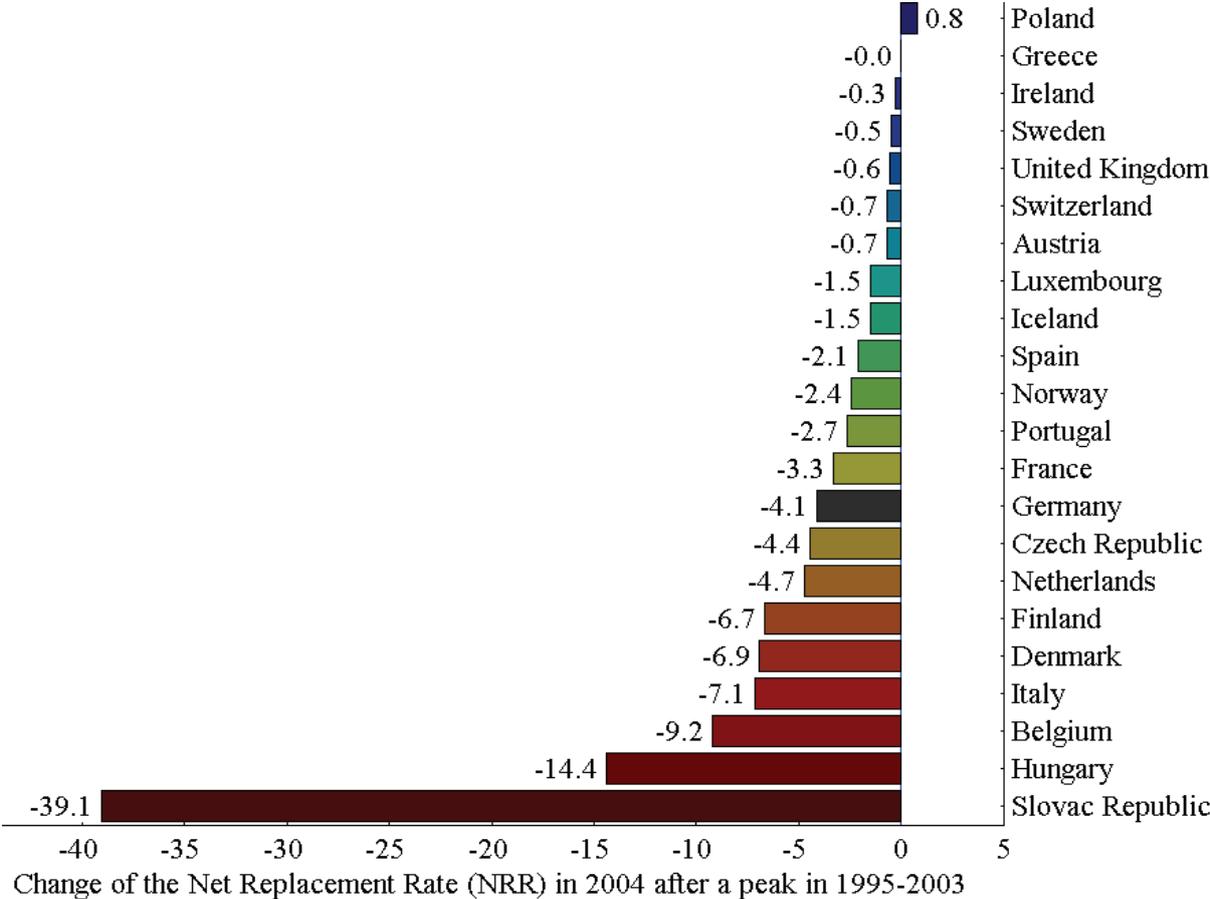
The conclusion about the decline of social security all over Europe contradicts most studies. For instance, Adema and Ladaïque (2005, p. 12) report that social expenditure in the OECD countries grows with the GDP, and in certain years even more rapidly. Similarly, the OECD (2004a, p. 116) reports about an increase in unemployment benefits: “Contrary to the decline in benefit amounts seen in earlier period, payment rates were made more generous in several countries”. Our own computations also illustrate the growth of social security benefits. For example, the dynamic of German development is shown in Figure 11. Its six plots correspond to six levels of previous earnings: 40, 50, 67, 100, 150, and 200% APW for one type of families (of 450 considered). The abrupt increase in the plot relief in 2001 indicates at the growth of social security benefits for all the six earning levels. At the same time Germany

Figure 9. Quasi-empirical NRR-curves (Net Replacement Rate) for 22 European OECD countries



Source: Tangian (2004b, p. 17) with the use of the OECD *Tax-Benefit Models* and demographic data from the Eurostat's *Labour Force Survey*

Figure 10. Decline of European social security by 2004 after the highest peak in 1995–2003 shown by reduction of national Net Replacement Rates (NRR)



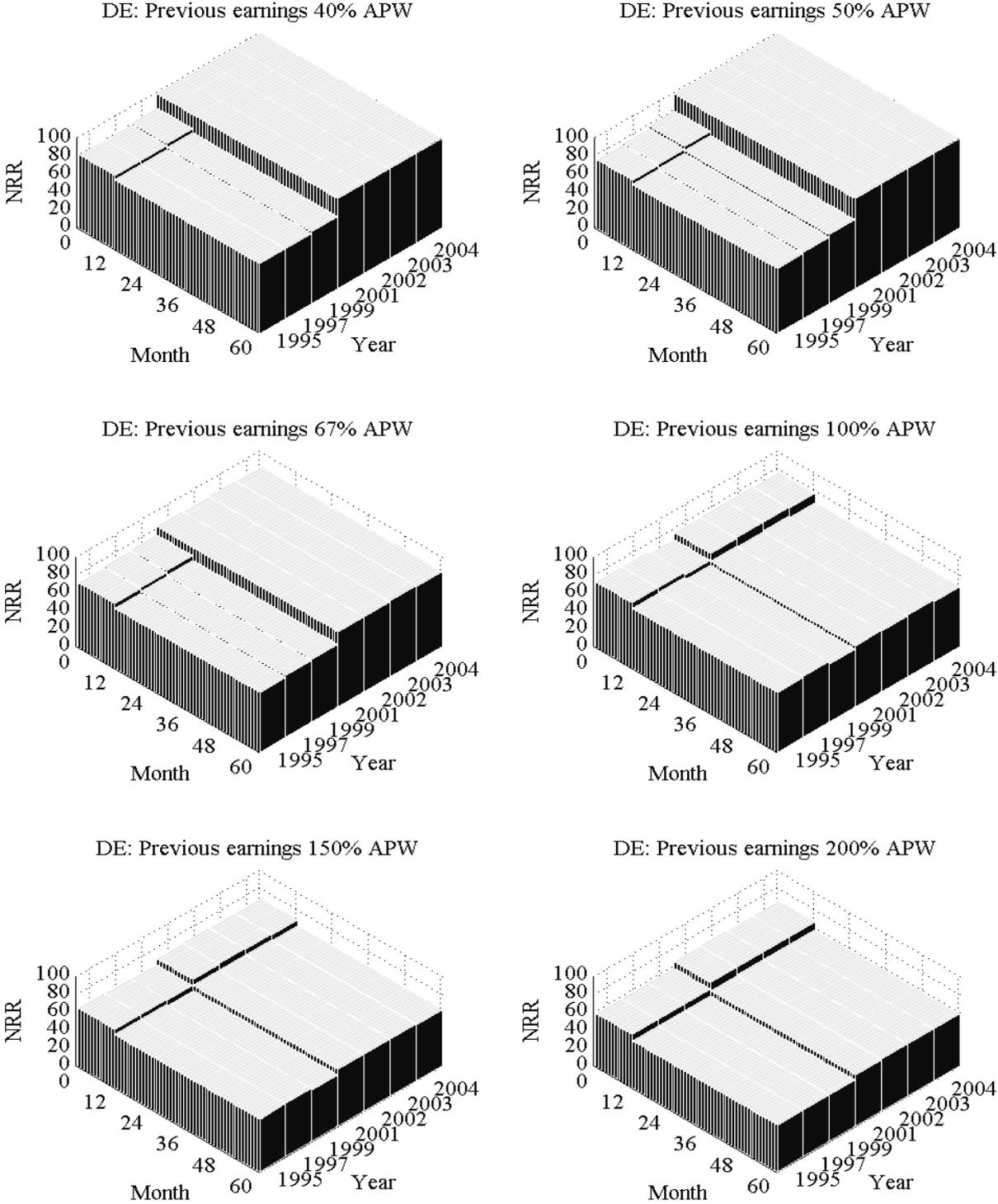
Source: Tangian (2004b, p. 18) with the use of the OECD *Tax-Benefit Models* and demographic data from the Eurostat's *Labour Force Survey*

exhibits a decline of social security by 4.1% in Figure 10. A similar situation is inherent in many other countries; see similar plots for all other European countries in Tangian (2005b).

How can this contradiction be explained? The explanation is the difference between the normative computations used by most authors and the factual situation captured by our survey simulation model. The normative approach takes into account the growth of benefits in each particular case, but neglects the dynamics of shares of the cases in the total unemployment. Since no institutional decline is generally observed, the causes can be either a significant change in personal profiles, or a change in the unemployment structure. According to Eurostat (2005) personal profiles did not significantly changed in recent years. Consequently, the cause of social security decline is the disproportional growth of long-term unemployment, and of unemployment after atypical contracts which disqualifies unemployed from high benefits, reducing thereby the national NRR-average. This mobility effect between unemployment groups has been already illustrated with an example in Section 3.2.

Thus, the flexibilization results not only in employment insecurity but also in social insecurity, reducing the NRR due to shorter employment periods.

Figure 11. Normative Net Replacement Rate (NRR) for Germany during 1–60 months of unemployment for one-earner couple with 2 children, 40 year-old earner, 22 years working record



Source: Tangian (2004b, p. 21) with the use of the OECD *Tax-Benefit Models* and demographic data from the Eurostat's *Labour Force Survey*

6 Flexicurity and precarious work⁶

6.1 'More and better jobs through flexibility and security'

The studies of the Hans-Böckler-Foundation reviewed show that current European policies fail to compensate the deregulation of labour market with social security advantages. The first flexicurity nexus 'flexibility–social security' from the Wilthagen's definition (see Section 2.1) does not work. Since 2006 the European Commission builds a conception of flexicurity, focusing on the second nexus 'flexibility–employment security'. 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 2007a, p. 11).

Keune and Jepsen (2007, p. 14) mention that the European Commission reconsiders the very idea of social security. Namely, instead of income security, the European Commission puts forward employability:

Employability is seen as the key for individuals to be able to make transitions from job to job, and from unemployment or inactivity to employment. Individuals derive security from employability, since it improves their employment chances. As Barroso put it: 'It is a fact of life that people may experience spells of unemployment but, by improving their skills, they will be in a position to find a new job as quickly as possible (2006 European Year of Workers' Mobility Launch Conference, Brussels, 20 February 2006)...

Summarising, the Commission's flexicurity concept calls for (i) higher flexibility through the increased use of flexible contracts and the limiting of job protection; and (ii) increased security through lifelong learning which is supposed to improve employability.

Thus, 'more and better jobs' declared at the Lisbon Summit 2000 should be attained due to flexibility and security. The 'better jobs' are not explained but should likely meet the broadly used ILO (1999) concept of *decent work*, 'the converging focus of all [ILO's] four strategic objectives: the promotion of rights at work; employment; social protection; and social dialogue', where employability plays one of central roles. To make the idea of decent work clearer, the ILO report cited opposes decent and *precarious* work, another new notion which got a particular attention of policy makers and scholars. As the opposite of decent work, precarious work is characterized by low income, low employment stability, low employability, and low integration in social security schemata; for details see Keller and Seifert (2006).

To conclude, flexicurity should compensate deregulation of labour markets by high employability and decent work, but should not lead to precarious employment.

⁶ Based on Tangian (2007d, 2008a–c), and Seifert and Tangian (2008a–d)

Table 6. Data structure for constructing composite indicators of flexibility and precariousness of work; question marks '?' show the aggregation of composite indicators

Individual No.	Classifiers	Flexibility			Precariousness			Partial indices	Aggregate indices
		1. External numerical flexibility	2. Internal numerical flexibility	...	1. Income	2. Employment stability	...		
	countcod Country	q3b Type of contract	q15a Part-time work	...	ef5 Net monthly income	q2d Tenure in the organisation	...	1. External numerical flexibility	Flexi- Precariousness
1	BE	2	2	...	3	2	...	?	? ?
2	BE	1	2	...	1	3	...	?	? ?
23788	CH	2	1	...	4	1	...	?	? ?

Source: Tangian (2007d, p. 13)

6.2 Indexing of flexible and precarious work at the micro-level

Our next goal is testing the Commission's intent to prevent precarious employment under flexibilization. For this purpose, we use the individual data of the 4th European Working Conditions Survey 2005 (EWCS 2005) by the European Foundation (2007b) restricted to employees. Trainees, self-employed, and unemployed are excluded from consideration. It is done according to the survey questions q3a and q3b on the employment status (Op. cit, p. 112). The number of persons in the model is thereby reduced from 29860 to 23788.

The data structure for the study is shown in Table 6, where each row consists of answers of an individual to 42 selected questions: 29 on flexibility, and 13 on precariousness of work. The selection of questions below shows how the notions of flexibility and precariousness of work are operationally defined. 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 instead of question marks '?'. The questions are grouped into three sections.

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` of the survey; for the full list see the report cited and) 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) classification of flexibility types introduced in Section 2.1:

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. From now on we do not list them; for particular questions see Tangian (2007d, p. 13–16).
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, p. 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 6, **Partial indices**, is reserved for five flexibility indicators (External numerical flexibility, Internal numerical flexibility, etc.) and three precariousness indicators (Income, Employment stability, and Employability). The indices are computed for every individual.

The fifth section of Table 6, **Aggregate indices**, is reserved for total flexibility and precariousness individual indices.

Every variable (column of Table 6 with 23788 answers to a specific question) is re-coded with to respect the rule: the more flexible (precarious) the work, the higher the value. Then the variables are scaled by two methods; see Box 4 and for details Tangian (2007b and 2007d).

Box 4: Scaling — normalization and standardization of variables

Normalization (conditionally referred to as *HBS method*) brings the range of every variable $x = (x_1, \dots, x_n)'$ to 0–100%:

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

Standardization (conditionally referred to as *OECD method*) brings the mean of a variable to 0, and the standard deviation to 100%:

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

where

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

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

To obtain first aggregate indices, the re-coded and scaled variables (23788-columns of Table 6) are summarized by groups (five flexibility groups, and three precariousness ones) and the eight resulting partial indicators (columns of Table 6) are either normalized (HBS method) or standardized (OECD method). The total aggregate indices of flexibility and of precariousness of work are similarly obtained from two groups of first-level aggregate indices. Note that the indicators are aimed not at distinguishing flexible/inflexible or decent/precarious work but to measure the *degree* of flexibility and precariousness, that is, to locate cases between two extremes. For instance, a permanent employee with hourly payments is indexed, with regard to payment, as more flexible than an employee with a fixed salary.

As explained in Box 1 with a reference to the OECD handbook ‘most composite indicators rely on equal weighting, i.e., all variables are given the same weight’

Under normalization, an index is simply the mean of the corresponding codes. The index attains 0 or 100 if *all* the codes are lowest or highest, respectively. 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 few given values or harmonized. For instance, income is given in 10 deciles. Therefore, normalization can be consistently applied.

Under the standardization, a composite indicator is interpreted as a weighted sum of variables, with the weights being inversely proportional to their standard deviations. The mean is regarded as a norm, and the average deviation is regarded as a scale unit. 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 the precariousness indicator — low. After standardization, all the values are neither high, nor low, but medium, and it is difficult to judge whether a job

is really flexible or precarious. The only conclusion could be that some jobs are more or less flexible/precarious than others. Another difficulty of interpreting standardized indicators is due to the fact that standardization changes the range of variables, implicitly introducing equalizing weights. As we shall see, it can result in a greater total indicator for smaller partial indicators and vice versa.

Finally, the effective weight of a single variable in the aggregate indicator depends on the indicator structure and on the size of groups of variables for partial indicators. For instance, the impact of one of five flexibility indicators on total flexibility index is 1/5, whereas the impact of one of three precariousness indicators on the total precariousness index is 1/3.

Figure 12 depicts the indices of flexibility and precariousness obtained with the HBS method, and Figure 13 — the ones obtained with the OECD method. The contribution of first-level aggregate indices is shown by the size of bars. The countries are ordered by the aggregate flexibility and precariousness indicated in % at the right-hand end of bars. Under the HBS method, the aggregate index is the mean of the partial indices, being proportional to the total length of the bars. It is not the case under the OECD method: the total indicators in Figure 13 are decreasing from top to bottom, but not the total length of the bars — it is just the side effect of the standardization mentioned.

Externalization flexibility plays the least role in the aggregate flexibility computed with HBS method. It is not seen under the OECD method, which equalizes the role of different factors. Nevertheless, 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 7.

Table 7. Correlation coefficients ρ for rankings of EU-31 countries according to HBS and OECD method

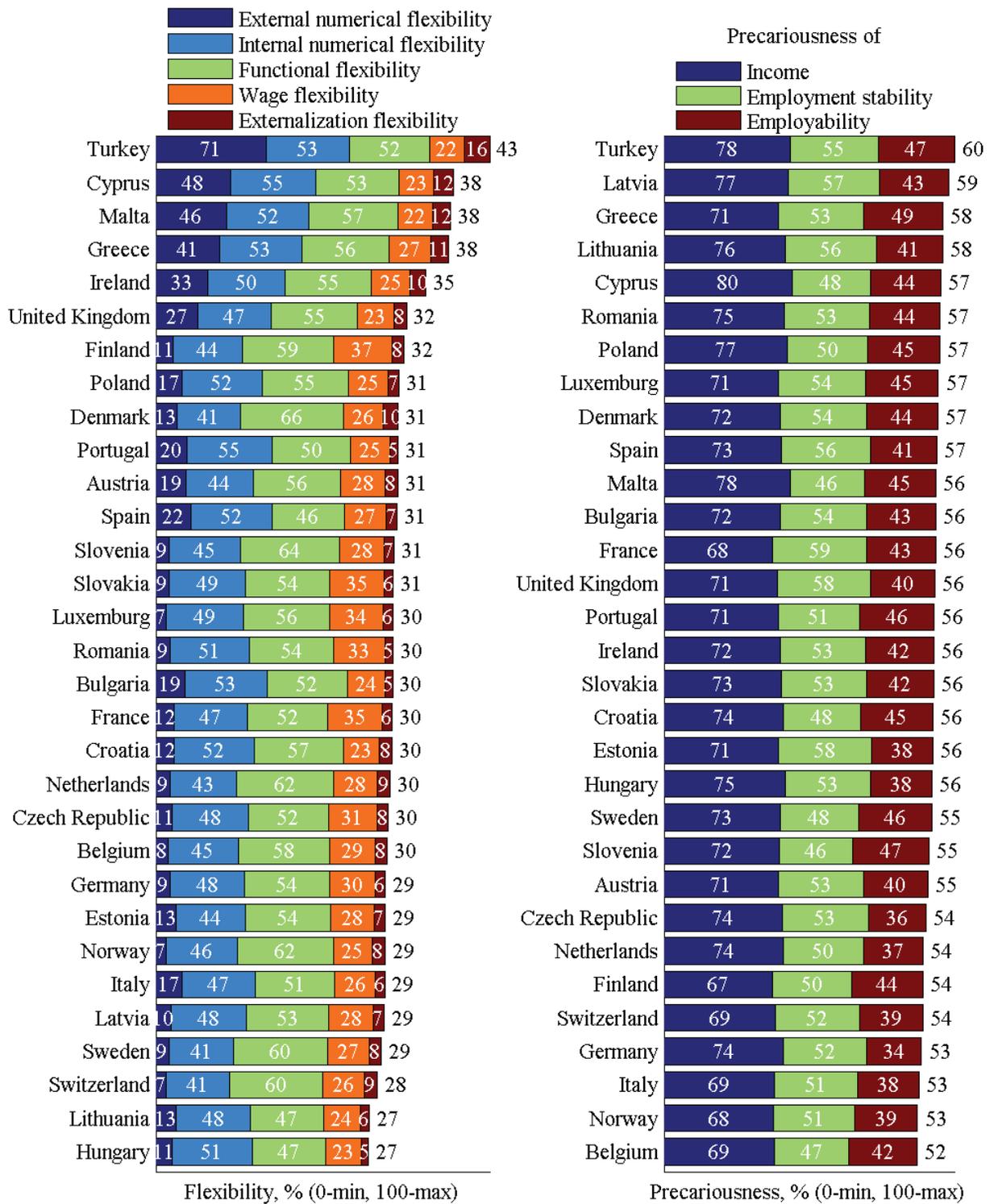
Flexibility	Aggregated flexibility	0.9182
	External numerical flexibility	0.9994
	Internal numerical flexibility	0.9774
	Functional flexibility	0.9902
	Wage flexibility	0.9237
Precariousness	Aggregated precariousness	0.9335
	Precariousness of income	0.7161
	Precariousness of employment stability	0.9921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

Source: Seifert and Tangian (2008b, p. 116)

6.3 Institutional and factual flexibility/precariousness of work

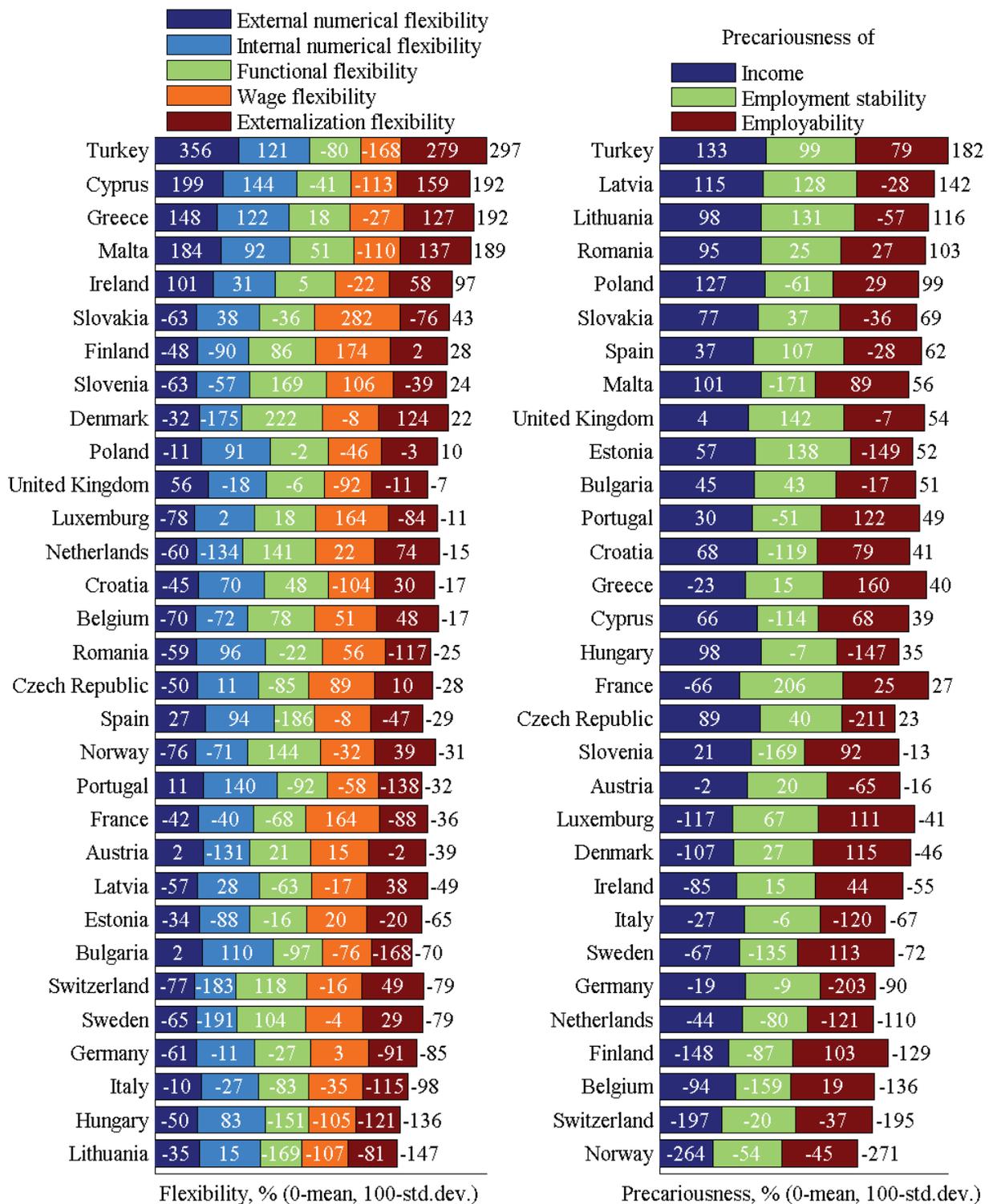
Figures 12–13 evoke a big surprise. Turkey is at the top of flexibility charts in both of them. In Figure 12, its aggregate flexibility attains 43% with the external numerical flexibility being as high as 71%. Figure 13 shows that Turkey deviates from the European mean twice as much as Lithuania in the opposite direction. At the same time, the OECD (2004, p. 117) characterizes Turkey as having the most strict employment protection legislation (EPL) among all the OECD countries. Why do our results contradict the EPL indicator of the OECD which is generally recognized as a measure of labour market flexibility?

Figure 12. Flexibility and precariousness indices constructed by the HBS method



Source: Tangian (2007d, p. 24)

Figure 13. Flexibility and precariousness indices constructed by the OECD method



Source: Tangian (2007d, p. 25)

This contradiction is explained as follows. The OECD evaluation is based on institutional arrangements, showing that the Turkish regulation of 'firing and hiring' is very strict. The survey data are empirical. It turns out that 302 of 454 employees interviewed work with no contract, that is, 67% employees are not covered by labour protection and are working in the most flexible way.

A similar situation is inherent in Malta, where 201 of 507 = 40% employees work with no contract, Cyprus (201 of 482 = 42%), and Greece (179 of 629 = 28%) — another OECD country with a very strict employment protection, see OECD (2004b, p. 117). On the other hand, the United Kingdom with a renowned relaxed employment protection legislation (ranked by the OECD as the next to last, the last being the USA) has only 130 of 876 (= 15%) employees with no contract. Since a relaxed employment protection is still more restrictive than none, the United Kingdom with the aggregate flexibility 32% (by the HBS method; in the estimation by the OECD method it is even under the European mean!) finds itself behind Turkey whose strict legislation is factually applicable to 1/3 of employees only.

Table 8 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 (2004b, p. 117). The factual indices are derived from the data of EWCS 2005 by either HBS or OECD method as described above.

Thus, factual and institutional situations drastically differ. The actual reality is quite far from the institutional picture!

Table 8. Institutional and factual external numerical flexibility for employees in European countries. Ranks of countries in the column are shown after the slash

	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 shows the 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

Source: First column — OECD (2004, p. 117); columns 2–4 — Tangian (2008b, p. 16)

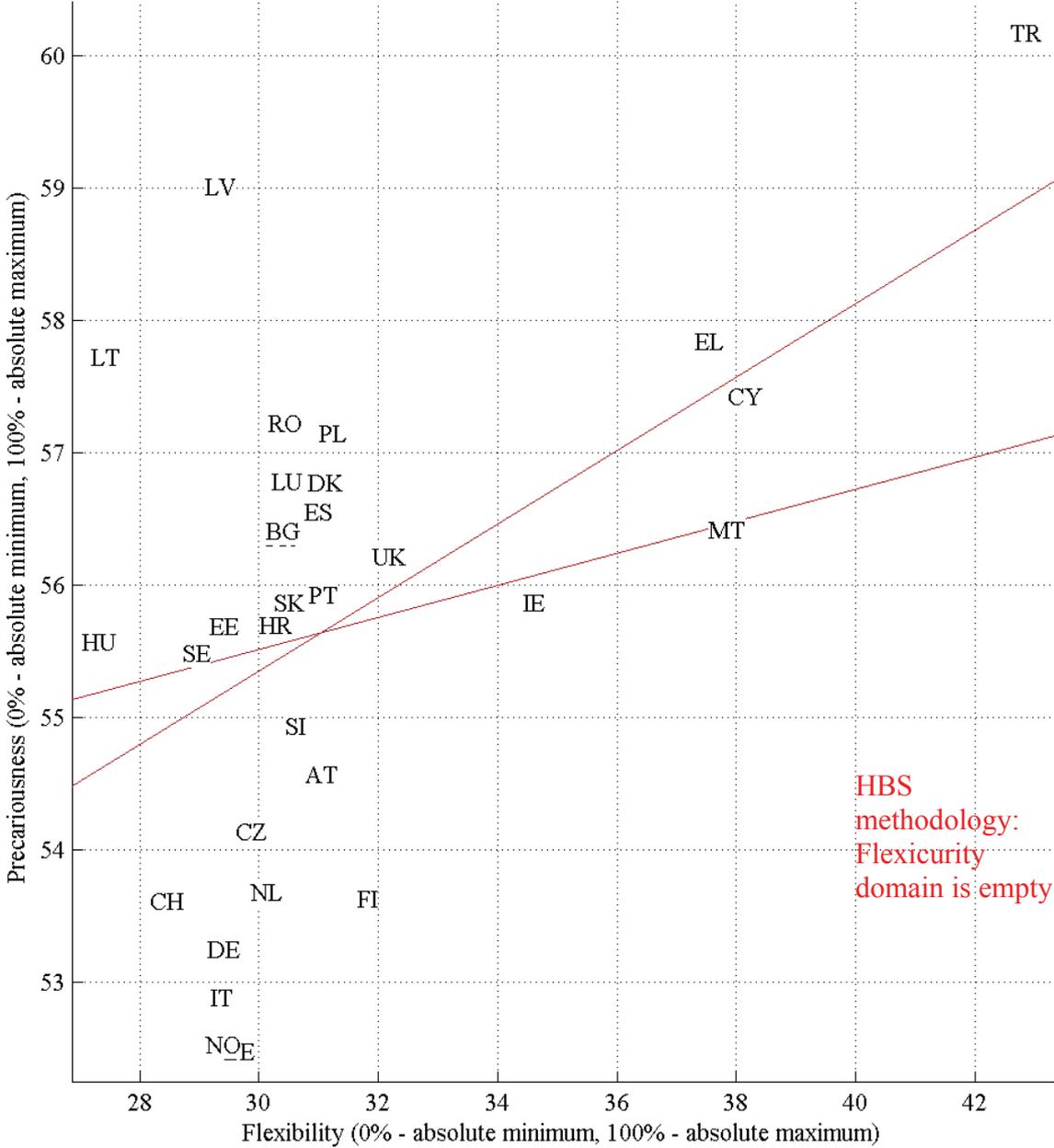
6.4 Findings

Figures 14–15 display European countries on the flexibility–precariousness plane. No country is located in the bottom-right 'flexicurity corner' of the plot with high flexibility and 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 14 computed by the HBS method for 31 European countries also shows that the precariousness of work grows as flexibility increases with the slope 28% (the upper 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 15 computed by the OECD method for 31 countries has the slope 26%, but the countries are located somewhat differently, and the P-value $P_F = 0.1584$.

Figure 14. Dependence between aggregated flexibility and precariousness indices for European countries (HBS methodology)

Regression on 31 European countries: $PREC = 47.03 + 0.28 * FLEX$ $R^2 = 0.2594$ $F = 10.1593$ $P_F = 0.0034$
 Regression on 23788 individuals: $PREC = 51.89 + 0.12 * FLEX$ $R^2 = 0.0120$ $F = 287.7543$ $P_F = 0.0000$

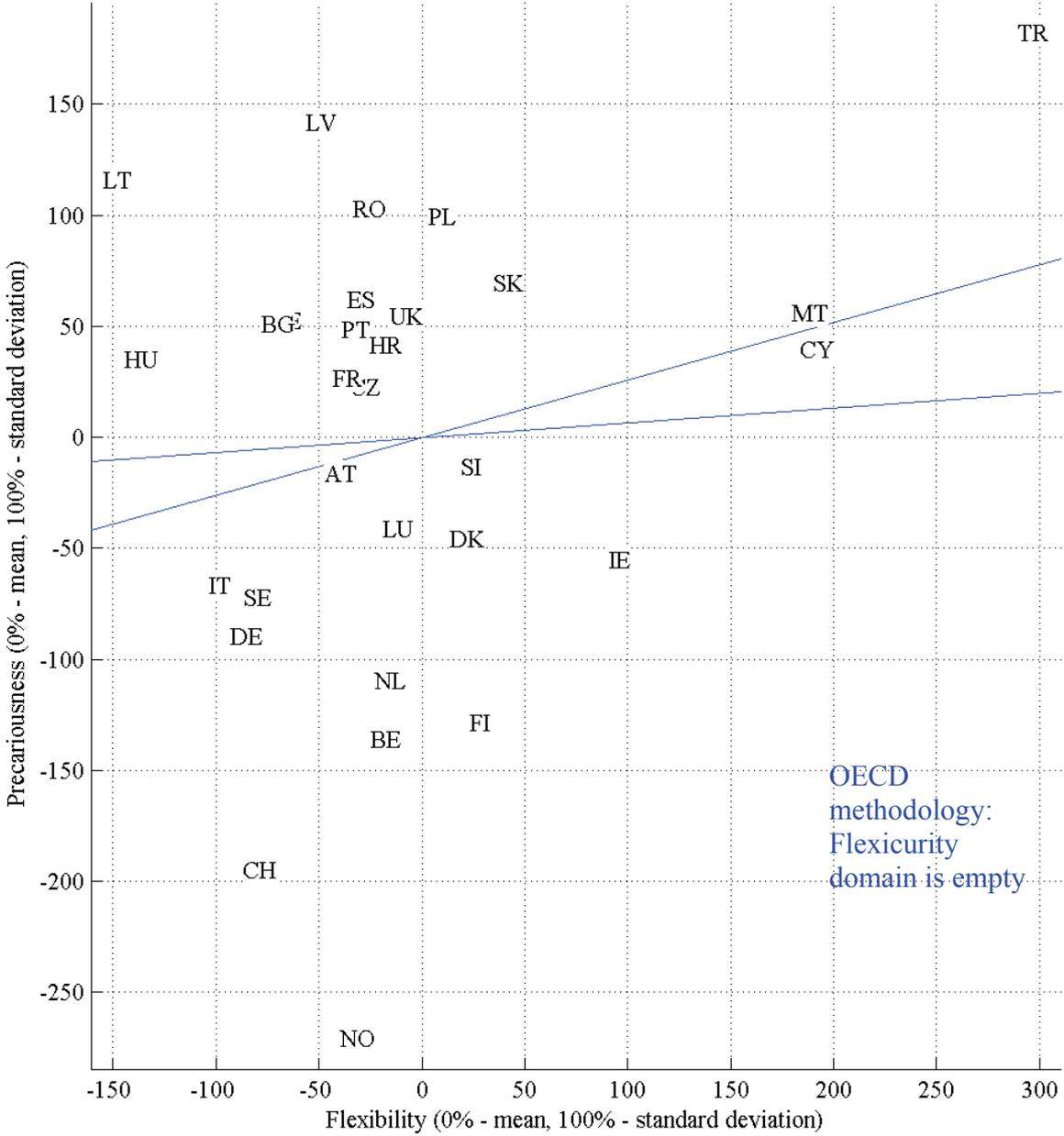


Source: Tangian (2007d, p. 27)

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 large number of observations, the P-value $P_F = 0.0000$ is negligibly small, so that the fact of positive correlation between flexibility and precariousness of work *at the level of individual contracts* is statistically certain both under HBS and OECD methods.

Figure 15. Dependence between aggregated flexibility and precariousness indices for European countries (OECD methodology)

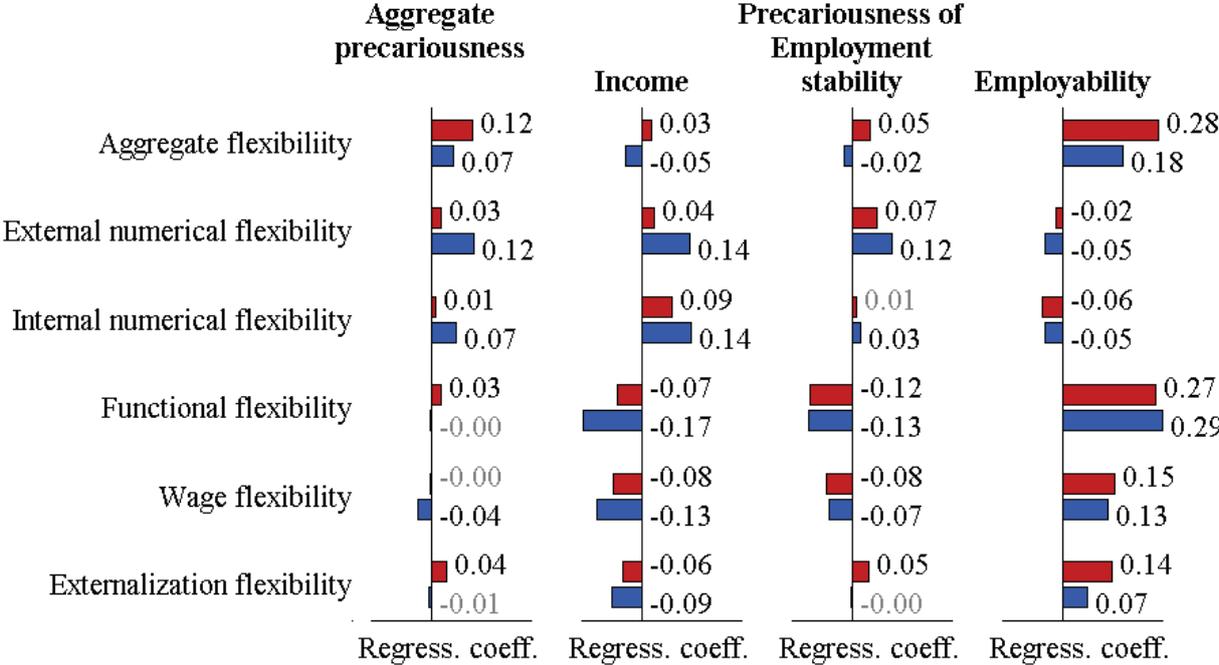
Regression on 31 European countries: $PREC = 0.00 + 0.26 * FLEX$ $R^2 = 0.0674$ $F = 2.0964$ $P_F = 0.1584$
 Regression on 23788 individuals: $PREC = -0.00 + 0.07 * FLEX$ $R^2 = 0.0044$ $F = 105.3472$ $P_F = 0.0000$



Source: Tangian (2007d, p. 28)

Imagine that, instead of axes of aggregate indices 'Flexibility' and 'Precariousness' in Figures 14–15, pairs of partial indicators like 'Internal numerical flexibility' and 'Precariousness of income' are considered and regression lines are constructed. Thereby the dependence of aspects of precariousness on aspects of flexibility is estimated. The slopes of these lines are shown in Figure 16. The upper red bars are computed with the HBS method, and the lower blue ones — by the OECD method. The top-left couple of bars show the regression coefficients 0.12 and 0.07 from Figures 14–15. As one can see, HBS and OECD methods give quite similar results.

Figure 16. Regression coefficients for the dependence of indices of precarious work on 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



Source: Tangian (2007d, p. 29 and 2008b, p. 19)

The most striking in Figure 16 is that the strongest negative impact of flexibility falls just on employability. Moreover, functional flexibility contributes to this effect most of all. It can be understood as follows. Those with low employability are employed flexibly rather than normally and are charged with occasional tasks (functional flexibility). Next time they are employed flexibly again, doing some other work, without a chance to proceed in their careers. Thereby they find themselves in the vicious circle of flexible–precarious work with little chances to escape. It is exactly what is often called 'traps of precarious employment'.

To conclude, the Commission's hope that flexible employment is well compatible with decent work and high employability is not confirmed. The empirical evidence is just the opposite: flexibility increases in risks of precarious employment and lowers down employability.

7 Flexicurity from the viewpoint of professional training⁷

7.1 The role of professional training in the flexicurity concept

After employability has been declared a keystone of flexicurity, professional training got a status of policy instrument. According to the *Common Principles of Flexicurity* (European Commission 2007a, p. 12), its second 'policy component' is

Comprehensive lifelong learning (LLL) strategies to ensure the continual adaptability and employability of workers, particularly the most vulnerable.

Life-long learning is included in the first 'common principle' (Op. cit, p.20) and in each of 'Four pathways' for national flexicurity reforms for different types of countries (Op. cit., 28–35). Moreover, training is even suggested as a security measure (Op cit., p. 11):

Security means 'employment security' — to provide people with the training they need to keep their skills up-to-date and to develop their talent as well as providing them with adequate unemployment benefits if they were to lose their job for a period of time.

Professional training as a driving force of flexicurity got a special attention in the subsequent major publications of the European Commission: devoted chapters in *Employment in Europe 2007* and *Employment in Europe 2008, Communications Opportunities, access and solidarity: Towards a new social vision for 21st century* and *A Shared Commitment for Employment*, as well as *New skills for New jobs*, to name a few; see European Commission (2007b–c, 2008b, 2009b–c). This overemphasis on training is justified by the reference to Eurobarometer (European Employment and Social Policy 2006): '88% of citizens said that regular training improves one's job opportunities' (European Commission 2007a, p. 8).

However, 'improving one's job opportunities' is not yet employability, and employability is not yet employment security which in turn is not social security, at least in its traditional understanding. Therefore, this chain of unequal substitutes resembles the tale mentioned in Section 4.1 about the man who exchanges a horse for a cow, then the cow for a sheep, and so on till he loses everything. Finally, it is not clear how well Europe is ready for lifelong learning and how Europeans perceive training in actuality. To study this question empirically and to get a direct feedback from the European employees, we apply monitoring indicators constructed from micro-data of the European Working Conditions Survey 2005 of the European Foundation (2007b).

One of difficulties in evaluating training is that it is an alone-standing factor. Therefore, to have some reference points, we consider training as a component of working conditions and compare the situation in training with their other aspects. In particular, we (1) evaluate all the components of working conditions for comparisons and (2) estimate their relative role in the satisfaction with working conditions.

7.2 Data and indicators

For the study, the EWCS2005 is restricted to employees. Trainees, self-employed, and unemployed are excluded from consideration. It is done according to the survey questions

⁷ Based on Tangian (2007e, 2008a–c, and 2009b) and Seifert and Tangian (2009)

q3a and q3b on the employment status (European Foundation 2007b, p. 112). The number of persons in the model is thereby reduced from 29860 to 23788.

The resulting data structure is shown in Table 9. The answers of individuals constitute the rows of the table numbered from 1 to 23788. The 126 columns, regarded as variables, contain coded answers of individuals to selected survey questions which are relevant to evaluating working conditions. The questions are grouped in several sections.

Table 9. Data structure for constructing the hierarchical composite indicator of working conditions; question marks '?' show the aggregation of composite indicators

Individual No.	Classifiers		A. Resources				B. C. Stability & income				Third-level aggregate index			
	countcod	Country	1. Qualification and development possibilities	2. Creativity	...	14. Job stability	15. Income	First-level aggregate indices	Second-level aggregate indices					
			q28a Training paid by employer	q20a Non-repetitive tasks	...	q35 Ability to do the work after 60	q37b Fair pay	...	15	A=1 + ... + 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	...	→?	?	→?	?	?	→?

Source: Tangian (2007e, p. 16)

The first section, 'Classifiers', consists of the survey questions which are not used in constructing the individual indices of working conditions but are necessary to classify individuals by country, by industrial branch, by gender, etc., for comparative analysis of countries and social groups, for instance,

- Country (variable `countcod` of the data set):
- Occupation by a simplified ISCO classification into 10 groups (variable `isco`)
- Industry by a simplified NACE classification into 11 branches (`nace11`)
- Sex of the respondent (`hh2a`)
- Type of contract (`q3`)

...

The following columns of the table contain answers to 125 questions of EWCS 2005. Besides, the survey question `q36` *General satisfaction with working conditions* is used later for the analysis of importance of different aspects of working conditions. The 125 questions are arranged hierarchically, according to the structure of the *Gute-Arbeit* indicator of the Confederation of the German Trade Unions DGB (2007). The variables are grouped in 15 sections, which reflect 15 aspects of working conditions. Here, only the questions related to training are specified; for the full list of questions see Tangian (2007e, p.17–22):

1. Qualification and development possibilities (8 questions)

(a) Training opportunities

- Training paid for or provided by employer (by oneself for self-employed) during the past 12 months, in number of days (q28a)
- On-the-job training (co-workers, supervisors) during the past 12 months, Y/N (q28c)
- Other forms of on-site training and learning (e.g. self-learning, on-line tutorials etc) during the past 12 months, Y/N (q28d)
- Educational leave over the past 12 months, Y/N (q34ab)

(b) Training-requiring working conditions

- Complex tasks, Y/N (q23e)
- Learning new things at work, Y/N (q23f)
- Necessity of different skills (in rotating tasks) Y/N (q26a1)
- Necessity of further training, in 3 grades (q27)

2. Creativity (possibilities to develop own ideas) (5 questions)
3. Career chances (in the enterprise) (2 questions)
4. Possibilities for influence and initiative (13 questions)
5. Communication and transparency (8 questions)
6. Quality of management/leadership (5 questions)
7. Industrial culture (5 questions)
8. Collegiality (possibility to get assistance from colleagues) (3 questions)
9. Meaningfulness of work (social usefulness) (2 questions)
10. Working time arrangements (10 questions)
11. Intensity/exhaustiveness of work (5 questions)
12. Physical strain (33 questions)
13. Emotional strain (20 questions)
14. Job stability and job security (Fear of the uncertain future) (3 questions)
15. Income (4 questions)

The section 'First-level aggregate indices' of Table 9 contains 15 indices of the 15 aspects of working conditions aggregated horizontally section-by-section. Thereby every individual is assigned 15 partial and one total index. The procedure is the same as described in the previous chapter, and computations are made in parallel for normalized variables (HBS method) and for standardized variables (OECD method).

Regardless of particularities, the country rankings with respect to the national average indices of working conditions (regarded as national indicators) constructed by both methodologies are quite similar. The rank correlations of 31 countries with respect to 15 aspects of working conditions as well and with respect to the total indicator are shown in Table 10. Since the results are very similar, we restrict our attention to the ones obtained by the HBS method.

Box 5: Relief tables

A relief table is a special chart which displays a table with a coloured background. The latter shows the "relief" of the table, as a geographical map: low values are marked with blue as the ocean depth, medium-ranged values are shown by green as planes, and high values are depicted by brown of different saturation, as mountains.

Table 10. Correlation coefficients ρ for rankings of EU-31 countries with respect to indicators constructed by HBS and OECD methods

1. Qualification possibilities	.9883	9. Meaningfulness of work	.9996
2. Creativity	.9948	10. Working time arrangements	.8516
3. Career chances	.9996	11. Intensity / exhaustiveness	.9976
4. Possibilities for influence	.9895	12. Physical strains	.9714
5. Communication and transparency	.9867	13. Emotional strains	.9742
6. Quality of management	.9677	14. Job stability	.9915
7. Industrial culture	.9863	15. Income	.9750
8. Collegiality	.9976	Total quality of work	.9895

Source: Tangian (2009b)

7.3 Findings

Figure 17 displays the composition of aggregate indicator of working conditions constructed with the HBS method (which enables to evaluate the situation in 'absolute' terms). In Figure 17, the countries are arranged in the decreasing order of the top-level aggregate indices displayed at the right-hand side of each row.

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 as accepted in the DGB indicator *Gute Arbeit*: the values below 50 are 'bad', above 80 — 'good', and the DGB single medium range 50–80 is split into three levels, 'inferior' (50–60), 'medium' (60–70), and 'superior' (70–80).

Two observations are of particular importance:

- (Bad qualification and development possibilities all over Europe) Among 15 aspects of working conditions considered, *qualification and development possibilities* (= professional training) get the lowest evaluation, attaining but the 'bad level' in *all* European countries. This means that Europe is not yet really prepared to base its policy on learning.
- (Poor career chances all over Europe and modest income) The third column in Figure 17 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 Lisbon Agenda.

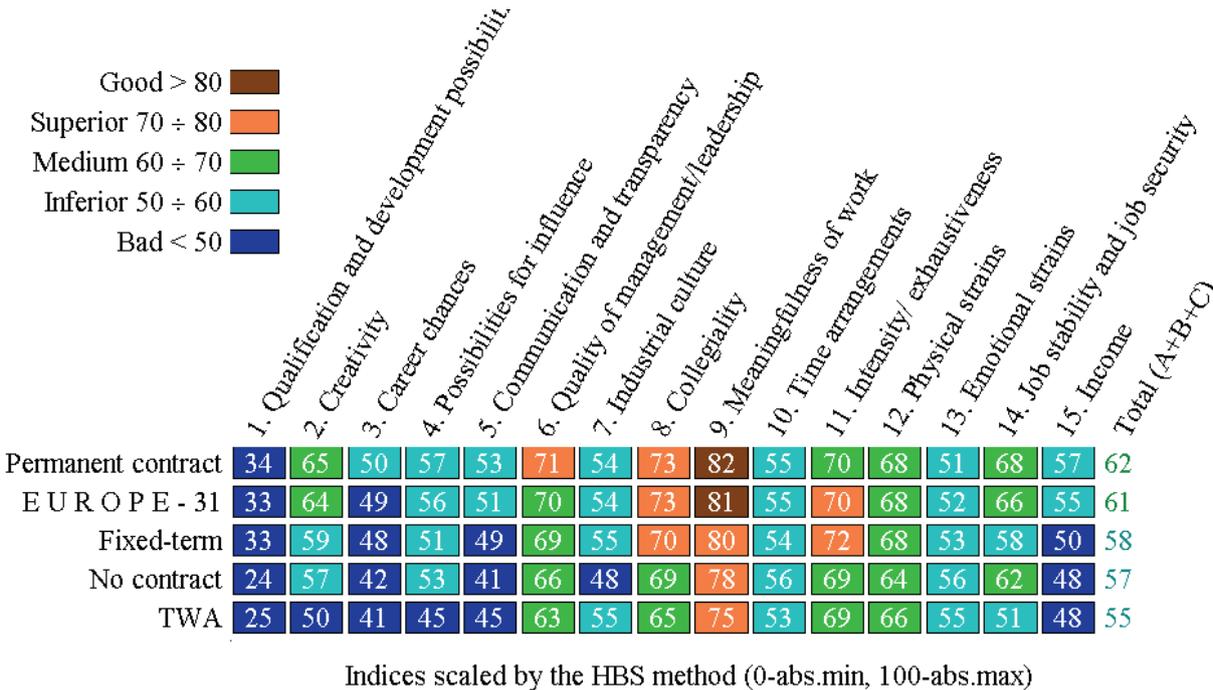
Figure 17. Composition of aggregate indices 'Total quality of work' computed with the HBS method

	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	Total (A+B+C)
Switzerland	44	77	54	65	58	75	52	75	88	56	68	74	51	75	67	67
Norway	38	72	56	64	60	66	55	82	85	54	66	71	48	80	65	66
Denmark	41	68	61	70	54	70	60	84	89	56	65	69	46	80	61	65
Netherlands	36	70	50	62	55	74	58	74	87	56	71	75	51	75	58	65
Ireland	33	65	57	59	53	70	58	80	82	55	73	75	51	72	61	65
United Kingdom	35	59	57	57	55	68	60	79	76	55	69	76	49	76	60	64
Belgium	36	71	51	58	53	69	51	72	83	56	70	73	52	69	65	64
Luxemburg	33	68	54	59	49	67	50	70	86	56	72	69	51	66	66	63
Finland	44	61	59	65	66	74	54	79	78	56	63	66	49	74	58	63
Sweden	40	77	54	70	54	69	54	82	83	56	64	64	46	76	56	63
Austria	38	66	49	56	52	66	55	73	82	55	65	70	50	70	63	62
Germany	33	63	48	51	46	59	50	67	78	55	67	73	54	70	60	61
Cyprus	27	58	53	50	52	74	54	77	88	56	65	67	53	71	57	61
Malta	30	74	54	60	45	79	63	80	88	61	65	64	51	70	50	61
EUROPE - 31	33	64	49	56	51	70	54	73	81	55	70	68	52	66	55	61
Spain	21	54	48	51	42	66	45	69	78	54	74	69	54	66	60	60
Croatia	36	62	49	53	45	69	59	75	80	54	81	64	47	62	54	60
Bulgaria	29	58	42	44	50	82	58	70	84	55	81	66	58	57	50	60
Latvia	34	66	43	59	54	75	61	73	82	53	78	61	51	64	45	59
Slovakia	36	63	44	47	46	69	60	72	78	55	72	68	58	59	50	59
France	26	61	49	57	46	66	40	61	83	54	72	68	52	61	57	59
Italy	26	55	45	53	43	62	37	62	79	55	71	71	56	66	52	59
Hungary	29	61	40	50	51	76	55	77	79	57	70	64	62	64	44	59
Portugal	25	59	54	52	45	57	43	68	83	55	73	67	53	61	54	59
Estonia	36	60	41	56	53	73	55	72	77	54	72	63	52	65	48	59
Romania	30	66	47	53	55	70	56	71	86	52	67	66	55	64	46	59
Czech Republic	31	57	41	50	50	65	56	66	73	56	67	71	57	56	52	58
Slovenia	36	66	43	52	48	73	64	72	85	55	66	61	49	56	55	58
Poland	30	63	43	52	49	66	54	69	84	53	77	63	56	54	47	57
Lithuania	29	54	43	51	56	82	54	64	72	54	75	64	49	55	44	56
Greece	28	55	46	47	47	74	53	67	75	55	64	55	47	55	55	55
Turkey	27	58	40	52	44	59	43	57	71	58	60	61	56	48	40	51

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

Source: Tangian (2007e, p. 28)

Figure 18. Composition of aggregate indices 'Total quality of work' computed with the HBS method by the type of contract



Source: Tangian (2007e, p. 58)

Figure 18 shows the average indicators of working conditions by the type of contract. The employees 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. An increase in atypical employment will not improve the quality of jobs.

7.4 The attitude to training

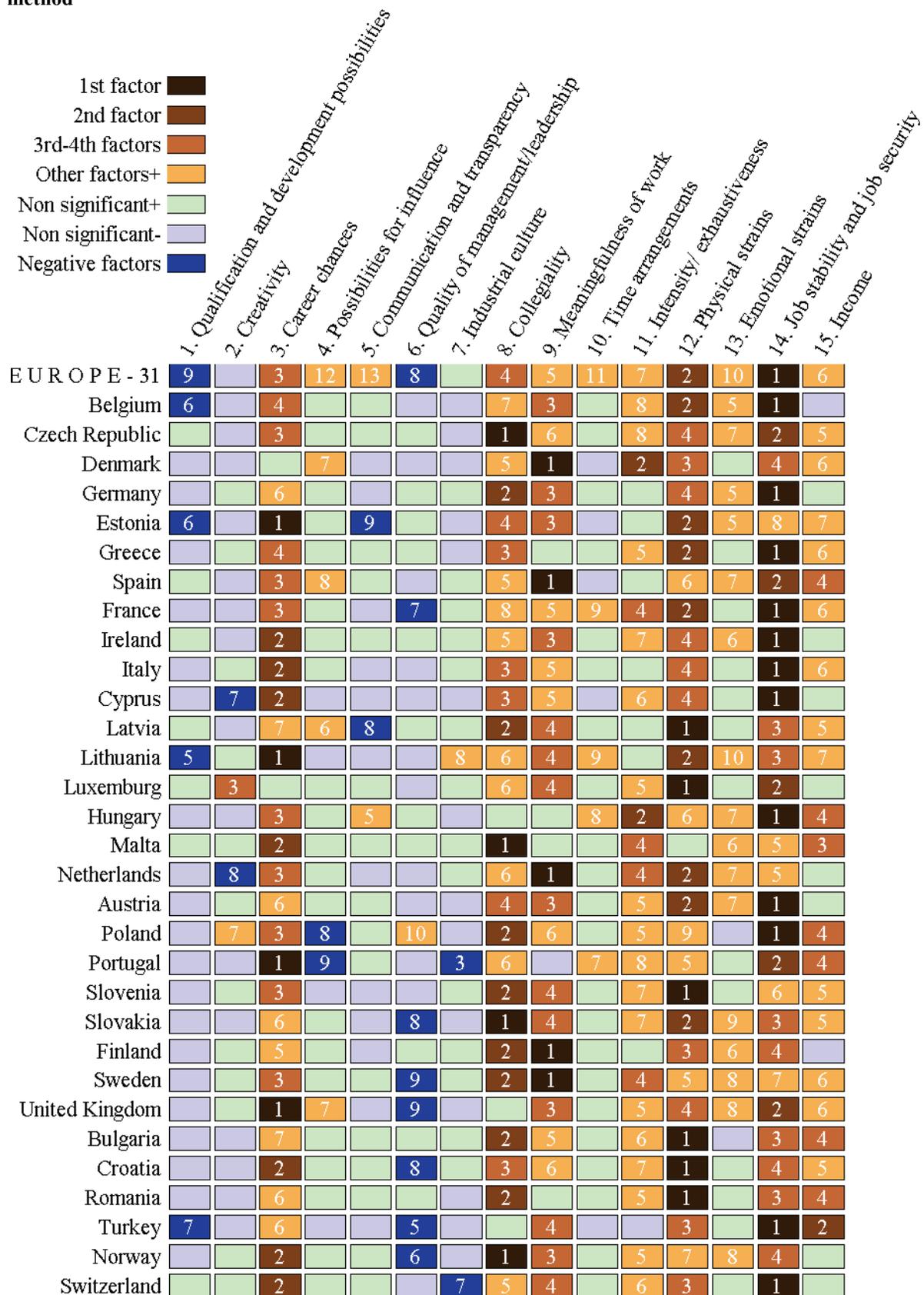
The survey question on general satisfaction with working conditions α_{36} enables to estimate the influence of the 15 sub-indicators on job satisfaction by means of stepwise regression. At first the partial indicator is found which has the greatest impact on the satisfaction with working conditions (provides the best fit). Then the next partial indicator is found which, being added to the first one, has the greatest impact, and so on. Figure 19 displays the rankings of different factors by country with the ranks shown explicitly and emphasized by colours to show the 'relief' of the graph. What does follow from Figure 19?

- (Most important aspect: job stability but not income) The aspect 14 'Job stability' is top ranked on the European average. Income is ranked only 6th. The general satisfaction with working conditions in 10 of 31 countries does not significantly depend on income, although many Europeans find it insufficient (Figure 17). This finding contradicts the assertion that 'individuals increasingly need employment security rather than job security', and 'more upward mobility' (European Commission 2007a, p. 8). In a sense, 'jobs' are esteemed higher than 'better jobs'.
- (Negative impact of training) Qualification and development possibilities have a negative impact on the general satisfaction with working conditions all over Europe (sometimes non-significant, as in Germany).

How is it compatible with the positive attitude to learning reported by the European Commission (2007a, p. 8) and DGB (2007, p. 24)? The explanation is the difference between rational answers to explicit questions and unconscious reaction revealed by our indirect analysis. The formulation of questions can predetermine answers desired. Indeed, if the question sounds 'Do you think that regular training improves one's job opportunities?' (European Commission 2007a, p. 8) who will answer 'No'? This answer, however, does not exclude that learning can be perceived as stressing, too demanding, and can create an unpleasant feeling of qualification insufficiency.

To conclude, the European Working Conditions Survey provides empirical evidence that Europe offers insufficient training facilities and that Europeans do not like to learn. It creates a vicious circle: employees perceive seldom training as excessively demanding, and employers are not motivated to invest in unpopular, and, consequently, low-efficient measures. Taking into account all of these, the Commission's conception of flexicurity does not look convincing, even if the function of social security could be reduced to professional training.

Figure 19. Importance of different aspects of working conditions for general satisfaction by the HBS method



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

Source: Tangian (2007e, p. 38)

8 Flexibility and security in collective agreements⁸

8.1 Collective bargaining and flexicurity

As mentioned in Introduction, discussions on flexicurity can be regarded pragmatically, with the focus on content rather than wording, and be used as a starting point to deepen the social dialogue for improving the trade unions' position. Then indicators can become practical instruments to make outcomes of negotiations more balanced and more transparent.

For this purpose, a negotiation model for flexicurity-relevant collective bargaining is developed. First, the opposite interests of negotiating sides are expressed by indicators which evaluate flexibility and security aspects of a collective labour agreement (CLA). A fair agreement should have 0-balance, by analogy with credit–debit 0-balance in finances. Since the flexibility and security indices are expressed in different scales ('in different currencies'), the substitution rate ('exchange rate') should be determined. In our case it is done by regression analysis of flexicurity-relevant agreements from the past practice. The data are taken from the Dutch computer archive of CLAs by Schreuder and Tjeldens (2004)⁸, downloadable from Dutch Collective Labour Agreements Database (2009), which contains standardized coded descriptions of about 5400 CLAs in years 1995–2007.

For a given CLA, a positive deviation from the flexibility–security 0-balance means that flexibilization issues are well compensated by security measures (better than on the average). A negative deviation means that flexibility prevails over security, implying that trade unions are disadvantaged. The model outputs tables and graphics and can be regarded as a kind of interactive check-list. It shows shortages and advantages of a given collective agreement with several indices, and displays its relative position with regard to all reference CLAs considered, to those of the given year, to those within the branch, or within the branch in the given year. Finally, the total evaluation of the CLA is made in terms of so called flexicurity balance.

The model is general enough to extend this approach to negotiations on issues beyond flexibility and security, as well as to perform analytical tasks. As application, the study contains an analytical contribution. It provides empirical evidence of increasing flexibility at the price of security. This is a serious warning against improper implementation of flexicurity and one-sided use of this policy in favour of employers. The computer tool developed is just aimed at enhancing the position of trade unions to the end of surmounting this negative trend.

8.2 Indices of flexibility and security for collective agreements

The Dutch CLA computer archive (Schreuder and Tjeldens 2004) can be imagined as a large table with 5383 rows for 5383 CLAs (observations) and 1216 columns (variables) for their specifications. The collective agreements are from 13 consecutive years 1995–2007. All of them extensively deal with employment security and social security, but only 3483 of them include flexibilization issues. The latter are regarded as flexicurity-relevant and only they are considered in the model.

The archive is built upon 649 numerical variables with which the CLAs are comprehensively characterized. The numerical specifications include the year of agreement, code of industry branch, 1–0 codes for Yes/No answers to numerous questions, and decimal figures like the

⁸ Based on Tangian (2009a)

length of holidays in days, percentages of salary increases, maximal limits for using TWA workers, etc.

Most of other variables are coupled with numerical variables, just containing text comments to them. A few other variables contain general descriptions of CLAs, names of negotiators, etc. We omit some numerical variables by different reasons as well as all the text variables which cannot be used in the model. Finally 356 numeric variables are selected. In spite of a seemingly important reduction, all the flexicurity-relevant information of the data set is represented in the model. The data structure after the omission of irrelevant CLAs and variables is illustrated by Table 11. It contains 3483 flexicurity-relevant CLAs, each occupying one row of the table. The selected 356 flexicurity-relevant numerical variables are grouped in several sections.

Table 11. Data structure for constructing composite indicators of flexibility and of security in collective labour agreements (CLAs); question marks ? show the aggregation of the composite indicators

CLA No. in archive	Classifiers	Flexibility			Security			Partial indices	Aggregate indices
		1. External flexibility	2. Internal flexibility	...	6. Labour rights	7. In-work income security	...		
caojr	Year	1 tijd17 Peak-slum/ seasonal work, Y/N	4 tijd23 Increase in part- time work, in %	...	22 inko56 Equal allowance for part- timers, Y/N	35 inko1 1st struc- tural wage in- crease, in %	...	1. External flexibility	Flexi- Secu- bility rity
1	1995	0	2	...	0	2	...	?	? ?
2	1995	1	3	...	1	2.5	...	?	? ?
.....									
3483	2007	0	1	...	0	4	...	?	? ?

Source: Tangian (2009a, p. 12)

The following columns of the table contain 354 variables grouped into two main sections, *Flexibility* and *Security*, which in turn fall into five and nine subsections, respectively; for the full list of variables see Tangian (2009a):

Flexibility (21 variables)

1. *External flexibility* (3 variables)
2. *Internal flexibility* (7 variables)
3. *Functional flexibility* (2 variables)
4. *Wage flexibility* (4 variables)
5. *Externalization flexibility* (5 variables)

Security (333 variables)

6. *Labour rights* (13 variables)
7. *In-work income* (75 variables)
8. *Out-of-work income* (69 variables)

9. *Job security* (12 variables)
10. *Employability* (30 variables)
11. *Employment security* (3 variables)
12. *Social security* (25 variables)
13. *Social dialogue* (9 variables)
14. *Work-life balance (combinatorial security)* (98 variables)

It is often argued that flexibility can be desired not only by employers but by employees as well. To avoid ambiguity, **Flexibility** in our model contains the factors which are desired by employers and are not desired by employees. The flexibility forms which can be desired by employees are included into the security indicator 14. *Work-life balance (combinatorial security)*.

The next to last section of Table 11 contains 14 partial indicators — five of flexibility, and nine of security. The last section of the table contains both total indices of flexibility and of security.

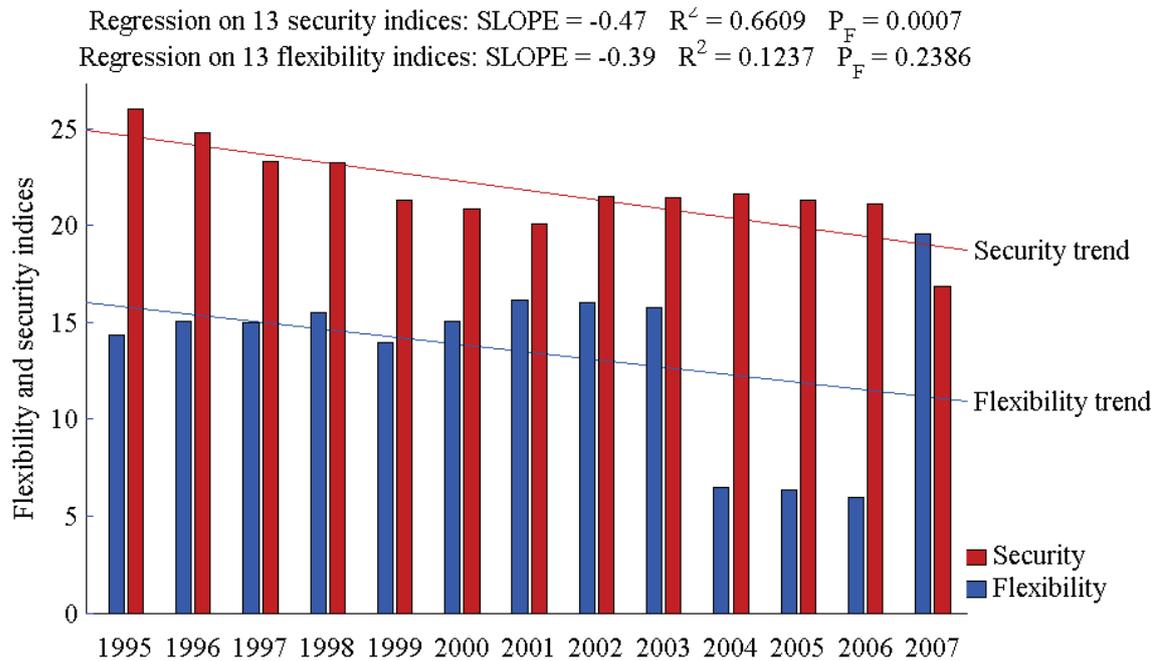
In Table 11, the partial flexibility and security indices are obtained by taking the mean codes of related questions along the horizontal dimension of the table. The summation is performed with no weights, except for implicit equalizing weights imposed by standardization; for details see Tangian (2009a).

8.3 Analysis of Dutch collective agreements

Figure 20 displays the flexibility and security indicators of the flexicurity-relevant CLAs averaged on year. These indicators are obtained for normalized variables, flexibility indices are shown by blue bars, and security — by red. The dynamical trend of the indicators is shown by the regression lines fitted to 13 yearly indices.

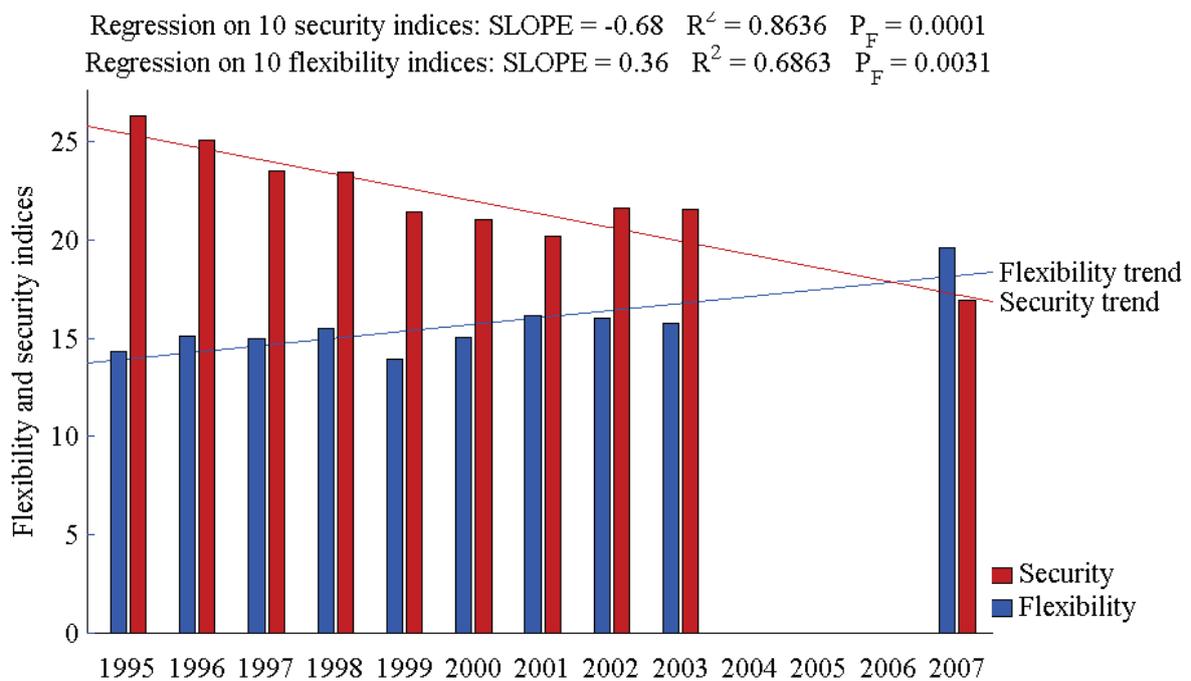
- (Security decline) The descending red regression line, fitted to security indices, shows a decrease in security. The high $R^2 = 0.6609$ (above the upper plot) confirms a good linear fit, and the negligible significance $P_F = 0.0007$ means that the decrease is statistically certain.
- (Abrupt drop of flexibility in 2004–2006) The flexibility indices of the years 2004–2006 are visibly lower than that of other years. Indeed, the corresponding CLAs lack 6 of 21 flexibility variables. It can be explained by the fact that the Dutch computer archive had been created by the end of 2003 by Schreuder and Tijdens (2004) and after that might be operated by other persons less experienced in coding CLAs.
- (Unclear flexibility trend) The blue regression line, fitted to flexibility indices, is also descending. However, low $R^2 = 0.1237$ and high $P_F = 0.2386$ confirm no statistically significant decrease. Eliminate the questionable years 2004–2006. We obtain quite a different picture. Now the flexibility line in Figure 21 is no longer descending but ascending. The statistical goodness is much higher ($R^2 = 0.8636, 0.6863$ instead of 0.6609 and 0.1237 , and $P_F = 0.0001, 0.0031$), meaning statistically significant trends. All of these indicate that the data from 2004–2006 are not quite reliable, and that flexibility likely grows rather than decreases.

Figure 20. Flexibility and security indices for 3483 flexicurity-relevant CLAs from totally 5383 by year (normalized variables)



Source: Tangian (2009a, p. 18)

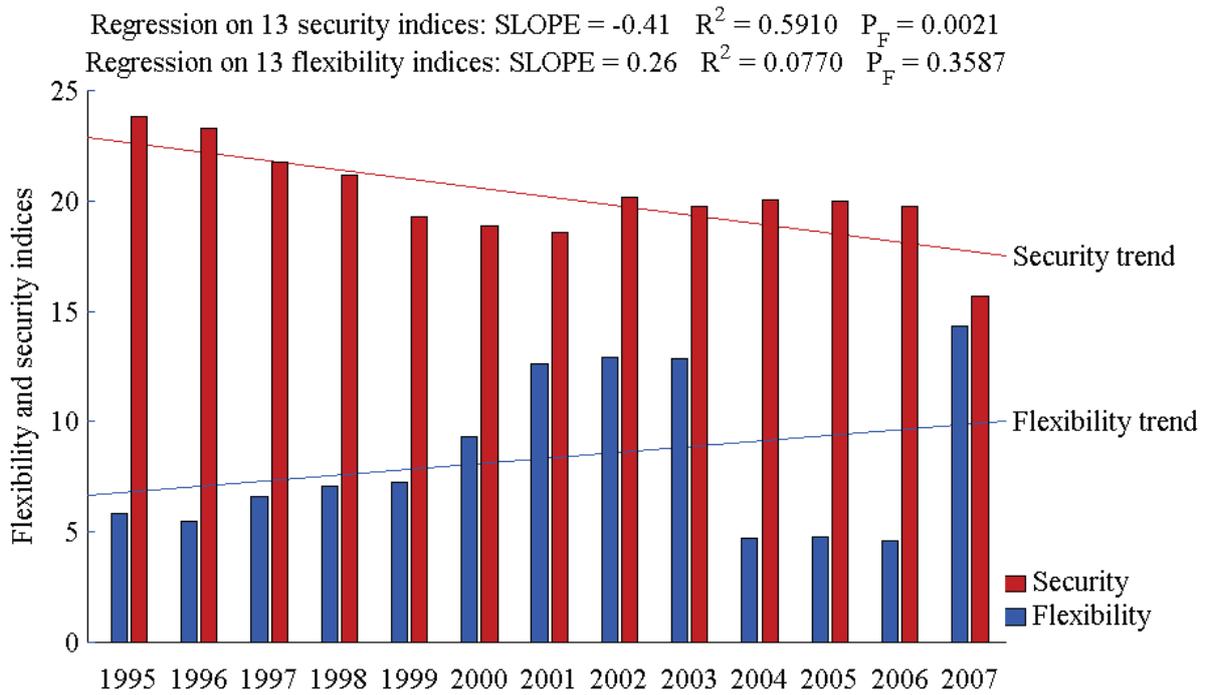
Figure 21. Flexibility and security indices for 2372 flexicurity-relevant CLAs from totally 3878 with no years 2004—2006 (normalized variables)



Source: Tangian (2009a, p. 19)

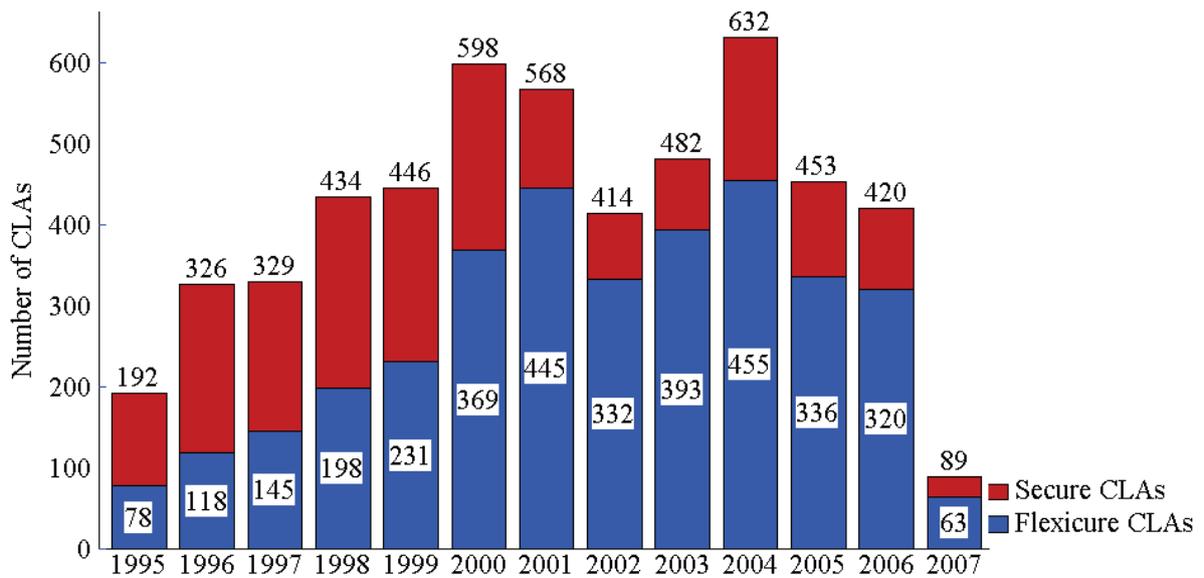
- (Flexibility expansion) Figure 22 shows how the situation looks like if all the 5383 CLAs of the Dutch archive are considered. The most surprising is that the flexibility in Figure 22 grows, whereas in Figure 20 decreases. How can it be, that adding the CLAs dealing exclusively with security drastically changes the behaviour of flexibility indicators without much affecting the security? The answer follows from Figure 23 which shows that the share of flexibility-relevant CLAs among all CLAs is increasing more rapidly than the flexibility decreases within the former (see Figure 20). The global effect is that the 'total' flexibility grows, although the 'specific flexibility' in flexicurity-relevant CLAs is decreasing.

Figure 22. Flexibility and security indices for all 5383 CLAs from the Dutch data base by year (normalized variables)



Source: Tangian (2009a, p. 21)

Figure 23. Share of flexicurity-relevant CLAs in all CLAs by year (for normalized variables)



Source: Tangian (2009a, p. 22)

8.4 Flexicurity balance

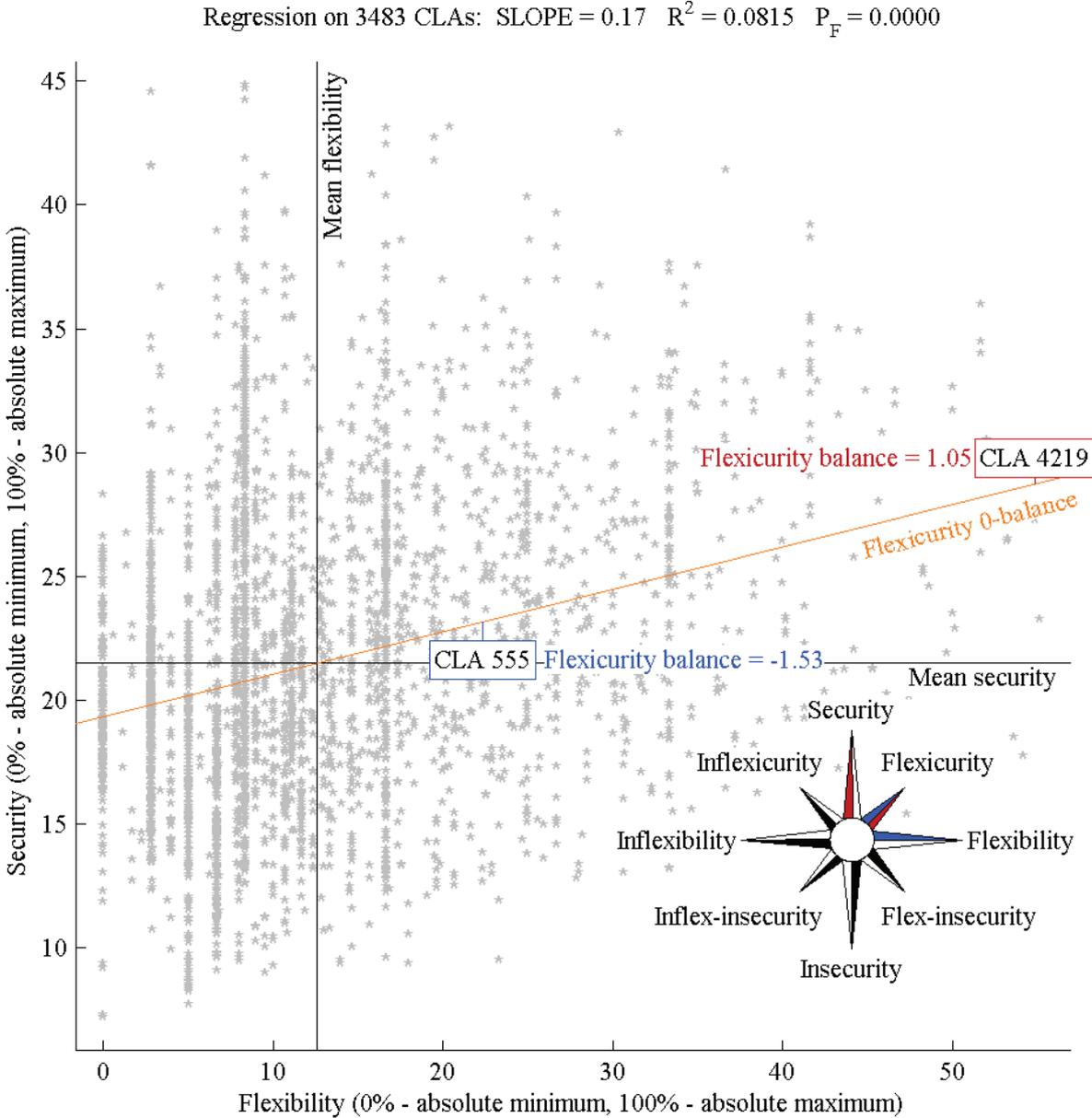
Figure 24 shows the flexibility–security plane (negotiation space) with the flexicurity compass and the ascending regression line fitted to grey stars * which denote 3483 flexicurity-relevant CLAs. The line with the slope 0.17 (see at the top of the plot) shows that a unit of additional flexibility is on the average compensated with 0.17 units of additional security. Therefore, the regression line is interpreted as the *flexicurity 0-balance*. The flexicurity 0-balance represents the status quo and is nothing else but a compact analytical representation of the current practice of compensating flexibility by security. This idea of analytically representing the status quo with an equation dates back to Tangian (2004c).

The vertical and horizontal lines in Figure 24 show the mean values of flexibility and security indicators of the 3483 CLAs, respectively. They visualize the location of CLAs in the negotiation space. The asymmetry of location of the CLAs with respect to the line intersection says that the majority of CLAs are in the (relatively) low flexibility and low security domain — just opposite to the flexicurity concept. The indices of these CLAs are however close to the mean values. Much fewer CLAs have flexibility and security indices above average, and their deviation from the mean is visibly larger. A plot for standardized variables is somewhat different but exhibits similar properties; see Tangian (2009a).

Figure 24 shows a sample CLA 555 (the number of the CLA in the computer archive) with flexibility and security indices 22.36 and 21.64, respectively. The *flexicurity balance of CLA 555* is the vertical distance to the line of flexicurity 0-balance. The distance -1.53 means that flexibility prevails over security, so that security is under-compensated by 1.53 units. For a given CLA, a positive deviation from the flexicurity 0-balance means that flexibilization issues are well compensated by security measures (better than on the average). A negative deviation, as in case of CLA 555, means that flexibility prevails over security (shown by the blue colour of flexibility), implying that trade unions are disadvantaged. Thus, the half-plane above the line of flexicurity 0-balance contains the CLAs which are advantageous for trade unions (with regard to the actual practice), and the half-plane below this line shows the CLAs advantageous for employers.

According to the European Commission's conception, the best flexicurity practices are the cases of high flexibility fairly compensated by security, that is, located on the right-hand side of Figure 24 above the line of flexicurity 0-balance, where the flexicurity balance is positive. In our case, the best flexicurity collective agreement is CLA 4219. In spite of a higher flexibility than that of CLA 555 it has a positive flexicurity balance = 1.05. Here both employers and trade unions made a good deal.

Figure 24. Negotiation space with flexicurity compass and flexicurity 0-balance computed for 3483 flexicurity-relevant Dutch CLAs (shown by grey stars *) from totally 5383. Flexicurity balance of a sample CLA 555 and of the flexicurity-best CLA 4219—with a positive flexicurity balance and highest flexibility (for normalized variables)



Source: Tangian (2009a, p. 26)

8.5 Flexicurity check-lists

Figure 24 shows the location of CLA 555 relative to min–max and mean values of flexibility and security observed (coordinate axes and the horizontal and vertical mean lines) as well as relative to the flexicurity 0-balance (the diagonal line). It may be important to know the location of a CLA relative to partial axes of flexibility and security (for instance, relative to axes of external flexibility and work-life balance), as well as relative to partial flexicurity 0-balance for these two partial axes. Additionally, the indices can be computed with different scaling methods, normalization (considered up till now) and standardization.

Instead of making numerous graphs for pairs of partial indicators of flexibility and security, we collect the information of interest in two *check-lists*. The descriptive check-list No. 1 shows the position of CLA 555 relative to min–max and mean values of partial indices of flexibility and security. Drawing analogy to Figure 24, it describes the CLA position relative to the coordinate axes and the horizontal and vertical mean lines.

The analytical check-list No. 2 shows the position of CLA 555 relative to the partial flexicurity 0-balances. Drawing analogy to Figure 24, it describes the CLA position relative to the diagonal line.

Consider the **check-list No. 1** in Figure 25 with four plots labelled A–D which show the indicators of CLA 555 relative to minimum, maximal, and mean values of the corresponding indicators of other CLAs. The plots differ in the set of reference CLAs: plot A is computed for all 3483 flexicurity-relevant CLAs, plot B — for the flexicurity-relevant CLAs of the given year, plot C — for the flexicurity-relevant CLAs of the same industry branch, and plot D — for the flexicurity-relevant CLAs of the same industry branch in the same year.

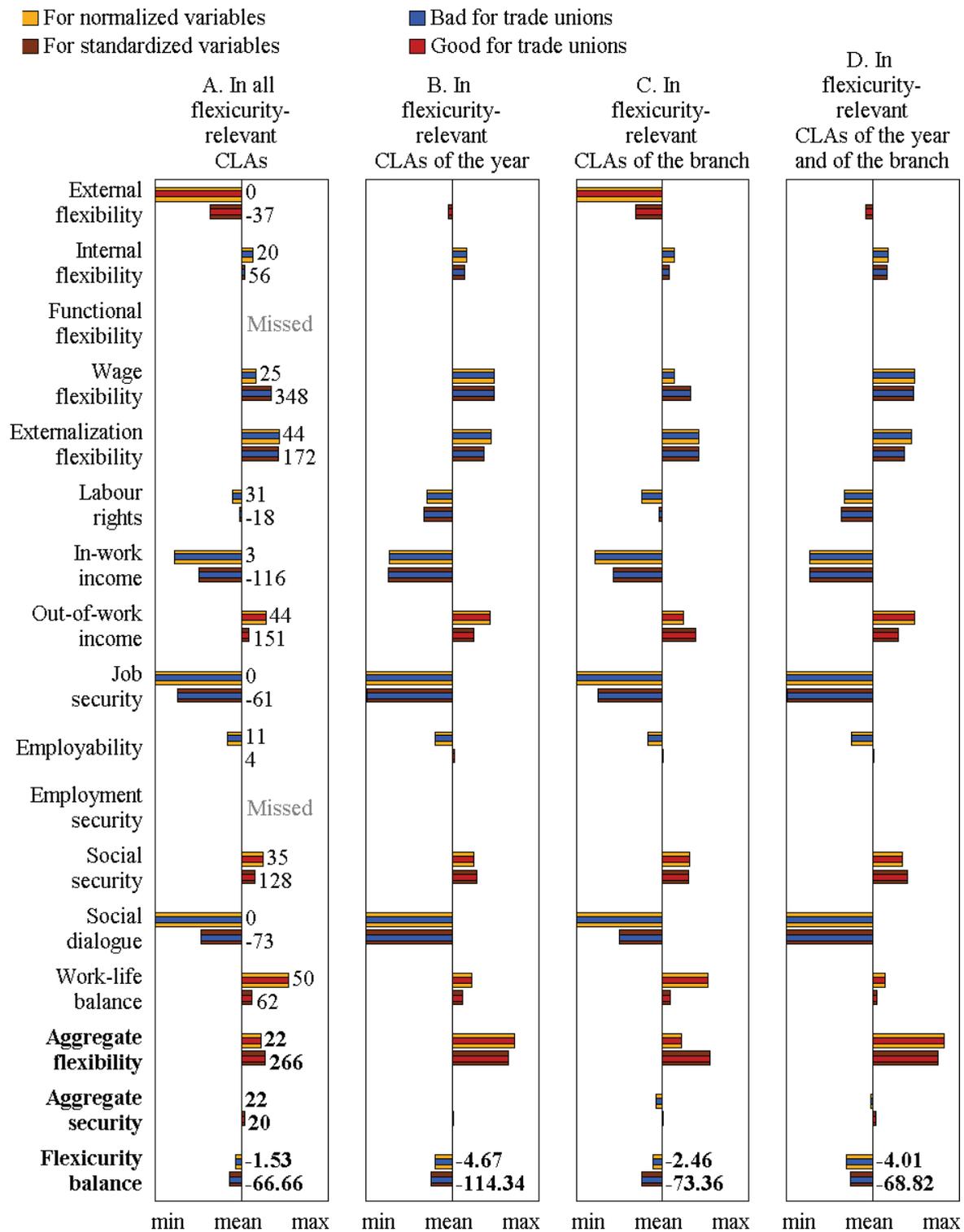
Note that every index is given in two versions: for normalized and standardized variables. Correspondingly, the results are shown by coupled bars.

Since the indicator values of the CLA are same throughout all the four sheets of the table, they are printed in the first plot only. The visual range of all the indicators is unified, although the actual values are, of course, all different. Thereby the relative location of the CLA in the negotiation space is shown without overburdening the plots with numerous indices.

For instance, CLA 555 has low (below average) indices of *External flexibility*, but relatively high indices of *Wage flexibility* and *Externalization flexibility*. CLA 555 is disadvantageous for trade unions with regard to *In-work income*, *Job security*, and *Social dialogue* which are visibly below the average.

The colours in this and in the next check-list emphasize the gains of either employers, or of trade unions. The bars marked by blue show the gain for employers, the bars marked by red correspond to the gain of trade unions. The predominance of one colour over another is a visual indication of an outbalanced CLA.

Figure 25. Checklist No. 1 (descriptive). Location of CLA 555 (FNV-No. 614, 2004, branch 72 'Industry') among 3483 flexicurity-relevant CLAs from the Dutch data base



Source: Tangian (2009a, p. 37)

The **check-list No. 2** in Figure 26 shows the flexicurity balance of CLA 555 for all combinations of partial indicators of flexibility and security. The aggregate flexicurity balance of CLA 555 for both types of scaling, -1.53 and -66.66 are in the top-left corner of the plot. The first one, -1.53 is the slope of the regression line in Figure 24. CLA 555 has no agreements on *Functional flexibility* and *Employment security*. The corresponding column and row have indications that the data are missed.

Other balances of CLA 555 show the compensation of particular types of flexibility by particular types of security. All the aspects of flexibility are positively compensated by

- *Out-of-work income* (disability insurance, pensions, etc.),
- *Social security* (provisions for child care, parental leave, etc.) and
- *Work-life balance* (different types of leave — Labour Time Reduction Days, leaves for marriages, etc.).

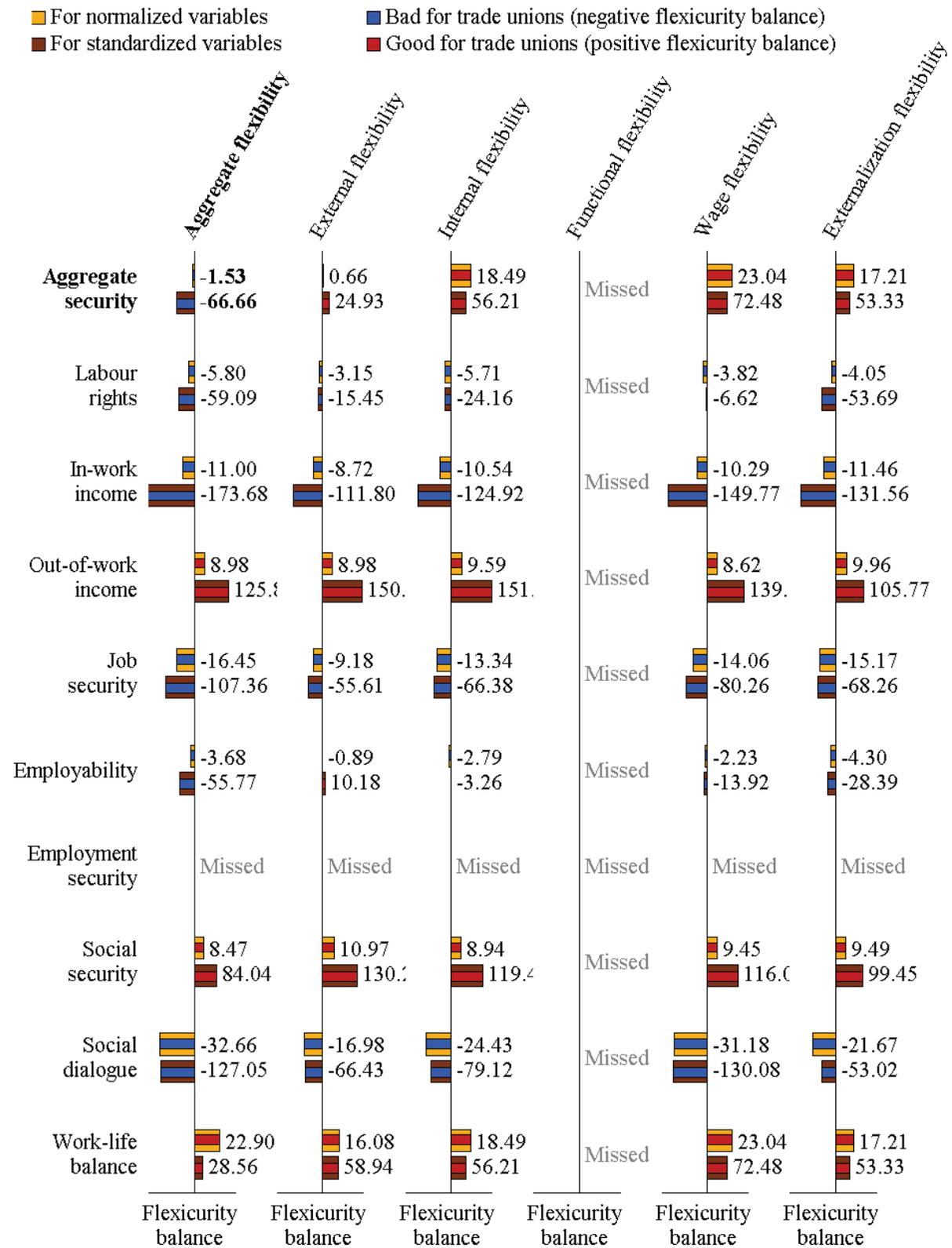
On the other hand, CLA 555 shows an insufficient compensation of flexibility in

- *Labour rights* (equality of atypical workers with normally employed workers),
- *In-work income* (salaries, overtime payments, etc.),
- *Job security* (adaptability of working conditions to aged persons, after a sickness, in reintegration),
- *Employability* (education, training, etc.), and
- *Social dialogue* (provisions for works councils).

Similarly to Check-list No. 1, the colours emphasize the gains of either employers, or of trade unions. However, unlike Check-list No. 1, which is focused on the relative position of a given CLA in the mainstream CLA practice, Check-list No. 2 provides a detailed evaluation of how well flexibility issues are compensated by security. For instance, a CLA with a strong deviation from the mainstream can get a good evaluation from the flexicurity viewpoint.

To conclude, statistical analysis of the Dutch CLAs reveals a growing predominance of flexibility at the price of security. The 'good practice example', as the Dutch experience is often referred to by the European Commission and OECD, turns out to be not as good as believed. Therefore, the model developed can be useful to evaluate collective agreements with regard to a fair compensation of flexibility by security measures.

Figure 26. Checklist No. 2 (analytical). Flexicurity balance of CLA 555 (FNV-No.\ 614, 2004, 72 'Industry') for aggregate and partial indicators of flexibility and security



Source: Tangian (2009a, p. 41)

9 Discussion: Six proposals⁹

As follows from the studies reviewed, the Commission's recommendations on flexicurity are somewhat idealized and are not all consistent with empirical actuality. For instance, the intent to provide more and better jobs meets interests of Europeans but attaining this goal through flexibility and security as it is proposed by the Commission leaves many questions open. In particular, professional training looks necessary but it is neither powerful enough to prevent from negative consequences of flexibilization, nor sufficiently widespread to back up a new employment policy.

A hope that lifelong learning is sufficient to compensate the shortage of stable jobs is at least naïve. An illuminating example is the dismissal of 2300 *Nokia* workers in Bochum, Germany, to the end of moving the plant to Romania (Spiegel Online 2008). The reasons are neither insufficient skills of German employees (who have been regularly trained by *Nokia*), nor their low adaptability to change, but cheap labour in Romania. Training can be efficient in case of single dismissals but not if dismissals are massive. No training can guarantee employment if there are no jobs.

The above example is a manifestation of the general trend of moving 'blue collar' jobs to poorer countries while retaining in the West steering offices. What should happen then to 'blue collars' in the West? Obviously, not all of them are fit to an office work, even if being lifelong trained. Should they resign themselves to unemployment, or take cleaning jobs, or move to poorer countries?

As for learning itself, its most efficient form is *learning-by-doing*, and training should not be separated from jobs but integrated in them. The idea of *complementary* out-of-job training is therefore too weak and cannot back up the implementation of Commission's conception of flexicurity.

Which consequences can it have? Let us outline briefly what can happen if the labour market deregulation will continue.

Poor career prospects of atypical employees. Indeed, each new job means a new start, often implying a starting salary, especially if an employee is little experienced in new tasks. Thereby, a higher risk of interrupted employment under flexibilization, or changes of employer increases the risk of remaining at the bottom of professional hierarchy. It is aggravated by growing long-term unemployment. In 1990 the 6–12 months-unemployed and more than 12 months-unemployed constituted respectively 44.6 and 30.9% of all unemployed. In 1998 these figures attained already 48.6 and 33.4% (OECD 2002b, p. 322). This means that the unemployment duration and the *share* of long-term unemployment have increased. As evidenced by the OECD (2002b, p. 156), the workers having experienced a long-time unemployment 'are more likely to be offered shorter contracts than other workers'.

Complications for family life and demographic problems. Income insecurity, mobility of the workplace, and individualistic psychology complicate family life. If both partners are flexibly employed then the difficulties are multiplied. The frequent necessity of changing schools is not the best option for children either. Due to all of these, the marriage age grows correspondingly. In turn, aging marriages results in a fertility decline. The population is aging, and its labour force fraction is getting

⁹ Based on Tangian (2004b, 2005b, 2006e, 2007c, 2008a, and 2009a–b)

smaller. The decreasing contributions to social security cause a deficit of retirement funds. Therefore, the demand for labour requires additional immigration with a number of side effects.

Immigration. As stated by the OECD (2001, p. 171), 'while admissions of new permanent foreign workers are currently very few in number, especially in the European OECD countries, the temporary employment of foreigners appear to be becoming more widespread. ... The temporary employment of foreign workers introduces flexibility into the labour market.' Moreover, foreigners are overrepresented among long-term unemployed (OECD 2001, p. 181–182) whose chances to get a normal permanent job are relatively low (OECD 2002b, p. 156).

Individualism and destruction of civil society. The enhanced mobility with frequent changes of working teams means the non-belonging to any collective. It results in individualism and lack of solidarity. If earnings and competitiveness are becoming the only sense of life, the social climate at work can hardly be good and relations between colleagues are unlikely to be more than formal. Frequent professional reorientations inherent in flexible work lead to the loss of professional and social identity. People with no social self-identification do not bear social responsibility and are unlikely to constitute a civil society.

Degradation of European human capital, decline of European competitiveness, and vanishing middle class. A further flexibilization can reduce the proportion of highly qualified workers whose skills are acquired due to long-term tenures. On the one hand, it can result in degradation of European human capital and, as a consequence, in decline of quality of European products and of European competitiveness. On the other hand, it increases in-work poverty. For instance, the actual German debate on poverty highlights 6.5 Mio-large underclass (Gammelin 2006, König 2006, Schmidt 2006). The middle class, the bridge between lower and upper classes, is vanishing and the society risks to fall into the rich and the poor with sustainable inequality.

Correspondingly, the Club of Rome foresees three scenarios of the world future (Radermacher 2006a–b):

1. A big war for resources and markets with a drastic reduction of the world population (15% likelihood)
2. The rich benevolently sacrifice their excessive well-being to help the poor (35% likelihood)
3. The 'brasilianization' of the world, meaning that the world population splits into a relatively small group of rich (people, countries) and a large group of poor (50% likelihood). Such a society is described in the novel *The Time Machine* by H. W. Wells (1895), where the bottom class of miserable Morlocks toils maintaining the underground machinery that keep the upper class of Eloi docile and plentiful.

The contemporary development looks to best match the third scenario (United Nations Development Programme 2002), which is also confirmed by the increasing inequality discussed in Section 9.4.

One has to distinguish between goals and instruments to attain the goals. The much promoted sustainable development is often presented as a EU goal which, in particular, requires flexibilization as an instrument to attain it. However, in the perspective of increasing income

differences, the sustainable development looks rather as an instrument itself. As follows from the facts mentioned, the sustainable development is aimed not only to 'meet the challenge of India and China' (Coats 2006, p. 5, 23, OECD 2005, p. 25, UK Presidency of the EU 2005) but primarily to **sustain and multiply the superiority of the rich over the poor**. Indeed, if the European social consent was higher before the 'sustainable development' and flexibilization, what are they for?

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All of these evoke doubts in the Commission's concept of flexicurity, which presumptions, as has been shown in this essay, are not always consistent with real facts. We conclude that an alternative implementation of flexicurity is needed and outline some measures which could be regarded as policy instruments as well as some more general political proposals.

9.1 Flexinsurance

Flexinsurance assumes that the employer's contribution to social security should be proportional to the flexibility of the contract. For this purpose, the degree of flexibility of individual contracts should be indexed, and the index should be used to determine the insurance conditions for every particular case. A prototype of such an individual index has been introduced in Chapter 6. The idea of flexinsurance is to cover unemployment risks, and to keep flexible control over flexibilization by a standard instrument of market economy.

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 (2006c) 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 (2006c) argues that its advantage is that a benevolent change of a job does not mean losing 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 a particular contract, and contributions to social security correspond to the expectation of unemployment benefits.
- (Constraining unnecessary 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 in cases it is really necessary.
- (Flexible instrument for 'regulating the labour market deregulation'). Adjustments of indexing and corresponding flexinsurance contributions need no legislation changes with long parliamentary debates but just administrative decisions. It is similar to periodic adjustments of statutory health insurance contributions which are changed almost every year.
- (Social justice) Providing advantages from flexibilization to employers is not socially just, especially in the background of increasing inequality. 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* (European Commission 2007a, p. 14): 'Active labour market policies, too, have a positive effect on the *feeling* of security among workers'.

9.2 Workplace tax / tax bonus

The *workplace tax* is to be imposed on the employers who offer bad working conditions regarded as 'social pollution'. For this purpose, the quality of every job should be indexed, and the index should be used to determine the tax amount for every workplace. A prototype of such an individual index for 'measuring the social pollution' has been introduced in Chapter 7.

Optionally, the workplace tax can be complemented with a positive measure, tax reductions, for very good working conditions.

Similarly to the green tax in the environment protection which stimulates enterprises to consider the natural environment, the workplace tax is aimed at considering the working environment. If 'more and better jobs' should be attained 'through flexibility and security' then one of roles of the latter is securing the job quality. The workplace tax is therefore a security measure shaped into the form of a standard instrument of market economy. A fraction of the tax can be paid directly to the employee to compensate shortages of working conditions (if any). However, its significant fraction should be paid to the state to keep the situation under the statutory control.

The workplace tax is particularly relevant to atypical employees whose working conditions are worse than that of normally employed. The French precariousness premium at the end of a temporary contract in the private sector (Service-Public 2008) can be regarded as a kind of workplace tax. Its amount — 10% of total earnings during the duration of the contract — makes temporary contracts in certain cases more attractive for employees than permanent contracts. This pay-off stimulates employers to issue permanent contracts and, on the other hand, secures the mobility of flexible workforces.

Besides the security function, the workplace tax should contribute to managing the European competitiveness. Indeed, at the world market Europe occupies its traditional niche as a manufacturer of top quality products (to compare, the USA export many rather cheap goods, and Asian firms specialize in the best quality-to-price ratio). To meet the challenge of globalization, Europe reinforces its position by the *innovation policy* which requires highly qualified manpower, well equipped workplaces, and stimulating working environment. Therefore, investing in the quality of work will pay back, and workplace tax / tax bonus should be regarded as steering instruments rather than as an additional financial burden which only increases production costs.

9.3 Basic income

The *basic minimum income*, or simply *basic income* assumes a flat income paid by the state to all residents, regardless of their earnings and property status; see Schäfer (2006) for a critical review. 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 very idea of minimum wage (Schulten *et al.* 2006).

The basic income meets the concept of welfare state, since it guarantees some unconditional living standards and discharges social tension. Its introduction would mark a significant progress in social security and therefore would meet the idea of flexicurity: 'more security for more flexibility'. Basic income could contribute to the European objective of providing 'more and better jobs'. Indeed, having some basic income, unemployed are not forced to accept any job offer, which in turn would motivate employers to embody principles of decent work in practice. Therefore, basic income can be regarded as a social measure coordinated with the European employment policy and ILO initiatives.

Since basic income prevents unemployed from accepting bad job offers, it backs up the solidarity of unemployed with employees in their demands for good working conditions and

fair pay. Therefore, basic income enforces the trade union position in their negotiations with employers.

Even the 'make work pay' policy can gain from basic income. Indeed, an unconditional income implies that any work gives a pure profit. Moving to work cannot be discouraged by losing out-of-work benefits. Thus, penalty measures of the policy 'make work pay' could be replaced by a more efficient benevolent motivation (cf. with A. Carnegie's 'There is no way to force somebody to do something other than to make to wish it').

The concept of basic income is usually criticized from the financial viewpoint. Where should its budget come from? The problem here is however not the question of money but of income redistribution. The redistribution does exist anyway and is performed through legislation, taxation, social security, and banking and business practices. In fact, almost every political decision leads to redistribution of income. For instance, the introduction of semester payments in German universities leads to redistribution of income not only within the actual population but also within the next generations, since those who could study only free of charge will not be sufficiently qualified to get high salaries in future. Flexibilization is another policy measure which leads to even more significant violations of the income status quo. It has been already several times discussed, for instance in Sections 1.2, 4.1, and 5.1.

Therefore, the question of budget is not correct. The actual question is about adjustments of the redistribution mechanism. Since all European residents, with very few exceptions, have some means of existence, the only question is how to deliver these means to recipients. For instance, the corresponding adjustments of the redistribution mechanism can be realized by:

- flexinsurance and workplace tax,
- higher taxation of high earners (to reduce the flat income), and
- funds released from reducing the number of civil servants currently working in social security (since the social security system becomes simpler).

Thus, a political will is much more important than the question of budget.

9.4 Constraining financial markets

The opening of financial markets in the 1970–1980s was thought to improve living standards in industrialized countries and to solve the poverty problem in the third world. Investments in countries with low labour costs promised cheap goods for consumers and high returns for investors. At the same time, the target countries were expected to profit from modern technologies and job creation. That was the theoretical starting point for the current globalization (World Bank 2002).

Since then world prices became more equalized, and import goods are no longer that cheap as in the 1970–1980s. The living standards in the industrialized countries, even in the United States, visibly improved exclusively for top earners. According to Krugman (2006),

Even households at the 95th percentile — that is, households richer than 19 out of 20 Americans — have seen their real income rise less than 1 percent a year since the late 1970's. But the income of the richest 1 percent has roughly doubled, and the income of the top 0.01 percent — people with incomes of more than \$5 million in 2004 — has risen by a factor of 5.

As for developing countries, the poverty problem was not solved at all and the inequality even increased (Stiglitz 2002). South Africa is one of most illuminating examples. After the apartheid has been abolished in 1994, foreign investments flew into the South African most

profitable branches, mining and extractive industry. Other branches, first of all agriculture with about 40% of labour force, mostly unskilled, became non-competitive (Theron et al, p. 10). Having pursued the neo-liberal policy, the government neither safeguarded low-profitable jobs, nor provided incentives for alternative domestic investments. It resulted in an increase in unemployment from 30.8% in 1995 (Theron et al. 2007, p. 5) to 46% in 2007 (Decent work, Decent Life 2008). According to Leibbrandt (2005, p. 7) the Gini-coefficient of inequality increased from 0.68 in 1996 to 0.73 in 2001. South Africa, having reduced a number of industries, became economically less independent, unemployed peasants overpopulated townships, and criminality tremendously increased with the murder rate having become the highest in the world; see List of countries by intentional homicide rate (2004). This globalization scenario is quite typical for developing countries.

The situation in industrialized countries is, of course, not that dramatic, but the development in the Eastern Europe exhibits some similar trends. Generally, the financial liberty increased in the mobility of workplaces with a negative impact on employment and social equilibrium. In Europe, the opportunity of making foreign investments, actually meaning export of jobs, gave employers a *legal* instrument of pressure on their governments: 'If you do not relax employment protection according to our requirements, we shall continue moving jobs abroad, where labour is cheaper and employment protection is less strict, and you will remain here face-to-face with an army of unemployed'. Thus, having liberalized financial markets, European governments paved the way to loss of control over labour markets.

Besides, the financial liberty resulted in a socially unfair redistribution of income with an increasing financial pressure upon the real economy. In a simplified form it can be explained as follows. The European GDP annual growth of about 1% means that an average enterprise is 1%-profitable. On the other hand, the usual 5%-interest rates of commercial banks mean that only the enterprises with profitability over 5% can pay the credits back. Apart from a few top-profitable domestic enterprises and pure speculations, only developing countries with the GDP growth of over 5% can provide a sufficient return. It leaves no development chances for average enterprises and slows down the development of most profitable ones, whereas banks are getting top profits from squeezing the real economy¹⁰. Quick financial speculations with numerous 'financial products' are becoming most attractive, and many industrial enterprises are now involved in these speculations. However, financial speculations end up with stock exchange crashes with a negative impact on real economy, employment, and social situation. Thus the problem of socially unfair redistribution of income is also multiplied by the problem of huge losses from *not produced* values during such crises. To get financial profits banks victimize real economy and sustainable social development.

Regarding from the historical viewpoint, European science, engineering, high technologies, general culture, education, and even richness are common achievements of the European population which gave Europe its economic advantages. All of these are a kind of common 'European property', profits of which should belong to all the Europeans¹¹. If the economy remained closed with no *private* foreign investments then all the gains could be finally

¹⁰ Large firms can take credits for development, paying back the credit with percent from their total profits which are much higher than the pure development returns. This means that large firms are "privileged" comparing to small and medium enterprises — contrary to the equal-chance principle and anti-trust policy.

¹¹ In UAE the author was told that some Arabic countries consider oil as national property whose end price includes that of crude oil and extraction/transportation costs. The former is subtracted from private profits in different ways and redistributed through social funds, education, and health systems). The Russian oil and gas industry is now taken under the governmental control to (partially) share the profits with the population.

redistributed within Europe. The financial openness of Europe means that the European common advantages work only for private investors, speculators, and other profiteers rather than for the whole of European population.

Since the way out is generally through the same door as the way in, financial markets should be constrained to some extent in order to restore control — if social priorities are to be respected. The radical solution would be removing finances from the market economy by nationalizing the finance sector. It would restore the control of labour markets, provide favourable conditions for developing small and medium enterprises, exclude leakages of resources from the real economy, and prevent crises.

All of these require however some changes in the actual political philosophy; see Degryse and Pochet (2009). Sustainable *social* development should be put over sustainable development. Indeed, the current crisis demonstrates that European policy makers are inclined to save commercial banks rather than the real economy. Instead of favourably crediting enterprises in need through national institutions, the European Central Bank offers unprecedented 1%-credits to commercial banks which keep their high interest rates, making new profits on this recovery measure.

9.5 Politicization and restructuralization of unions

With the collapse of the Eastern block, the West got rid of its political opponent. And, at the same time, the world lost its ideological and military equilibrium. Different social systems played in the world a role similar to that of opposite parties in a democratic country. Lacking any systemic alternative, the European social-democratic capitalism has shifted to the right, and this process continues, being aggravated by the actual neo-liberal globalization.

Trade unions, even those which have not collaborated with communists, have gained much from their presence at the political stage. The far-going communist demands on principal political questions have made employers more flexible in negotiating secondary economic issues. It has worked by the principle formulated by the father from Truffault's film *400 Blows* (1959): "You ask for 10 francs, so expect 5, will be glad for 3, so get 1." With no communists who had asked for 10, it became difficult for trade unions to get even 1. For instance, in West Germany it was often said that the third side in collective bargaining was always the GDR. Indeed, due to the political competition, every item had to be superior in the West. Finally, proletarians might appeal to the Soviet Union with its tanks and missiles in fighting trim.

Now there is no Soviet Union and left parties are no longer as influential as 30 years ago. Trade unions have a much less favourable political background and a much weaker political support. Under the new circumstances, trade unions are left almost alone to constrain the massive offensive of the neo-liberal capitalism. The modest role of a social partner looks neither powerful, nor adequate. Therefore, trade unions may need an enhanced representation at the political level with participation in legislation and executive bodies, contributions to parliamentary debates, own press organs, and published manifestos (the history of trade unions knew periods of their close cooperation with particular political parties, like in Germany after the World War I). If by some reasons it is important to keep the trade unionist supra-political image, a partner trade-unionist party could be founded to perform all these functions; see also Upchurch (2009), and Upchurch et al. (2009).

On the other hand, the restriction of trade unions to national boundaries meets no longer the structure of the globalized economy with multi-national companies, supra-national supply chains, world-wide labour mobility, and international finance with offshore banking. The world business is becoming uncontrollable by single countries and unattainable for national

trade unions. The structure and allocation of unions can be adjusted to the actual situation by establishing trade-unions for international structures, like 'Ford trade union', or 'Nestle trade union'. Politicization of unions can contribute to a better control over multinationals as well.

9.6 Separation of politics from economics

With the collapse of the Eastern block, the West also lost one of directive forces for its development. As said in the novel *Indecision*: "During the Cold War you felt like you had a reason to get up in the morning. Now what have we got?" (Kunkel 2005, p. 92). Before 1990s both economical and technological progress were influenced by long-running defence programs. The society had a high degree of ideological consensus, understanding of military expenses, and rather common political values. The market economy was an efficient instrument of related policies. After the Cold War had been over, the West continued its development with no radical change. As winners in the world confrontation Western democracies declared themselves politically best and the self-regulating market economy was recognized as most advantageous.

The response of the market with no ideological constraints and directing force was a struggle for resources, cheap labour, new sale markets, and easy profits. For instance, *daily* (!) financial speculations on currency exchange rates only (!) surpassed *yearly* international direct (productive) investments which attained its absolute maximum of 1492 Bio. US dollars in 2000 (UNCTAD 2002, p. 303). This is consistent with Machiavelli's (1532) observation in *The Prince* that politics, lacking any guiding principle, is reduced to a continuous struggle for power with no moral limits. The market economy — an efficient weapon of the Cold War — turned against its owners after the war had been over. It is noteworthy that labour market deregulation reforms in Europe started in the early 1990s (European Commission 2006c, p. 5, see also Casey 2004) immediately after the collapse of the Soviet Union.

Lacking the guiding political goal of the Cold War, the market economy started to work for itself, putting economic values over social ones. The worldwide increasing inequality shows that social priorities are considered secondary and that flexibilization of employment relations aimed at boosting business activities is most advantageous for owners and top earners. Thus, the 'economic priorities' are closely linked to the 'brasilianization' scenario of the Club of Rome. If the current trends will not be constrained the European social model will not survive. A social explosion which can outbreak due to the actual policy can be socially very costly, much surpassing gains from 'economic priorities'. The nuclear energy also seemed quite cheap before the Chernobyl explosion. As said by the 6th Director General of the UNESCO René Maheu (1966, p. 34) '...The man has an almost unlimited capacity to suffer... It is in fact the injustice... which is intolerable.'

What could be a solution, particularly, how social values can be put over 'economic priorities'? Moreover, how to subordinate economy also to urgent problems of climate change, environment protection, overpopulation, shortage of resources and water, and some others. The bottle-neck is that all the problems enumerated are but constraints for economic development, and the modern politics is to a great extent steered by economy.

From the democratic viewpoint, this current situation is quite questionable. The 'economic priorities' are in fact priorities of owners and employers. Therefore, a policy for economy is rather a policy for a small fraction of population, that is, a non-democratic policy. Even the market efficiency is disputable. Indeed, market economy includes banks, insurances, lawyers, and other agents who do not contribute to the real economy but consume a considerable fraction of the national product. These 'regulating expenditures' are comparable with losses from planning errors in a centralized economy. Moreover, the centrally planned economy

might function better if it were less 'overregulated' by contradictory policy instruments (like unrealistic directives, inadequate money supply, huge military expenses, etc.) and incorporated certain market mechanisms.

Besides, it is often overlooked that the theoretically proved market self-optimization assumes some preferences of politic/economic agents, so that goals play the guiding role. After the end of the Cold War, Western countries lost the directive ideological and military goal and turned to short programs within short periods between successive elections. From the economic theory (turnpike theorem; see McKenzie 1976) it is known that an optimal development goes along some main trajectory, whereas short programs inevitably enter and leave it with great losses. Thus, the advantages of the market economy should not be overestimated.

One can imagine a separation of politics from economics. It means that the central government is not primarily influenced by economy. To realize it, politicians and governmental officials should neither be involved in business activities nor profit from them indirectly. At the moment this suggestion can look unrealistic, but the times can change (recall that the proposal of Montesquieu (1748) to separate legislative, executive, and juridical powers was not realistic as it had been formulated long before the French and American Revolutions when it has been implemented).

The closeness of politics to the market economy headed by owners and employers inevitably implies that the interest of this fraction of population is taken into account with the first priority. It contradicts the fundamental democratic principle of respect of a majority which in the given consideration is obviously constituted by employees. Therefore, putting economic priorities over social priorities turns out to privileging a minority of population while disregarding a majority. It has a certain moral aspects, and the rich are allowed to multiply their richness by different high-level operations with currencies, shares, and so called 'financial products' which in the everyday life would be qualified rather as tricky frauds. Indeed, fortunes are *legally* made just by moving money from one account to another, although the gains are clearly obtained not from heaven but from losses of disadvantageous customers. A policy which supports unfair redistribution of income can hardly be qualified as democratic.

Following this logic, a democratic policy cannot be driven by a liberal market economy. In this sense, the Copenhagen criteria with no reservations on the functioning of market economy are contradictory:

Membership requires that candidate country has achieved stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and, protection of minorities, the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union (European Council 1993, p. 1).

Indeed, a really democratic policy can be either beyond the market of private enterprises, or driven by a market of public/private-public enterprises, the case we do not consider here. The case when politics is beyond economy means that economy is an instrument of politics rather than its driving force. Their relations could be like between the 'contractor' and the 'subcontractor', which in a sense follows ideas of Polanyi's (1944). Recall that Polanyi warned against the power of the market economy which 'consumes' labour and natural resources. To prevent these effects, Polanyi discussed the *decommodification* of labour and nature, that is, removing both of them from the market and introducing the corresponding regulation.

Our proposal is just a small step further. Instrumentally, it means that the private sector should be restricted to real economy with labour and ecological restrictions. The financial sector should be nationalized, or taken under governmental control with certain restrictions, and some services vital for the reproduction of labour force like education, including the university level, and health should be accessible for everyone or even free of charge. The list can be continued, but we'd rather stop at this point.

To conclude, it should not be hoped that the great challenge of labour market structural change can be answered by minor reforms of professional training. The level of reform should correspond to the level of desired change. Otherwise, the situation will be similar to the one mocked by Saltykov-Shchedrin (1826–1889): 'How to make our unprofitable enterprise profitable, not changing anything in it?'

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