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The Flexibility-Security Nexus in Transitional Labour Markets: An empirical analysis ^a

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This article is intended to serve as a basis for discussions and, as well, a stimulating critique on monitoring Transitional Labour Markets (TLM) in Europe. TLM arouse interest from many researchers across Europe and beyond trying to develop new policy directions based on a complementary relationship between flexibility and security with the aim of allowing people to move both in and out of paid employment more easily. The concept of TLM provides a framework and guidelines to develop a new strategy of social risk management and social integration as well as an alternative to full employment deemed to be no longer applicable to Europe. Currently, the so-called European social model is seen having a big stake in the future of TLM. Numerous items in the TLM tool-kit are already good practices in Europe.

The lack of foresight concerning the elements of successful supportive bridging mechanisms comes from the fact that such situations, in most cases, were not the outcome of deliberate TLM and “flexicurity” strategies. The level of consensus-building, the type of welfare regimes, in a word, the “context” should still be considered as a crucial linchpin. Using a linear scaling technique and the Principal Components Analysis (PCA), the article states a way at improving the European political and strategic learning process through the building of a composite TLM index.

JEL classification: C02; P51

Keywords: Principal Components Analysis, Transitional labour markets, Comparative Economics

^a In H.Jørgensen & P.K.Maden (eds.), *flexicurity & beyond - finding a new agenda for the European Social Model*, DJØF Publishing Copenhagen, 2007: chapter 10. An earlier version of this paper under the name “How Transitional labour Market might work in Europe?” was presented at the conference “Flexicurity and Beyond” on 12-13 October 2006, Aalborg, Denmark: workshop 6: “European forms of flexibility and security”.

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1. INTRODUCTION: BACKGROUND AND PURPOSE

Since the European Council of March 2005, the European Union's authorities have pointed out that the Lisbon strategy needs to be redefined to focus on growth and employment purposes. The European labour market has been strongly influenced by demands of 'flexibilisation' and 'employability' with the aim of developing initiatives by unemployed people in training and job-seeking activities. Nevertheless, in a context of long-lasting mass unemployment without quick and numerous job creations, the main burden of labour market adjustment bears on individuals.

In addition, behind the traditional typology of risks taken over by the Welfare State (Esping-Andersen, 1990), new risks have emerged resulting from globalization and demands for flexibility as well as the individualisation process.

The sharp decline of traditional social structures, the shift towards greater individual responsibility and the split in corrective mechanisms due to European integration, the growing worldwide interdependence between nations and globalization of commercial/financial transactions require new forms of protection from risk. Several proposals have been put forward in the European debate to meet current challenges.

Besides the 'third way' or 'asset Welfare capitalism' (Giddens, 1998), Transitional Labour Markets (TLM) are beginning to appear as a key concept through the debate about the European Social market economy providing a framework and guidelines to develop a new strategy of risks management (Schmid & Auer, 1998).

Four basic principles are often stressed by TLM's authors (Schmid & Schömann, 2004): (1) 'Empowerment' through the strengthening of personal freedom and autonomy, which presupposes not only transfers but also a new balancing of rights (Supiot, 2001), (2) 'Dynamic efficiency' with a switch from passive expenditures to active ones, (3) 'Sustainable employment' by favouring permanent full-time work and limiting casual working, (4) 'Cooperation' between local networks and job centres.

From an economic point of view TLM should be considered as a possible extension of 'institutionalists' work developed by authors such as P.Doeringer & M.Piore (1971), P.Osterman (1999) and others. TLM are close to their work by the emphasis put on 'flows' rather than 'stocks' to explain the functioning of labour market. Nevertheless, TLM go beyond the traditional opposition between 'internal and external market', whose frontiers are becoming increasingly blurred, by promoting a new balancing of rights between actors with the aim to avoid labour market segmentation and ease mobility.

Some more or less known examples of good practices in Europe can give an idea about how TLM might work: i) work foundations in Austria (Winter-Ebmer, 2000), ii) Paid Leave Arrangements (PLAs) and job rotation in Denmark (P.K Madsen, 1999(a), (b); Jensen, 2000), iii) Urban time policies 'tempi della città' in Italy (Bonfiglioli, 1997; Mareggi, 2001; Boulin & Muckenberger, 1999 (...)), iv) parental leave schemes in Sweden (A.Z.Duvander, T.Ferrarini, S.Thalberg, 2005; Nyberg, 2004 (...)), v) flexible working hours in the Netherlands (Tijdens, 2000; Visser, 2002, 2003; Visser & al.,

2004; Yerkes & Visser, 2006 (...), vi) labour-sharing contracts ‘groupements d’employeurs’ in France (Grefe, 2005 (...)).

We must point out that these ‘bridging mechanisms’ have been developed at the national level and are not the results of deliberate TLM strategies. Most of the reforms were introduced before TLM became a popular labour market concept. Nevertheless these examples must be seen as a starting point to implement TLM in European policy-making. The common point of these arrangements is that flexibility and security come together with ‘flexicurity’ as an outcome. The need for new regulatory instruments to achieve new policies and policy mixes (social and employment policies) has always been a major issue in Europe.

A few European initiatives (i.e. the European Employment Strategy (EES), the ‘Open Method of Coordination’) with their strengths and weaknesses (Nedergaard, 2005; Telò, 2002 (...)) pointed out that ‘benchmarking’ and ‘peer review’ should be preferred to settle necessary reforms on a socio-economic ground. Dealing with TLM assumes that you are reaching beyond static analyses of stock values by referring to dynamic flows.

As a matter of fact, ‘transitions’, within the scope of TLM, are still a rather unexplored research field. This article tries to fill the gap by carrying out an empirical analysis taking into account both labour market flows and incentives of different institutional arrangements and effects on labour market agents towards greater flexicurity.

The underlying questions of this contribution are therefore the following two: How can one to identify relevant performance indicators according to the TLM-‘flexicurity’ approach? And: To which European employment and welfare regimes do ‘flexicurity’ and TLM arrangements fit better? The article will first display the two methods chosen to monitor TLM performances (composite index designing and principal component Analysis - PCA). Then, an interpretation of results according to the employment and welfare regimes in Europe will be suggested.

2. METHODOLOGY APPLIED IN MONITORING TLM’S PERFORMANCE: A COMPOSITE INDEX AND THE PRINCIPAL COMPONENT ANALYSIS

The present empirical study of TLM from a comparative point of view applies both a composite index and Principal Component Analysis (PCA). The countries were selected according to their relevance in the standard classification of European employment and welfare regimes¹ and the availability of reliable data for comparisons. The social-democratic model is represented here by Denmark and Finland; the continental model by France and Germany; the Southern European model by Italy and Spain and finally market-led regimes by the United Kingdom (UK) and Ireland.

¹ From G.Esping Andersen’s classification including revisions and adjustments made by the author himself and others researchers as Bonoli 1997; Ferrera, 1996 (...)

The Netherlands were included because of their intermediate position between the social democratic regime and the continental one. The impact of monitoring and the methodology used will be first discussed. Then, I shall move on to deal with empirical results obtained for both individual transitions and institutional aspects. An interpretation of results according to the employment and welfare regimes in Europe will be given.

2.1 Choice of Performance indicators

The major difficulty in analysing TLM is that emphasis has to be placed on dynamic indicators (transition rate between different statuses, from unemployment to policy measures, from participating in a policy measure into employment, from work unemployment etc...) rather than on stock indicators like unemployment and employment rates. (LFS) and longitudinal data from the European Household Cross sectional data from the European Labour Force Survey Panel Survey (ECHP) provide such informations on inflows and outflows over time.

Within the TLM framework, the incentive effects of different institutional arrangements (unemployment insurance systems, active labour market policy regimes, etc.) on labour market agents and their impact on labour market performance will also be examined. Stock data will be used to reveal interesting features of the institutional context favouring secured mobility and autonomy for individuals.

The method applied involves the integration of domains and sub-domains into an index according to their relevance in describing the TLM aspect to be measured. To prevent a redundancy of indicators inadvertently included in the analysis, correlation between them will be taken into account through simple regression models. The integrated indicators should of course be correlated, but not be confounded. Nevertheless, the level of redundancy remains a subjective decision. Through this first attempt at developing a TLM index, four main domains are selected, broken down into ten sub-domains (performance dimensions) with a variable number of performance indicators (component variables). In the end, we shall get a schematic representation of the index and structure of the indicators (Osberg & al., 2002 (a), (b)). (See figure 1 below).

2.2 Standardization of performance indicators: linear scaling technique

There are two main reasons for implementing standardization in such an analysis.

Firstly, as we are faced in most cases to indicators of various dimensions, standardization allows to depict multiple performance indicators with comparable data on the same scale. In addition to the various dimensions of selected indicators, raw data have most of time different significant ranges. Thus, without scaling, composite indicators could be biased towards variables with high ranges. Besides, unscaled aggregation of values leads to an implicit weighting scheme that can affect the final index.

Secondly, the setting up of an overall composite index implies that each indicator must work in the same direction. This is the so-called ‘directionality issue’: the increase in some variables such as transitions from unemployment to work or training should match an increase in the final composite TLM index, whereas other indicators such as transitions from work to unemployment should match a decrease in the overall performance. Thus, standardized data series can solve the directionality issue. The higher the standardized value, the higher the index, whether the benchmark represents the minimum or the maximum value. The method used in this analysis is the ‘linear scaling method’², where original data are standardized using best performance.

This is the most common method used for standardization. The original data are standardized to a common interval scale with values between 0 and 1.

On the basis of a mathematical formula a value of ‘1’ is assigned to the best performer benchmark and a value of ‘0’ to the worst performer. Other countries are assigned values between 0 and 1 according to their relative performance on each indicator, i.e. a value of 0.5 indicates a halfway performance between the lowest and the highest value.

2.3 Additive averaging with equal weighting & the Principal Component Analysis

Once having determined the overall performance of sub-domains, we need then to assess and measure the four selected domains, which form the composite index of TLM. The weights assigned to the domains and their respective performance dimensions will influence the outcome of the overall final index. The additive averaging is a technique of aggregating variables that gives explicit weights to each variable. The sum of all weights must be 1. Equal weights are assigned to all performance dimensions within domains (5) and (6). Changes can be used to analyze the sensitivity of results to the weighting scheme adopted (7).

$$(1.1) \quad \text{LMFI} = 1/3 * \text{OFM} + 1/3 * \text{IFM} + 1/3 * (1/2 * \text{JUM})$$

$$(1.2) \quad \text{HCDI} = 0.5 * \text{CVTD} + 0.5 * \text{IHR}$$

$$(1.3) \quad \text{EI} = 0.5 * \text{ELWP} + 0.5 * \text{EGP}$$

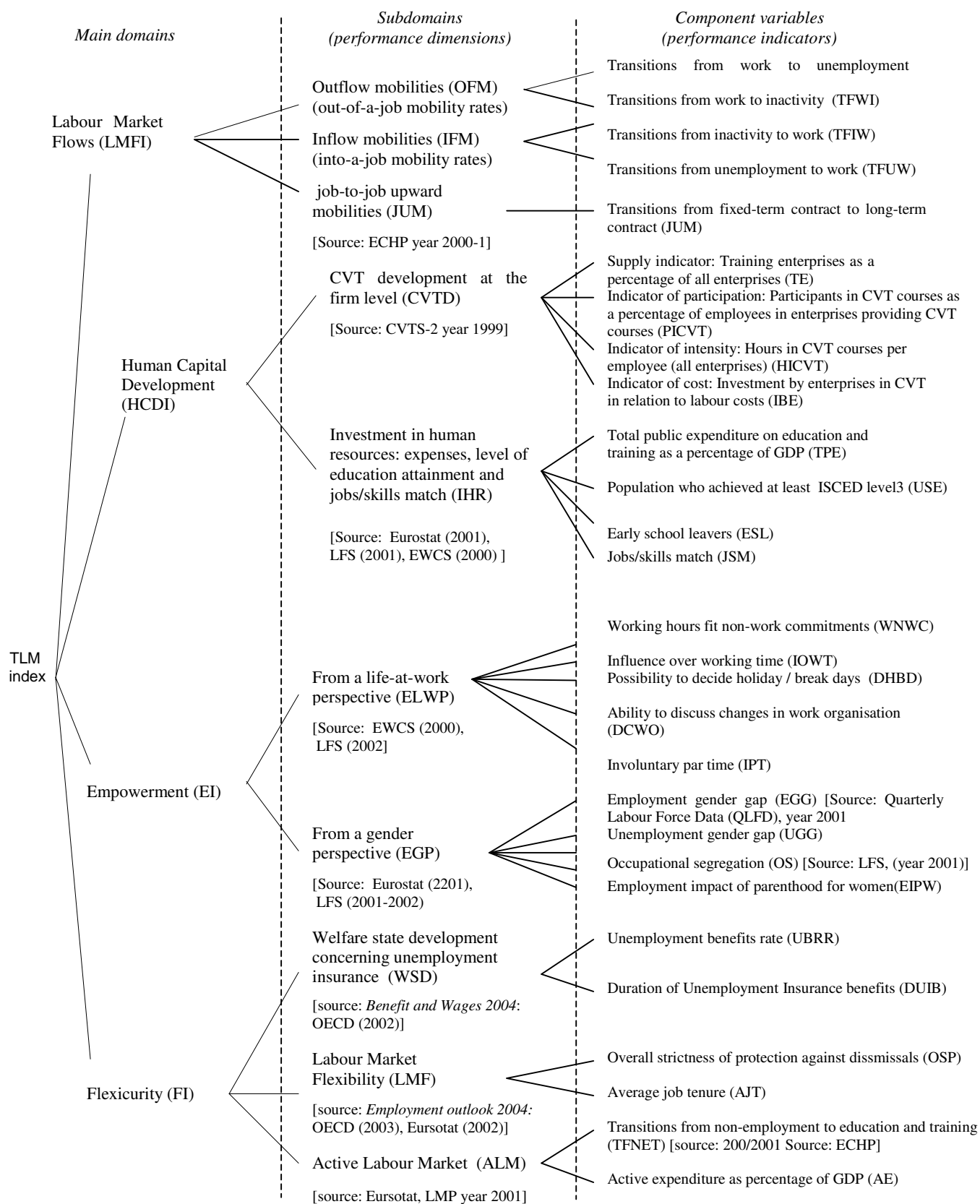
$$(1.4) \quad \text{FI} = 1/3 * \text{WSD} + 1/3 * \text{LMF} + 1/3 * \text{ALM}$$

$$(1.5) \quad \text{With traditional additive averaging:}$$

$$\begin{aligned} \text{TLMI} = & 0.25((0.33)(\text{TFWU} + \text{TFWI})/2) + (0.33)(\text{TFIW} + \text{TFUW})/2 + (0.33)(1/2 * (\text{JUM})) \\ & + 0.25((0.5)((\text{TE} + \text{PICVT} + \text{HICVT} + \text{IBE})/4) + (0.5)(\text{TPE} + \text{USE} + \text{ESL} + \text{JSM})/4) + 0.25((0.5)(\\ & (\text{WNWC} + \text{IOWT} + \text{DHBD} + \text{DCWO} + \text{IPT})/5) + (0.5)((\text{EGG} + \text{UGG} + \text{OS} + \text{GPG} + \text{EIPW})/5) + 0. \\ & 25((0.33)(\text{UBRR} + \text{DUIB})/2) + (0.33)(\text{OSP} + \text{AJT})/2 + (0.33)(\text{TFNET} + \text{AE})/2 \end{aligned}$$

² Two other methods can also be applied for data standardization. The first method ‘normalization to base year’ refers to a base time period where each indicators are normalized to the first year initial period (base of 1.0 with fluctuation through time) and then aggregated to build the overall index. ‘Normalization to base year’ is used by Osberg & al (2002). Although this spatial and temporal comparison is respectfully towards ‘directionality issue’ it implies that data are available over time. 3. 3. Concerning some of our selected indicators i.e. transition rates, we are short of facts to use this temporal approach. As for the second method ‘Z-Score’ (standardized variable) based on Gaussian curves formula, which also takes into account the ‘directionality issue’, it will not be used because it does not provide standardization to a common range (See F.J.Salzman (2003) for an overview).

Figure 1. Structure of the indicators



(1.6) With equal weights, using the SMOP for each subdomains and traditional additive averaging between main domains:

$$\text{TLMI} = 0.25((0.33)*\text{OFM}_{\text{SMOP}}+(0.33)*\text{IFM}_{\text{SMOP}}+(0.33)*(0.5*\text{JUM})) + 0.25((0.5)*\text{CVTD}_{\text{SMOP}} + (0.5)*\text{IHR}_{\text{SMOP}}) + 0.25((0.5)*\text{ELWP}_{\text{SMOP}} + (0.5)*\text{EGP}_{\text{SMOP}}) + 0.25((0.33)*\text{WSD}_{\text{SMOP}} + (0.33)*\text{LMF}_{\text{SMOP}} + (0.33)*\text{ALM}_{\text{SMOP}})$$

$$\text{Either: TLMI} = 0.25*\text{LMFI}+0.25*\text{HCDI}+0.25*\text{EI}+0.25*\text{FI}$$

(1.7) Or with alternative weights giving more importance to the flexicurity context :

$$\text{TLMI} = 0.1*\text{LMFI}+0.25*\text{HCDI}+0.25*\text{EI}+0.4*\text{FI}$$

Secondly, I shall apply the Principal Component Analysis (PCA)³. It should be considered as a complementary technique to the composite index in monitoring TLM. The PCA provides correlations between the selected variables and reduces them in a small number of categories factors while highlighting a map of performances for the selected countries. Factor analytic model can be written as follows:

$$F_n = \alpha_{n1}X_1 + \alpha_{n2}X_2 + \alpha_{n3}X_3 + (\dots) + \alpha_{nj}X_j \quad \text{or} \quad F_n = \sum_{j=1}^p \alpha_{nj}X_j$$

Where F_n corresponds to each factor based on a linear combination of the initial variables related to institutional characteristics ($X_1...X_j$). Thus factors (principal components) should not be correlated. Coefficients α_n correspond to weightings of the initial variables as predictors. The degree of inertia of each factor F_n is given by its eigenvalue λ_n which takes the following form: $\lambda_n = \sum_{j=1}^p \text{cor}^2(X_j, F_n)$

To obtain the proportion of variance explained by each factor their respective empirical variance is reduced to the total variance: $\frac{\lambda_n}{\sum_{j=1}^p \text{Var}(X_j)} \times 100$

The eigenvalues and the corresponding factors are then sorted by descending order in respect to their respective significance. The higher the variability provided by the eigenvalue, the more significant. The ranking of eigenvalues [$\lambda_1 < \lambda_2 < \lambda_3 \dots < \lambda_n$] and their respective percentage of variability are usually represented through scree plot figures. The smaller, less significant, components are then left out in the rest of the analysis.

3. In order to shorten the presentation scree plot of eigenvalues will not be included. All these data are still available on request. For further details concerning the method of calculation, see I.T Jolliffe [2002]

We generally retain two or three eigenvalues (factors) for mapping the data set and performances. From the two previous steps, two maps will be plotted:

The first one, called the ‘correlation circle’, analyses correlations between initial variables (indicators of the sub-domains) in a factors’ space. The number of factors (which form the axes) depends on their percentage in the initial variability of the data set. If the percentage of variability represented by the first two factors is rather low, and as to avoid a misinterpretation of the results, the results will have to be supplemented by a second chart on axes 1 and 3. As far as the reading of the chart is concerned, when variables are close to each other, their correlation is positive (r close to 1). If variables are orthogonal they are not correlated (r close to 0) and if they are on the opposite side with respect to the center, the correlation is significantly negative (r close to -1). The correlation circle is also useful in interpreting the meaning of the axes. To do so, the squared cosines of the variables provide (cf. Appendix 2 table A4) an idea of how reliable the position of selected variables with respect to axes is. The closer the squared cosine of a given variable to zero, the less reliable the link to the axis.

The second map used is the two-or-three-dimensional scatter plot (depending on the factors’ space) with the aim to visualize the principal trends for the selected countries. The scatter plots will be presented in the same factors’ space as the ‘correlation circle’.

3. EMPIRICAL RESULTS AND THEORETICAL INTERPRETATIONS

3.1 Labour Market Flows

For TLM, ‘critical’ transitions refer to long-term unemployment and parking periods which decrease chances for individuals to enhance their qualification or improve their experience at work. Such situations may in the long run lead to poverty, social exclusion and discouragement. Therefore, to compute the index of labour market flows, the transition rate from work to unemployment was adjusted by the long term unemployment rate. The adjustment is made by using an equal weighted average. The data were all previously indexed via a common scale using linear scaling method. Similarly the transition rate from work to inactivity was adjusted by the actual average age of retirement.

Labour market flows reveal an important side of TLM because they can provide an idea of transitions between different statuses on the labour market. Transitional rates are clustered into three types of mobility to and from the labour market: Outflow mobility (or out-of-a-job mobility rate), inflow mobility (or into-a-job mobility rate) and job-to-job mobility.

The Pearson correlation matrix (cf. Appendix 2, table A4) and the correlation circle (figure 1) show that the variables are highly correlated except for the transitions from work to unemployment.

As seen from figure 3 and table A1 in the Appendix 1, Denmark and the Netherlands have the highest job-to-job mobility rates, the lowest long-term unemployment rates and

good performances in reintegrating both inactive and unemployed into the labour market. Denmark is the best performer in terms of labour market flows followed by the Netherlands and Ireland, whereas Germany, France, Italy, Spain and Finland are the worst performers, even if Finland and France remain good performers to maintain people in employment. The high level of transitions from work to unemployment has an unfavourably impact on Spain's overall index of labour market flows.

This is confirmed by the mapping performances in the scatter plot (cf. figure2). Southern Europe but also continental Europe tends to be more exposed to less job-to-job upward mobility, high transitions rates out of work, high and persistent unemployment and inactivity. The Overall index and the PCA confirm what have been shown by previous studies concerning labour market flows (T.Kruppe, 2001; M.Taylor, 2002).

FIGURE 1: LABOUR MARKET FLOWS' CORRELATION CIRCLE
Variables (axes F1 and F2: 68,32% of variability)

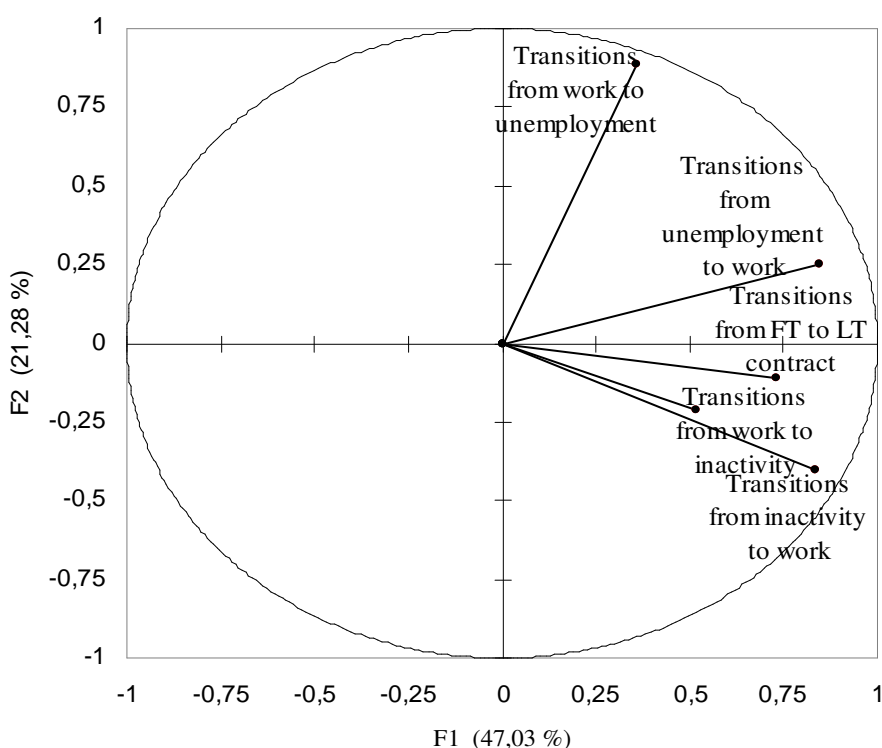
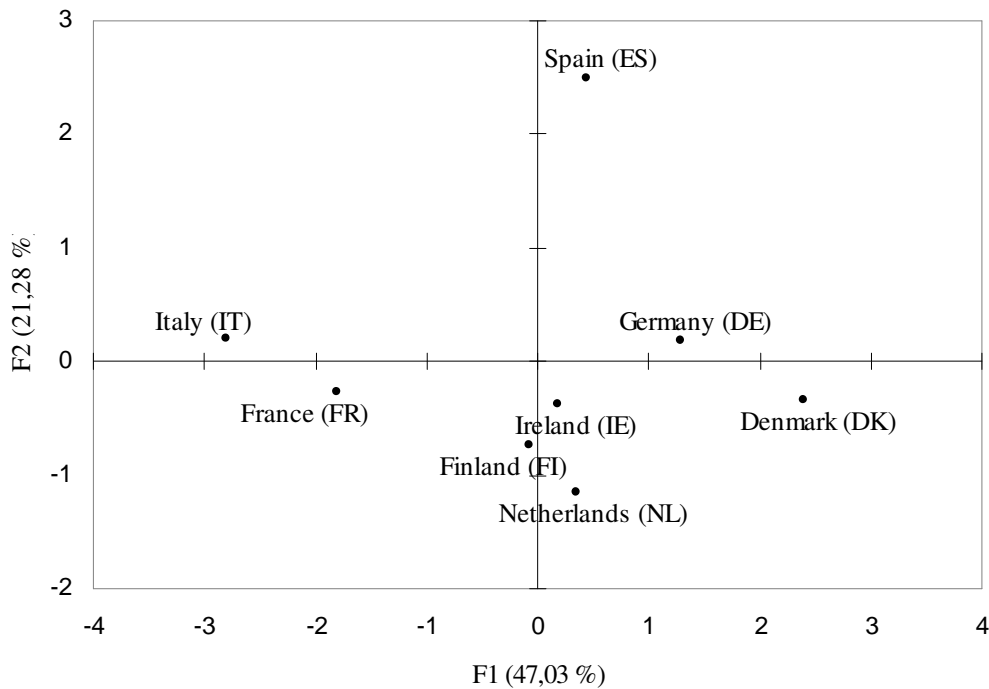


FIGURE 2: LABOUR MARKET FLOWS' SCATTER PLOT
Observations (axes F1 and F2 : 68,32 %)



3.2 Human capital development

This subdomain takes into account the education and training side of human capital formation. Continuing vocational education and training (CVT) is considered as a crucial element in TLM [Lassnigg, 2005]. It may constitute a powerful lever to better match labour supply and demand in enhancing mobility. Compared to the other levers (price adjustment through wages and quantitative adjustment i.e. work-time reduction and early retirement) an effective CVT has the advantage of reducing labour market segmentation and wage spread through upgrading individuals' skills so that they can become productive again. CVT may also provide employees with a free choice of a new job rather than to have mobility forced on them. Some experiences are already good practices such as the validation of acquired experience at a university level for less skilled people, skills mapping, follow-up plans (...). The correlation circle (figure 4) shows that many correlations are significantly positive.

The 'early school leavers' variable and 'ICED level 3' variable are opposite to each other with a significantly negative correlation. The first axis (F1) refers to job/skill match, whereas the second axis (F2) clusters the level of CVT (both in terms of intensity and investment) and the education level of the population. Figure 4 shows that in the two right quadrants countries are good performers in terms of CVT. Finland shows the best performances in terms of job/skills match.

Italy and Spain are the worst performers considering all variables. The map shows that the UK and Ireland favour private investments rather than public ones contrary to Finland and France. Ireland and France are the best performers concerning education level. The linear scaling method assigns the best performance to Denmark followed by Finland. An intermediate group is comprised of Ireland, France, the Netherlands and the UK. According to the overall index, Italy, Germany, Spain are the worst performers (see appendix 1, table A2).

FIGURE 4: HUMAN CAPITAL's CORRELATION CIRCLE
Variables (axes F1 and F2: 68,32% of variability)

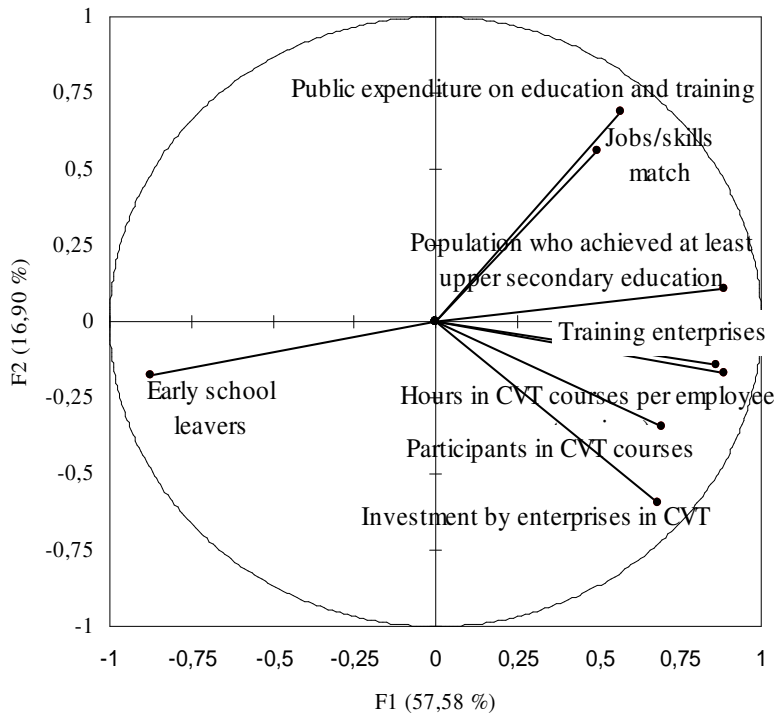
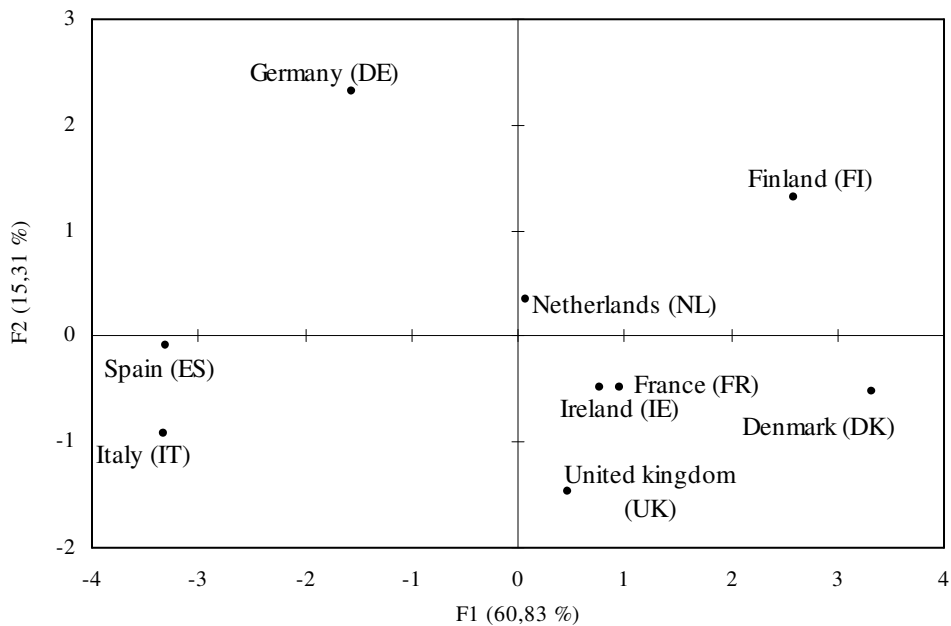


FIGURE 5: HUMAN CAPITAL's SCATTER PLOT
Observations (axes F1 and F2 : 76,14 %)



3.3 Empowerment from a life at work and gender perspectives

Basically, TLM rests more on a capability-based approach of social citizenship than on an asset-based one. Figure 6 shows that some variables are highly correlated (i.e. employment gender gap and unemployment gender gap, ability to discuss changes in work organisation and influence over working time). The best performers are located in the Southern-Western quadrant including Finland, Netherlands and Denmark. All these countries manage to combine both gender equality and individual autonomy in a life-at-work perspective. The obtained results can be linked to the different employment and Welfare State regimes: In market-led regimes, social security benefits are less related to work than to investigations on needs.

However, the low levels of compensation and the stigmatization effect lead unemployed to renew participation in the market. Thus, market-led regimes got a low level of decommodification with a high level of mismatch between the most able to perform on the market and others. In the continental and southern regimes, social security grants some important rights to individuals. Nevertheless, it does not lead to a high level of decommodification and autonomy in so far as rights are quite dependent on contributions and the workers' situation in the labour market. It refers to countries such as Germany, France and Italy.

Countries under the social democratic regime tends to have the highest level of decommodification and the lowest level of stratification insofar as compensations are the same for all citizens, independently of social contributions or individuals' results on the labour market. Nevertheless, less emphasis is now put on the 'decommodification' potential of the Scandinavian Welfare State and more to its 'recommodification' through greater stress on ALMP (Kvist, 2003).

FIGURE 6: EMPOWERMENT's CORRELATION CIRCLE
Variables (axes F1 and F2 : 71,36 %)

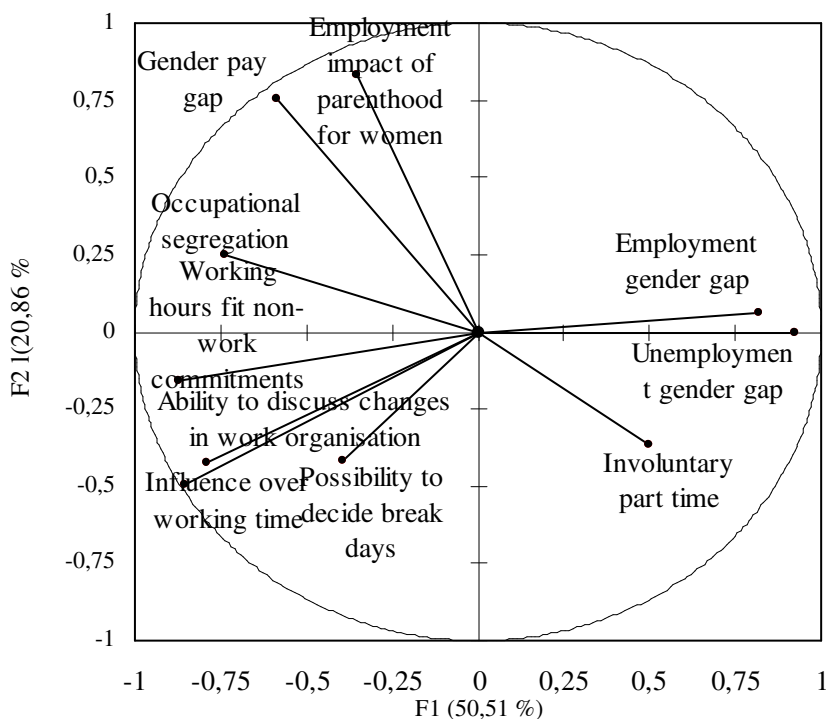
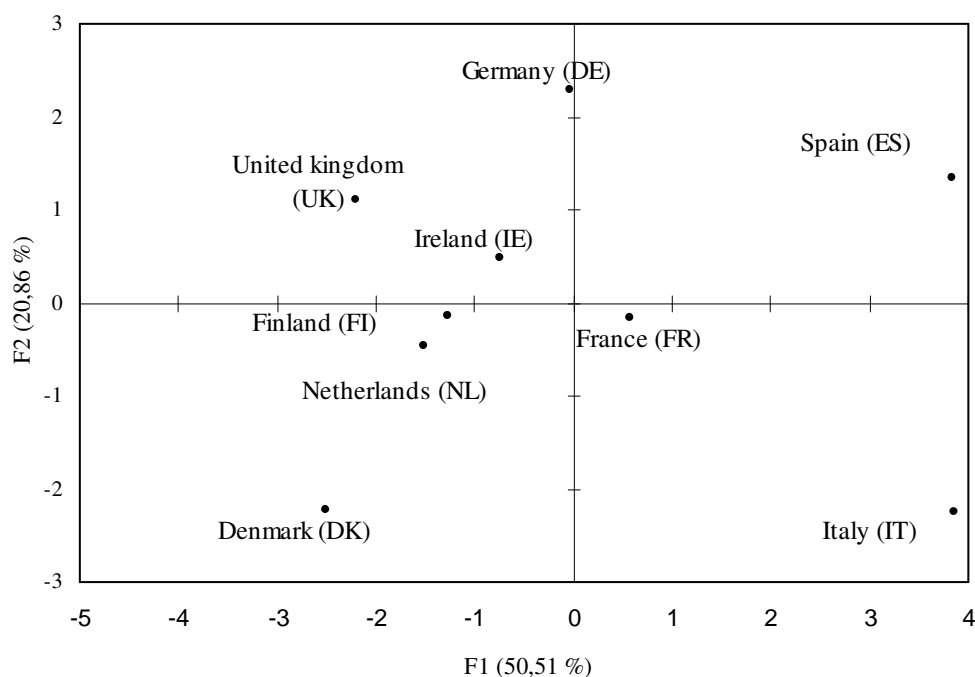


FIGURE 7: EMPOWERMENT's SCATTER PLOT

Observations (axes F1 and F2 : 71,36 %)



3.4 Flexibility-security nexus

In the present context flexicurity is supposed to be the outcome of a combination of high employment and income security, combined with high numerical flexibility and low job security. The first axis reflects the degree of employment security as opposite to job security. It clusters variables such as unemployment benefits rates and its duration or active expenditure. The second axis refers to labour market flexibility including the average job tenure and the overall strictness of protection against dismissals.

Following this, greater flexicurity is assigned to Denmark followed by the UK and the Netherlands [see figures 8 and 9 and table A2 in the appendix 1). France, Germany and Spain constitute an intermediate group while Ireland and Italy are the worst performers. UK's performance must be played down due to the 'trade-off' between flexibility (best performer) and security (worst performer).

FIGURE 8: FLEXIBILITY-SECURITY NEXUS
CORRELATION CIRCLE
(axes F1 et F2 : 75,39 % of variability)

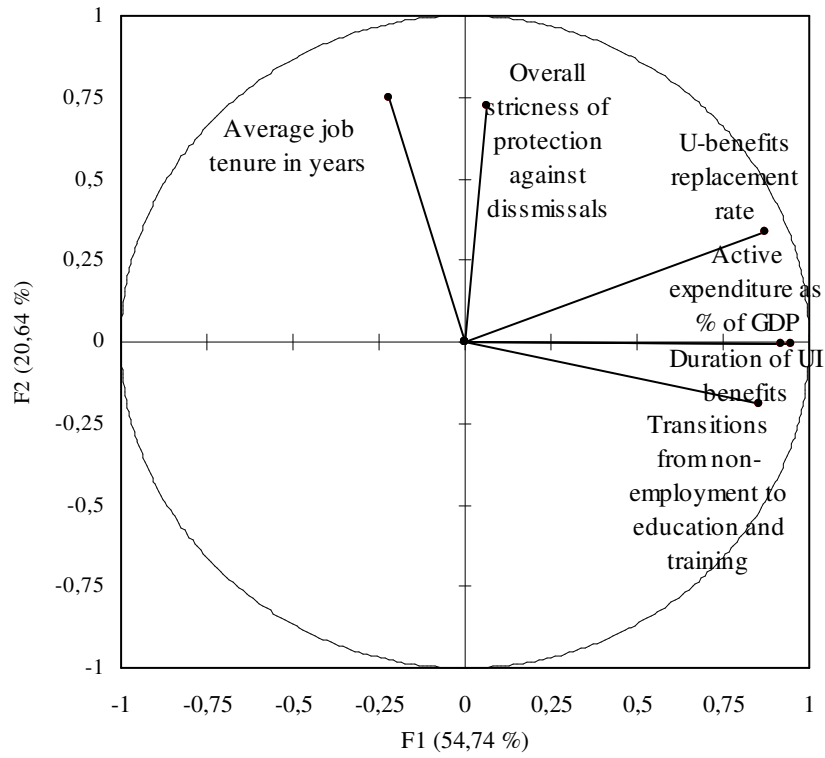
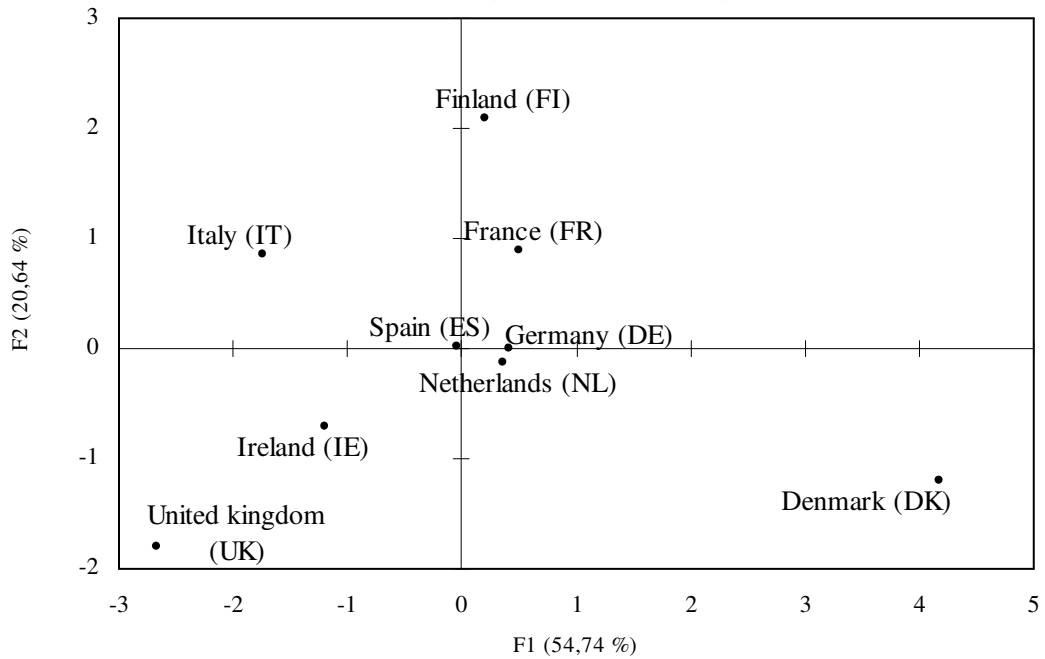


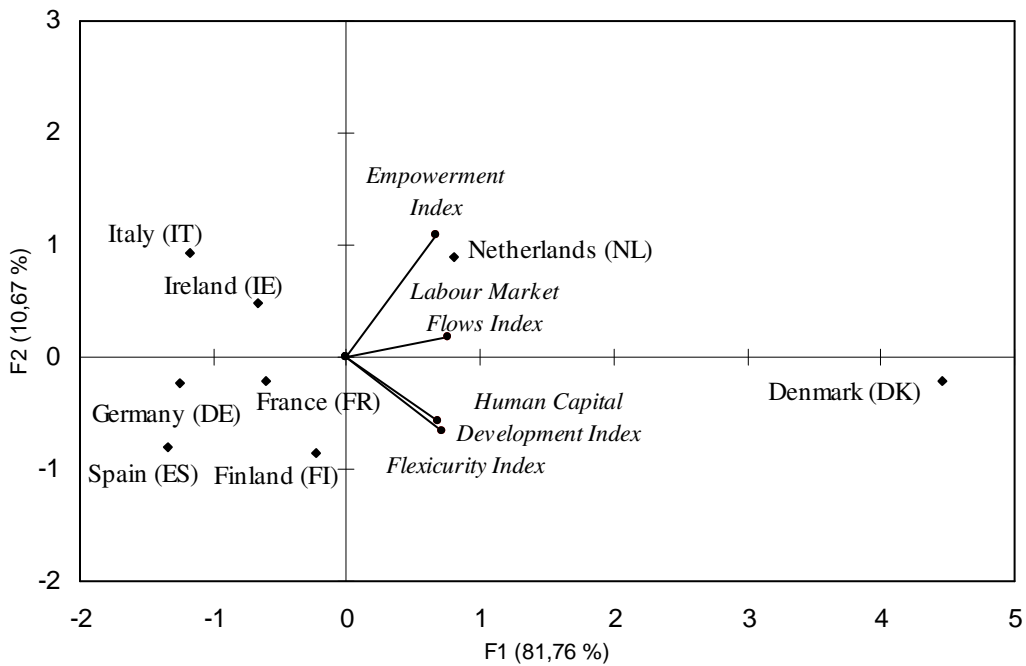
FIGURE 9: FLEXIBILITY-SECURITY NEXUS SCATTER PLOT
Observations (axes F1 et F2 : 75,39 %)



3.5 Transitional Labour Market index

From the previous mapping of performances, we can ascertain which countries could be better equipped to develop comfortable transitions through flexicurity. Nevertheless, at this stage of the analysis, we can't provide a global measure of TLM which could be used over time. The PCA helped us to highlight a map of performances from the component variables and sub-domains while solving to some extent the problem of weighting. Thus, the next concern is to aggregate the different performances obtained for each sub-domains leading to the final TLM composite index (cf. Appendix 1, table A3). Three groups of countries can be plotted: a first one clusters Denmark and the Netherlands which show the highest composite indices (index_{range} = 0,62 to 1,28). An intermediate group is composed by Finland, France and Ireland (index_{range}= 0,36 to 0,5). All things being equal, the worst performances concerning TLM are assigned to Italy, Spain and Germany (index_{range} = 0,19 to 0,23).

FIGURE 10: TRANSITIONAL LABOUR MARKET SCATTER PLOT
with a projection of the four main domains
(axes F1 and F2: 92,43 %)



4. CONCLUDING REMARKS AND OUTLOOK

The main argument of this article is that TLM seeking to combine ‘flexibility’ and ‘security’ can be developed into a key concept to manage structural adjustment of the European economies while maintaining social cohesion. Solutions already exist in Europe for managing transitions in a better way.

At the European level, the aim has been to define a series of target variables and specific efficiency indicators concerning ‘transitions’. As we have seen in this article, the PCA and the design of a composite index are two complementary methods, which may provide such an analytical framework. However, one has to be careful in selecting indicators, because this is still a subjective decision, which will influence the overall performance outcome. Furthermore, even if a composite index is straightforward, it does not take into account the interactions between the various selected dimensions. A problem in such analyses is the tendency to overvalue elements which are both easily quantifiable and available for comparisons.

With respect to other similar studies in the area (Tangian, 2004; Muffels & al., 2005), the main difference lies in the choice of indicators, including not only flexicurity components, but also more qualitative aspects related to transitions, human capital and empowerment that are also keys to measuring the level of TLM development in selected European countries. Concerning obtained results they are similar to previous studies by ranking social-democratic regimes at the top. Nevertheless, the monitoring analysis carried out here teaches us that:

i) Contrary to existing conceptions, there are some disparities among countries with a same work and welfare state regimes as suggested by qualitative variables as gender or welfare at work when they are included in the analysis. For instance, the performance regarding empowerment from a life-at-work and gender perspective is far to be the same in Denmark and Finland. When considering ‘empowerment’ variables a different ranking appears: despite demographic challenges and the potential labour supply decreases, the analysis shows that risks are better covered in Denmark and the Netherlands insofar as, instead of favouring excessive passive expenditures, they stress resources and services enhancing citizens’ autonomy. Personal services are also more and more externalised from home and transformed into a Welfare State activity. Differences are also found among continental regimes. France has an internal labour market structure (highly depending on the sector of the economy) with an average index of empowerment combined with the highest educational achievement of the population and a central role play by the state in securing individuals job whereas Germany has a higher level of upward mobilities and turn-over, a more flexible labour market and a strong ‘neocorporatist’ structure as regards to its vocational training system. If these two countries have the same level of flexicurity, greater value is assigned to France at the end of the aggregation process because of its performance in terms of human capital development and empowerment, all things being equal. As for the southern European model, Spain and Italy show almost the same results although Italy is assigned the best value in terms of empowerment from a gender perspective.

ii) The analysis demonstrates the existence of significant trade-offs. Good performance in one dimension might diminish performance in other dimensions which can lead to overestimations with respect to overall indices. For instance, Italy shows the best performance in terms of outflow mobility, but there seems to be a trade-off between its overall index of transitions from work to unemployment and its overall index of transitions from work to inactivity.

Concerning the flexibility-security nexus a trade-off can be observed both for the UK and Ireland (up to a point). Far from a 'socially integrative' approach those countries are evolving, despite the 'inclusiveness' rhetoric, towards a market-led strategy characterised by a low level of welfare state development concerning unemployment benefits and a high level of labour market flexibility. If the UK and Denmark have succeeded in lowering their unemployment we can't conclude to the use of a common tool. All Those two countries followed very different national paths. Thus, there is no such a thing as a unique way of achieving successful transitions, even if some welfare state regimes may be more prone and equipped to doing so. Only further studies related to cost/benefit analyses or the impact of policy trade-offs on individual sub-groups could provide information on the quality of the adjustments made by the different European countries.

Concerning the implementation of TLM one has to be very careful not to underestimate the national contexts. The right path to success on a European scale is far to be obvious, because according to sectors, countries and regions, situations are so much different. Besides, the reasons that caused some European countries to develop institutions that support successful transitions are not the result of a deliberate TLM strategy but rather the outcome of gradual institutional changes and social dialogue between the actors (see Larsen, 2005). As in the case with EES, in the context of TLM, social partners, governments and territories should select through mutual learning the policy-mix of flexibility and security that best suits their own local employment and welfare state model. Assuming such conditions, the Union will hold new cards to spend resources more efficiently, enabling governments to make TLM a success.

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Appendix 1: Table A1 to A3: TLM composite index¹.

TABLE A1: LABOUR MARKET FLOWS - HUMAN CAPITAL DEVELOPMENT

Countries	LMFI =						HCDI= 0,5*(D)+0,5*E
	OFM (A)	IFM (B)	JUM (C)	$1/3*(A)+1/3*(B)+$ $1/3*(1/2*C)$	CVTD (D)	IHR (E)	
DK	0,45	1,9	0,79	0,92	1,7	2	1,85
FI	0,04	0,3	0,21	0,15	0,98	1,4	1,19
FR	0,19	0,24	0	0,14	0,78	0,6	0,69
DE	0,06	0,1	0,46	0,13	0	0,41	0,21
IE	0,35	0,08	0,4	0,21	0,84	0,39	0,62
IT	0,48	0	0,32	0,21	0	0,01	0,01
NL	0,4	0,4	0,64	0,37	1	0,3	0,65
ES	0,12	0,2	0,39	0,17	0,2	0	0,1
UK		"	"	"	1,17	0,25	0,71

TABLE 2: AEPOWERMENT - FLEXIBILITY SECURITY NEXUS

Countries	EWLP	EGP	EI =	WSD	LMF	ALM	$1/3*(H)+$
	(F)	(G)	$0.5*(F)+0.5*(G)$	(H)	(I)	(J)	$1/3*(I)+1/3*(J)$
DK	1,83	1,13	1,48	1	0,63	1	0,88
FI	0,2	0,68	0,44	0,28	0,25	0,12	0,22
FR	0,44	0,68	0,56	0,48	0,02	0,05	0,18
DE	0,47	0,27	0,37	0,06	0,12	0,35	0,18
IE	0,96	0,47	0,72	0,02	0,45	0,08	0,01
IT	0,3	1,16	0,73	0	0	0,03	0,01
NL	1,76	0,62	1,19	0,15	0,2	0,54	0,3
ES	0,02	0,2	0,11	0,28	0	0,06	0,29
UK	1,33	0,5	0,92	0	1	0	0,33

TABLE A3: TRANSITIONAL LABOUR MARKET INDEX

Countries	LMFI	HCDI	EI	FI	TLMI*	TLMI**
	(K)	(L)	(M)	(N)	(O)	(P)
DK	0,92	1,85	1,48	0,88	1,29	1,28
FI	0,15	1,19	0,44	0,22	0,5	0,5
FR	0,14	0,69	0,56	0,18	0,39	0,4
DE	0,13	0,21	0,37	0,18	0,22	0,23
IE	0,21	0,62	0,72	0,01	0,39	0,36
IT	0,21	0,01	0,73	0,01	0,24	0,21
NL	0,37	0,65	1,19	0,3	0,62	0,62
ES	0,17	0,1	0,11	0,29	0,17	0,19
UK	"	0,71	0,92	0,33	"	"

*Equal weighting: $TLMI = 0.25*LMFI+0.25*HCDI+0.25*EI+0.25*FI$ ** Alternative weighting: $TLMI = 0.1*LMFI+0.25*HCDI+0.25*EI+0.4*FI$

1. Intermediate indices were not reported in the tables in order not to complicate the presentation. All these data are still available on request

Appendix 2: PCA. Table A4: Correlation matrix (Pearson (n)) and squared cosines of component variables for each main factor.

Variables & main factors	TFWU	TFWI	TFIW	TFUW	JUM	F1	F2	F3				
TFWU	1**	0,128	0,015	0,397	0,091	0,128	0,780	0,030				
TFWI	0,128	1**	0,501	0,299	-0,022	0,269	0,044	0,640				
TFIW	0,015	0,501	1**	0,515	0,580	0,696	0,165	0,004				
TFUW	0,397	0,299	0,515	1**	0,573	0,721	0,063	0,011				
JUM	0,091	-0,022	0,580	0,573	1**	0,538	0,012	0,359				

Variables & main factors	TE	PICVT	HICVT	IBE	TPE	USE	ESL	JSM	F1	F2	F3		
TE	1**	0,340	0,720**	0,728**	0,159	0,695**	-0,889**	0,446	0,740	0,020	0,216		
PICVT	0,340	1**	0,767**	0,617	0,378	0,635	-0,327	0,131	0,483	0,118	0,343		
HICVT	0,720**	0,767**	1**	0,594	0,286	0,717	-0,704**	0,434	0,788	0,030	0,005		
IBE	0,728**	0,617	0,594	1**	0,110	0,458	-0,463	0,021	0,466	0,356	0,001		
TPE	0,159	0,378	0,286	0,110	1**	0,522	-0,364	0,503	0,248	0,316	0,279		
USE	0,695**	0,635	0,717**	0,458	0,522	1**	-0,794**	0,461	0,790	0,011	0,011		
ESL	-0,889**	-0,327	-0,704**	-0,463	-0,364	-0,794**	1**	-0,593	0,766	0,031	0,131		
JSM	0,446	0,131	0,434	0,021	0,503	0,461	-0,593	1**	0,324	0,470	0,026		

Variables & main factors	WNWC	IOWT	DHBD	DCWO	IPT	EGG	UGG	OS	GPG	EIPW	F1	F2	F3
WNWC	1**	0,763**	0,430	0,620	-0,414	-0,676**	-0,767**	0,684**	0,392	0,077	0,763	0,025	0,000
IOWT	0,763	1**	0,599	0,894**	-0,261	-0,718**	-0,818**	0,448	0,122	-0,056	0,730	0,244	0,003
DHBD	0,430	0,599	1**	0,323	-0,573	0,018	-0,486	-0,277	-0,048	-0,072	0,157	0,174	0,627
DCWO	0,620	0,894**	0,323	1**	-0,214	-0,713**	-0,679**	0,496	0,196	-0,111	0,620	0,178	0,014
IPT	-0,414	-0,261	-0,573	-0,214	1**	0,024	0,452	-0,049	-0,702**	-0,458	0,250	0,135	0,518
EGG	-0,676**	-0,718**	0,018	-0,713**	0,024	1**	0,660	-0,854**	-0,387	-0,212	0,668	0,004	0,249
UGG	-0,767**	-0,818**	-0,486	-0,679**	0,452	0,660	1**	-0,581	-0,472	-0,466	0,849	0,000	0,017
OS	0,684**	0,448	-0,277	0,496	-0,049	-0,854**	-0,581	1**	0,588	0,337	0,543	0,062	0,352
GPG	0,392	0,122	-0,048	0,196	-0,702**	-0,387	-0,472	0,588	1**	0,752**	0,346	0,573	0,007
EIPW	0,077	-0,056	-0,072	-0,111	-0,458	-0,212	-0,466	0,337	0,752**	1**	0,124	0,690	0,015

Variables & main factors	UBRR	DUIB	OSP	AJT	TNET	AE	F1	F2	F3
UBRR	1**	0,805**	0,208	0,075	0,601	0,783**	0,760	0,116	0,006
DUIB	0,805**	1**	0,099	-0,297	0,629	0,824**	0,840	0,000	0,017
OSP	0,208	0,099	1**	0,131	-0,026	-0,078	0,004	0,528	0,445
AJT	0,075	-0,297	0,131	1**	-0,292	-0,063	0,050	0,559	0,379
TNET	0,601	0,629	-0,026	-0,292	1**	0,838**	0,734	0,036	0,000
AE	0,783**	0,824**	-0,078	-0,063	0,838**	1**	0,898	0,000	0,054

** significant values at the level of significance $\alpha=0,05$