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USING, INTERPRETING AND DISCUSSING
THE LAEKEN INDICATORS

LUCIE DAVOINE

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**CENTRE
D'ETUDES
DE L'EMPLOI**

«LE DESCARTES I»
29, PROMENADE MICHEL SIMON
93166 NOISY-LE-GRAND CEDEX
TÉL. 01 45 92 68 00 FAX 01 49 31 02 44
MÉL. cee@cee.enpc.fr
<http://www.cee-recherche.fr>

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LUCIE DAVOINE

lucie.davoine@cee.enpc.fr

CES-Matisse, University Paris 1, Centre d'études de l'emploi

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ABSTRACT

Employment quality seems less and less important in the European arena today. In a context where theoretical and political backgrounds are uncertain, we try to revive the debate around employment quality by using the Laeken indicators and complementing them by subjective indicators. The data provides a European map of employment quality and clusters of countries. Three groups of countries can be distinguished with regard to employment quality: the Nordic and liberal countries where the quality of employment is high, contrary to the Southern countries where jobs are jobs of poor quality, whereas the Continental Europe is in an intermediate situation. Two other results deserve attention: First, data analysis shows a correlation between employment quality and employment rate. Secondly, our results fit with usual and recent typologies from different academic disciplines (and in particular typologies of Welfare States). These results give us the opportunity to discuss the interactions between macro economy, labour market and welfare state, and to question the relevance of the Laeken portfolio as well as the theory implicitly underlying the Lisbon Strategy.

Key words: Employment Quality, Employment Rate, European Employment Strategy (EES), Lisbon Strategy, Multiple Correspondence Analysis (MCA).

***Taux d'emploi et qualité de l'emploi en Europe :
Une analyse comparative à partir des indicateurs de Laeken***

Résumé

Le thème de la qualité de l'emploi a fait son apparition dans l'arène européenne au sommet de Lisbonne en mars 2000. Le sommet de Laeken lui a donné un contenu plus précis grâce à une série d'indicateurs. Mais ce thème ne semble plus faire partie des objectifs prioritaires de la stratégie de Lisbonne renouvelée. Dans ce contexte, nous proposons de relancer le débat sur la qualité de l'emploi, en utilisant les indicateurs de Laeken et en les complétant par des indicateurs subjectifs. L'analyse de données débouche sur une « carte de la qualité des emplois » et une classification des pays. Quels que soient les indicateurs retenus, trois groupes se dégagent nettement : le Royaume-Uni et les pays nordiques où les emplois seraient de bonne qualité, à l'inverse des emplois en Europe du Sud, tandis que l'Europe continentale se retrouve dans une position intermédiaire. Deux résultats supplémentaires méritent une certaine attention. La qualité des emplois et le taux d'emploi semblent corrélés d'une part. Notre typologie présente, d'autre part, des similitudes avec les typologies qui existent dans de nombreuses disciplines et en particulier les typologies des États-providence. Ses résultats sont l'occasion d'envisager les divers canaux par lesquels la macro-économie, la protection sociale et la qualité de l'emploi interagissent, mais aussi de discuter la validité des indicateurs de Laeken et des théories qui sous-tendent implicitement la stratégie de Lisbonne.

Mots clés : *qualité de l'emploi, taux d'emploi, comparaisons européennes, stratégie européenne pour l'emploi (SEE), stratégie de Lisbonne, analyse des correspondances multiples (ACM).*

INTRODUCTION¹

The Lisbon European Council in March 2000 stated that Europe should be “*the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion*” by the end of the decade. However, this goal was set in an optimistic context. The employment growth was high and the so-called new economy nourished hopes. This fact raises a basic question: Is the Lisbon strategy still a topical and relevant subject today? In the field of employment, the actors remember the end of the slogan: *more and better jobs for all*. This article examines the political and economic relevance of the Lisbon strategy, attempting to answer one central question: are quantity and quality of jobs correlated? To answer this question, a comparative perspective is adopted. Employment quality and employment growth in each member State are measured and analysed in order to assess the possibility of trade-offs or synergies between employment quality and employment. But “employment quality” is a fuzzy concept, with no accepted scientific definition. This contribution deals with this matter by using, discussing and complementing the dimensions of employment quality set up at the Laeken Council.

The first section sketches the European political background following the Lisbon Summit. It explores the Lisbon strategy, questioning employment quality as being still a topical subject in the European arena. The second section explores some theoretical links between quality of employment and employment. The third section presents our methodology and the data treatment. The Multiple Correspondence Analysis (MCA) based on these indicators results in a “European map of the quality in work”. In the last section, our results are confronted with usual and recent typologies from different academic disciplines. This confrontation gives us the opportunity to discuss our indicators and the robustness of our typology.

1. THE POLITICAL BACKGROUND: EMPLOYMENT QUALITY AFTER THE LISBON SUMMIT

Employment quality in the European arena: a locking effect?

The concept of employment quality² emerged in the conclusion of the Lisbon summit, thanks to the Portuguese presidency. The next three presidencies did not hesitate to promote it: during French, Swedish and Belgian presidential administrations, agenda and work programmes were adopted. Finally, between March 2000 and December 2001, the four presidencies created “a winning coalition strategy” (Pochet and Degryse, 2003), sustained by the Directorate-General for Employment and Social Affairs of European Commission (2001a) and the work of the Foundation for the Improvement of Living and Working

¹ The author is grateful to Christine Erhel, Bernard Gazier, Gilles Raveaud, Arnaud Lechevalier, Andrew Clark, Andranik Tangian, Florent Fremigacci, Yannick L’Horty, Jean-Michel Hourriez, Jean-Claude Barbier, Marie-Thérèse Letablier and the participants in seminar or workshops of TLM.NET, IWEPS, the “Pool Europe”, MATISSE, the Department of Industrial Relations of the LSE, the association “Recherche & Régulation”, ESEMK, and the CEE for helpful comments on earlier versions of this article.

² See Barbier and Samba Sylla (2004) for the different wordings and translations in the European countries. We use them without distinction.

Conditions (2002). During this period, discussions among policy actors were animated, because the forms, wording and conception of precariousness, flexibility, security and quality of jobs are diverse in Europe (Barbier and Lindley, 2002). Indicators were eventually adopted at the Laeken Council of December 2001 in order to reflect the 10 dimensions accepted by Member States: intrinsic job quality; skills, life long learning and career development; gender equality, health and safety at work; flexibility and security; inclusion and access to the labour market; work organisation and work-life balance; social dialogue and workers involvement; diversity and non-discrimination; overall work performance. These indicators were examined in the framework of the European Employment Strategy (EES) of which aim is to sustain the Lisbon strategy, thanks to the diverse tools of the Open Method of Coordination (a framework given by guidelines, common targets, national action plans, recommendations, joint report and peer review)³.

The following presidencies were not so prone in promoting employment quality, but the concept remained in the European arena. Indeed, the “new EES”, which appeared in 2003 claims three global objectives: full employment; quality and productivity at work; and cohesion and social inclusion. The Commission, from its part, still produced analyses: during three years, the authors of *Employment in Europe* systematically devoted one chapter to the quality of employment and one report on the improvement of employment quality was published two years after the Laeken Summit (European Commission, 2003b). A further revision of the EES was launched in the beginning of 2005 and the Council decision of 12 July on Employment guidelines mentioned again the objectives of full employment, employment quality, labour productivity and social cohesion. Thus, on the surface, the quality of employment seems to be an established focus in the European arena, thanks to a “locking effect”: once a concept has appeared in the European arena and has been approved by the European institutions, it cannot easily disappear.

In the same time, the concept was spilling over European frontiers. OECD itself wants “more and better jobs” (OECD, 2003) and Canadian researchers have begun to develop international perspectives in order to judge Canada’s performance (Brisbois, 2003). The American Employment Policy Foundation also develops an Index of Employment Quality⁴. The International Labour Organisation also tries to measure and improve decent work (Ghai, 2003). The Lisbon strategy participated in the spreading of these ideas and the indicators of employment quality enrich the debate. However, despite this image, the employment quality issue is less and less important in the European arena.

An overshadowed issue

The employment rate seems to be the main and only objective of the EES. Indeed, the Lisbon summit already set two targets to be achieved by 2010: a total employment rate of 70% and a female employment rate of 60%. Following these targets, the “Stockholm target” and the “Barcelona target”, concerning the employment rate of the senior are now well-known. Reports and graphics highlight the “good” and “bad” results of individual countries relative to the targets of the Lisbon, Stockholm and Barcelona Summits. By contrast, targets in the field of employment quality are not so famous and policy actors seem to be less concerned. For example, negotiations regarding the new EES revealed a lack of interest in the quality of

³ To understand the legal basis and the functioning of the EES, see:
http://europa.eu.int/comm/employment_social/employment_strategy/index_fr.htm

⁴ <http://www.epf.org/pubs/eqi.asp>

work. The guideline devoted to employment quality in the provisional January version disappeared in the definitive version (Pochet and Degryse, 2003). In the same way, the Council suppressed the quantified objective concerning the number of accidents at work⁵. It is also worth noting that the second pillar became “quality and productivity of work”, as if quality was not sufficient in itself. More recently, the two last versions of *Employment in Europe* did not explicitly devote a chapter to the quality of employment. Moreover, think tanks and institutions around the EES seem to be less interested in employment quality issues. The title of the European Employment Taskforce’s report, *Jobs, jobs, jobs*, “thumbs its nose” at the three objectives defined at Lisbon in the field of employment (Kok, 2003). Even the European Trade Union Institute does not devote any space in *Benchmarking Working Europe 2004* to employment quality and justifies the importance of the first pillar of the Lisbon Triptych by the recent rise of unemployment. More recently, the 22-23 March 2005 Council discussed the Commission mid-term review of the Lisbon Strategy and accepted its proposal for a focus on “employment and growth”. It could be argued that the end of the “pink wave” and the slowing down of economic growth endangered the importance of employment quality and refocused government’s attention and efforts on employment rates.

On the other hand, the first EES was not totally satisfactory. The quality of work was a “horizontal objective” without specific targets. Following the Laeken portfolio of indicators, numerous and complicated indicators have been published while explicit objectives do not exist. For example, the report on the improvement of employment quality (European Commission, 2003b) does not facilitate ranking because all the figures are contained in a table with 16 columns (the member states and the European mean) and 41 lines (the main indicators and their progression). Yet, the indicators should sum up “the essence of the problems” (Atkinson *et al*, 2002) and the quality of employment may only be given the same weight as employment when Member States agree upon a small set of targets. Similar proposals have been made in the realm of social inclusion (Atkinson *et al*, 2004; Cherchye *et al.*, 2004). To conclude, the history of the employment quality in the European arena illustrates the ambiguities and hesitations of the OMC in the field of employment and social inclusion (Erhel, Palier, 2005).

Given the fact that the employment quality is “wobbly” in the European arena, it may be useful to clarify the theoretical frameworks which possibly sustain the Lisbon strategy. The next section explores some links between employment and quality of employment.

2. WHICH THEORETICAL FRAMEWORK?

Quality of employment and employment: a synergy?

European institutions highlight “synergies” and “complementarities” between quality of employment and employment (see, for example, *Employment in Europe 2002* and European Commission, 2003b). Improving quality in work may be growth-friendly and even OECD doubted whether deregulation and low wage could increase employment (OECD, 2004, p.66).

European Commission’s explanations focus on the supply side of the labour markets (Raveaud, 2005). “Making work pay” may not be sufficient, and high quality of work makes

⁵ In this field, states, including France, set specific national targets in their National Action Plans.

working more attractive. Good jobs can prevent an early exit from the labour market: worker, and in particular women and seniors can bear the working life (Jepsen and Hutsebaut, 2003). However, the direction of causality may be inverted. A high employment rate of 55-64 years old people can improve quality of employment. For example, training can be high in Sweden, Finland or Denmark because employers do not expect an early retirement from the labour force and decide to invest in the training of “seniors” (see, *Employment in Europe 2003*, p.174).

We can also consider long-term effects: health, human capital and good working conditions can foster productivity of firms (Appelbaum *et al*, 2000; De Greef and Van den Broek, 2004, for case studies and figures 120 and 123 in *Employment in Europe 2002*). Higher productivity can improve competitiveness and raise growth and employment. On the other hand, accidents at work and occupational disease have an economic cost (Askénazy, 2004). The main idea is that obsolescence and wear of human resources should be avoided, in order to foster a sustainable growth. Labour becomes a production factor, which could boost growth in a knowledge-based economy.

Macroeconomic effects based, for example, on the “insiders-outsiders” approach could also explain the link between unemployment and employment quality: with a low unemployment rate, “insiders” can ask for better wages and working conditions. Furthermore, in a Keynesian perspective, high wages can produce a virtuous circle: they boost demand and growth, and then reduce unemployment. Indeed, developing a low wage service sector may not be the best way for increasing employment rates (Kenworthy, 2003, Altman, 2000). In brief, economic studies from different theoretical backgrounds can sustain the Lisbon strategy and the rhetoric surrounding it.

Quality of employment and employment: a contradiction?

It would be more accurate to say that the theoretical and empirical links between employment, unemployment and quality of employment are not entirely clear. Indeed, we can imagine a negative correlation. In times where economic growth gets going again, firms do not hire immediately, work is more intensive and the number of accidents at work raises (Bouvet and Yahou, 2001). However, this negative correlation is temporary. In a long term perspective, the effects of high demand and technical progress on the quality of employment are unclear (Rubery and Grimshaw, 2001). In a micro-economic and organizational perspective, the link between quality of working life and performances of the firms are not so clear (Pruijt, 2003). Moreover, good working conditions and wages are often said to be expensive for employers and to prevent them from hiring more people. For instance, a member of the European employment committee asserted that “Quality is about protecting insiders” (Barbier and Samba Sylla, 2004). In other words, the quality of employment would endanger the two other sides of the Lisbon strategy: more jobs for all.

On the other hand, in a Keynesian perspective, making work attractive does not appear to have an impact on the employment rate: employment quantity is not determined by the supply side of the labour market, but rather by demand by firms and economic activity trends. Effect of the employment quality on the supply side of work may determine the activity rate (that is to say, maybe the unemployment rate), rather than the employment rate. The study of L'Horty and Rugani (2000) confirms this Keynesian idea: the growth of GDP is not correlated with the structure of the labour market and the social structure (at least with cross-sectional data in one point of time): two countries with similar labour market structures can have different macro-economic indicators and vice versa.

In the end, economic mechanisms can explain synergies between the two first pillars of the Lisbon strategy, but economists also pointed up the contradictions between these objectives. Given that the relevance of the Lisbon Triptych is disputable and that the Laeken indicators portfolio does not perform its functions completely, the next part of this contribution tries to explore the possible synergies between quality of employment and employment. The fundamental premise of this empirical work is that graphical visualisation is a useful tool for comparative research.

3. DATA TREATMENT: MAPPING EMPLOYMENT QUALITY IN EUROPE

The Laeken perspective

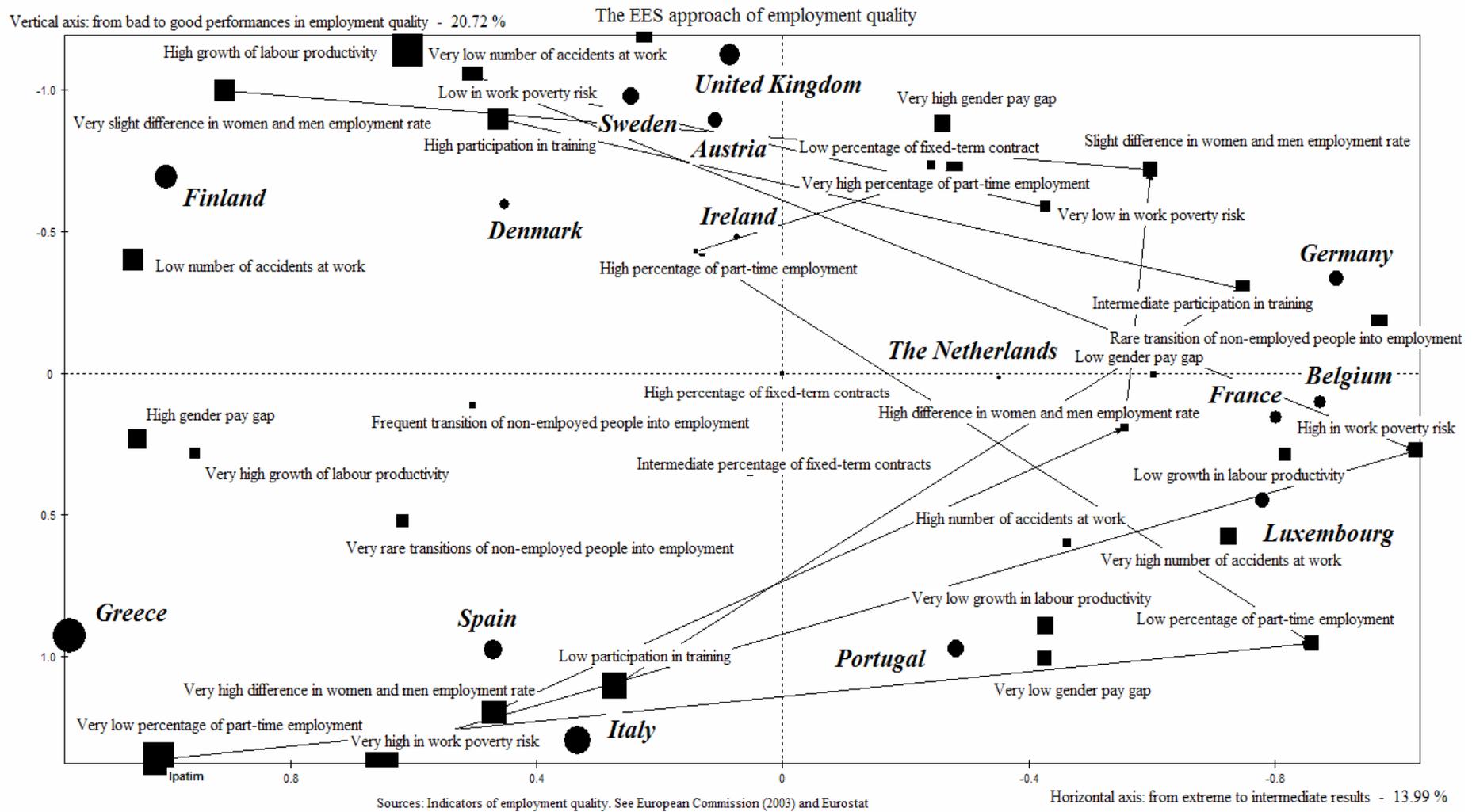
In a first step, indicators were selected in order to reflect the diversity of indicators chosen at Laeken and to ensure that most relevant dimensions were included (see Table 1).

Table 1

Dimensions	Key indicators
Intrinsic job quality	Transitions between non-employment and employment and within employment by pay level
Skills, life-long-learning and career-development	Percentage of working age population participating in education and training
Gender equality	Ratio of women's hourly earnings index to men's for paid employees at work 15+hours
Health and safety at work	Evolution of the incidence rate, defined as the number of accidents at work per 100.000 persons in employment
Flexibility and security	Number of employees working voluntary and involuntary part-time as % of total number of employees and of those with voluntary and involuntary fixed-term contracts as % of total number of employees
Inclusion and access to the labour market	Transitions between employment, unemployment and inactivity
Work organisation and work-life balance	Absolute difference in employment rates without the presence of any children and with presence of a child aged 0-6, by sex (age group 20-50)
Social dialogue and workers involvement	as yet no agreement
Diversity and non-discrimination	as yet no agreement
Overall work performance	Growth in labour productivity, measured as change in the levels of GDP per capita of the employed population and per hour worked %

Results of the Multiple Correspondence Analysis (see Box 1) are proposed in the Figure 1a.

Figure 1a



Box 1:
How to read the graphics?

Multiple Correspondence Analysis (MCA) tries to describe a cloud of points, which does not spread out equally in every direction, because of the affinities between rows and columns (the contrary would be the “Independence hypothesis”). The goal is to seek, for a cloud of points, the best representation in the minimum number of axis. In other words, MCA tries to determine a new space (of two dimensions, if possible) which passes through the centre of gravity of the cloud (*i.e.* its mean profile) and which maximizes the inertia. Inertia is the distance to the independence hypothesis, that is to say an indicator of the magnitude of the correlations. On the graphical results, the percentage near each axis is the proportion of the cloud’s inertia that can be summarized by each axis. In brief, the greater the proportion explained by the two first axes, the better the graphic.

Contrary to the Principal Component Analysis (PCA), MCA uses categorical variables (that is, non continuous or discretized ones). The choice of this statistical methodology is of course questionable. The change of continuous variables (such as the EES indicators) into categorical variables (in order to use a MCA) may change the result. But the PCA can be more sensitive to extreme values than MCA with categorical data (where extreme values and less extreme ones can be put together). The second advantage of MCA is to take account of the effect of each modality of categorical data, whereas PCA can only precise the weight and the coordinates of the whole indicator. Besides, each modality of variables (“very high, high, low and very low”, or “high, intermediate and low”) is represented by a small square on the graphic. We can see the contribution of each modality to the axis system thanks to the size of the square, which is proportionate to its contribution. One point represents a country. The size of this point is proportional to the relevance of the country’s representation in this plane. We drew the trajectories (from “very high” to “very low”) for 4 indicators (participation in training, percentage of part-time employment, difference in men and women employment rates, in-work poverty risk). Please note that untraditionally, the first axis is the vertical axis and the second axis is the horizontal axis (in order to fit with the geography).

The first step of our analysis is based on the « Key Indicators » of the employment quality according to the EES (see Annex for further details about data and the choice of indicators). The analysis of the Labour Force Surveys (LFS), and the European Community Household Panel (ECHP) provided most of the indicators. Besides, this analysis could have been richer if new Member states were incorporated but, unfortunately, suitable data was not yet available.

The trajectories of the variables bring to mind the “Guttman effect”. The vertical axis represents the opposition between “high quality of employment” (in the North) and “low quality of employment” (in the South). For example, in the “North”, there is very high participation in training, a very low number of accidents, low gap in employment rates of men and women, a low risk of in-work poverty. The horizontal axis sums up the opposition between the intermediate position (on the east of the graphic) and the extreme position (on the west). On this axis, very bad and very good performers encounter each other.

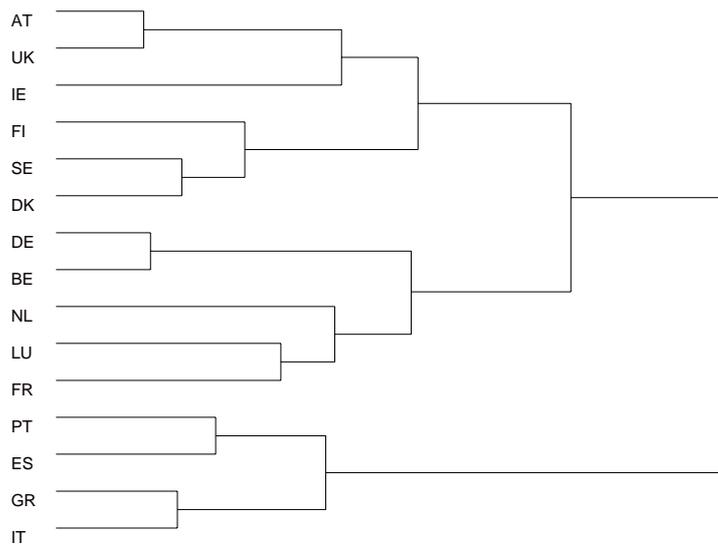
Thanks to this figure, it is easy to see that, according to the EES criteria, quality of employment is high in Sweden, Finland, Denmark, United Kingdom and Austria. The

Continental countries (Germany, France, Belgium and The Netherlands) seem to hold an intermediate position. In the Southern countries (Greece, Italy, Spain, Portugal), quality of employment is rather low.

However, it is worth noting that an individual country's ranking varies depending on the indicator being used. The development of fixed-term contracts and the growth in labour productivity are not correlated with other indicators. In the same way, the number of accidents at work appears to be very high in Belgium, Germany and France. In other words, the Continental countries are bad performers according to this criterion whereas they are in an intermediate position in most of the cases. These examples suggest that the "key indicators" from the EES are not strictly correlated.

The MCA can be complemented by a hierarchical cluster analysis in order to find relatively homogeneous clusters of countries. It combines the clusters sequentially on the basis of measured characteristics and reduces the number of clusters at each step. This process can be summed up in a tree or dendrogram. The cluster analysis in figure 1b confirms the main results available on the graphics.

Figure 1b

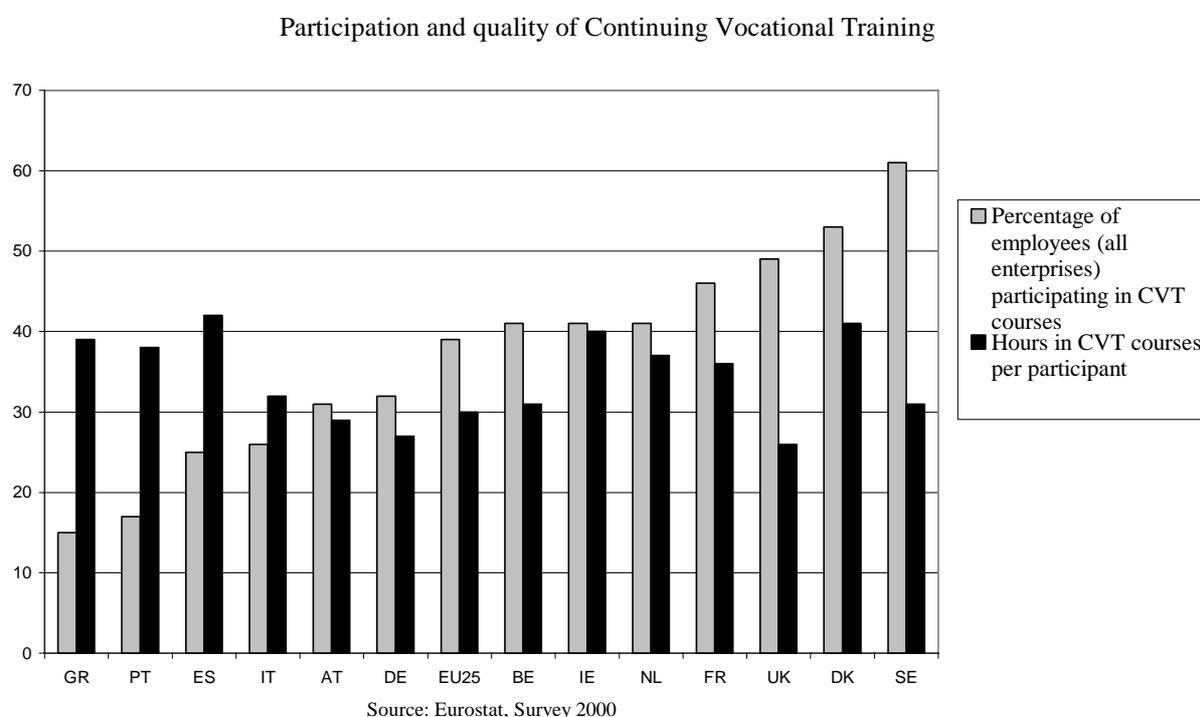


Cutting the tree into 3 clusters would be one of the best partitions. The first group, composed by Austria, United Kingdom, Ireland, Finland, Sweden, and Denmark mixed up countries from the liberal model and from the Nordic model. These countries appear to be the best performers concerning employment quality. The second group made up of France, Germany, Belgium, The Netherlands, Luxembourg fit with the Continental model. The third group would be constituted of Spain, Portugal, Italy and Greece, that is to say the Southern countries. The Southern European countries are facing the worst results in terms of employment quality.

Complementing the Laeken portfolio

Although the Laeken portfolio provides policy makers with a set of indicators aimed at assessing employment quality, these indicators appear to be too genial and should be complemented and reinforced. In addition, some indicators are ambiguous. For example, the growth in labour productivity can be explained by a rise of work intensity engendering muscle skeletal disorders and other troubles which endanger employment quality. The normative role of some indicators (and especially the indicators of policy efforts) should be questioned. There could be diverse ways to achieving a common goal. For example, the indicator of investment in vocational training does not take into account the quality of training. The EES indicator should at least be complemented by an indicator of the mean time spent in training by participant (see Figure 2).

Figure 2



According to this second criterion related to the training duration, Nordic countries and the United Kingdom are not so good performers. Moreover, the key indicator of the dimension “skills, lifelong learning and career development” cannot have so easily a normative role, because it is, to some extent, an indicator of “input”, that is to say of policies’ efforts in one field. According to the Open Method of Coordination principles, member states agreed on policy objectives, but remain free to choose the methods by which these objectives are achieved (Atkinson *et al*, 2002). In some countries, lifelong learning can be on-the-job training, or informal education without vocational training course and certificate. Employment systems can value different kinds of skills: industry-specific, general skills and firm-specific, as argued in the stimulating article of Estevez-Abe *et al* (2001). Different patterns exist that can be as performing in terms of workers well-being and skills.

Some other indicators should be welcome in the Laeken portfolio as for example indicators related to the level of wages, or to social dialogue or to the workers involvement. The lack of agreement between member states explains these loopholes. For example, France wanted to include an indicator of the level of wages, but did not succeed because United Kingdom and Sweden were strongly opposed to the idea. The Swedish actors put forward the fact that the responsibility of wage policies does not belong to the Swedish government, but to social partners (Barbier and Samba Sylla, 2004). A compromise was found around the transition between different pay levels. It should be kept in mind that the portfolio reflects a balance between different political and national points of view.

Moreover, the Laeken portfolio of indicators may not balance different dimensions of employment quality. For example, only one indicator (number of accidents at work) sums up working conditions (that is to say quality of work in a narrow sense). But the number of accidents at work does not reflect the spread of the occupational diseases and work-related problems. For example, the pressure at work would be high in Sweden and United Kingdom (Gallie and Paugam, 2002) whereas the number of accidents at work is low.

Furthermore, this portfolio contains a risk of dilution of the quality in work concept because it includes indicators about the employment rates or the transitions rates, that is to say indicators related to quantity of employment and to segmentation of the labour markets. However, quality of transitions is an important factor in the European Commission's analysis, according to which European societies can bear bad jobs if these jobs are temporary and if they can be springboards to "good jobs". Indeed, temporary employment is frequently a stepping stone towards jobs of better quality for young people. But older people, low-skilled and female workers are frequently trapped in jobs of poor quality (see chart 95 in *Employment in Europe 2003*). Despite this fact and despite the opinion of workers who see fixed-term jobs as bad jobs (Clark and Senik, 2005), European Institutions still promote these types of contracts. In the same way, according to the European Institutions, a high part-time employment proportion would be a good indicator of the possibility to join security and flexibility on the one hand, and to reconcile working life and family life on the other hand. According to this European literature, part-time employment could contribute to the general quality of employment. But part-time seems to be sometimes involuntary, at least in some countries like France (Clark and Senik, 2005). The promotion of both part-time employment and fixed-term contracts illustrated the fact that European recommendations can bypass workers' point of view.

These examples highlight the ambiguity of the employment quality concept; a question remains in the European analysis: quality for whom? For the workers, for the labour force (including unemployed people), for the firms, for the economic performance of the countries, etc.? This question is often evaded, and, when it is not, the answer is that quality of employment is a "win-win" strategy (see previous section). European analysis eluded the conflicts of interests which can appear between firms and workers. Moreover, the judgment about «good» and «bad jobs» is quite entirely left to Governments and the European Commission. Only two indicators reflect the opinion of workers themselves: involuntary part time employment and job satisfaction, but the last one is a context indicator, without the same importance as the "key indicators". Indicators are not justified by opinion polls. This is the reason why we added subjective data in the last step of our statistical analysis.

Self-reported and subjective data may not be the panacea. The question about job satisfaction could be interpreted differently from one country to another and international comparisons based on opinion polls are disputable. For example, the difference of satisfaction could be underestimated in case of an adaptation of preferences in countries

where quality of employment is low. People may not have the same reference point if they do not look at what is going on in European neighbour countries (or if they do not imagine a better world). However, studies suggest that mean satisfactions are comparable among countries (see Diener and Suh, 2000; Layard, 2005, pp.32-33). To conclude, subjective indicators cannot replace objective indicators, but they bring some information on employment quality, when objective indicators are insufficient or when the opinion about public policies' goals is needed (Veenhoven, 2002; Diener and Suh, 1997). For this reason, the article attempts to set up a dialogue between diverse approaches of employment quality.

Above the risk of dilution of the employment quality concept, the multiplication and diversification of objective and subjective indicators can increase the number of points of view, all of them being legitimate. For example, the context indicators of gender equality offer further information. Indeed, concerning gender segregation in sectors, the worst situation is in Sweden, followed by the United Kingdom. The highest occupational segregation rate is observed in France, and Denmark comes just after (see the statistical Annex of European Commission, 2003a). These situations not only reflect policies and social choices, but also cultural diversity and different values (Arts *et al.*, 2003; Voicu, 2004). Social Europe has to cope with this diversity (Scharpf, 2002, Adnett, 2001). The political challenge is to set up indicators based on shared objectives and, in the same way take into account the diversity of values and institutions (Ghai, 2005). It was the aim of the EES, but it may have partially failed this mission.

A close correlation

To counterbalance the disadvantages of the Laeken portfolio, a map of the working conditions, based on subjective and self reported well being at work is also provided (Figures 3a and 3b). The list of the EES' contains one indicator about job satisfaction, but data was missing for Sweden and Germany, although these countries would be of a great interest for our analysis. That's why we chose other indicators, based mainly on the Eurobarometer and the European Social Survey. Among the data available, we selected indicators in order to reflect the diversity of issues at work: number of hours, autonomy, social dialogue and climate in the firm, improvement of skills, quality and diversity of tasks, and painfulness.

According to this map based on subjective and self-reported indicators, employment quality seems rather satisfactory in Nordic countries, in United Kingdom, in Ireland, in the Netherlands and in Austria, whereas France, Belgium, and to a lesser degree Germany seem to have joined the group of the Southern countries with lower satisfaction with many items. However, involuntary part-time employment is very high in Sweden and Finland (respectively 22% and 31% of part-time employment whereas the European mean is 16%). In this case, the cluster analysis may be helpful.

Figure 3a

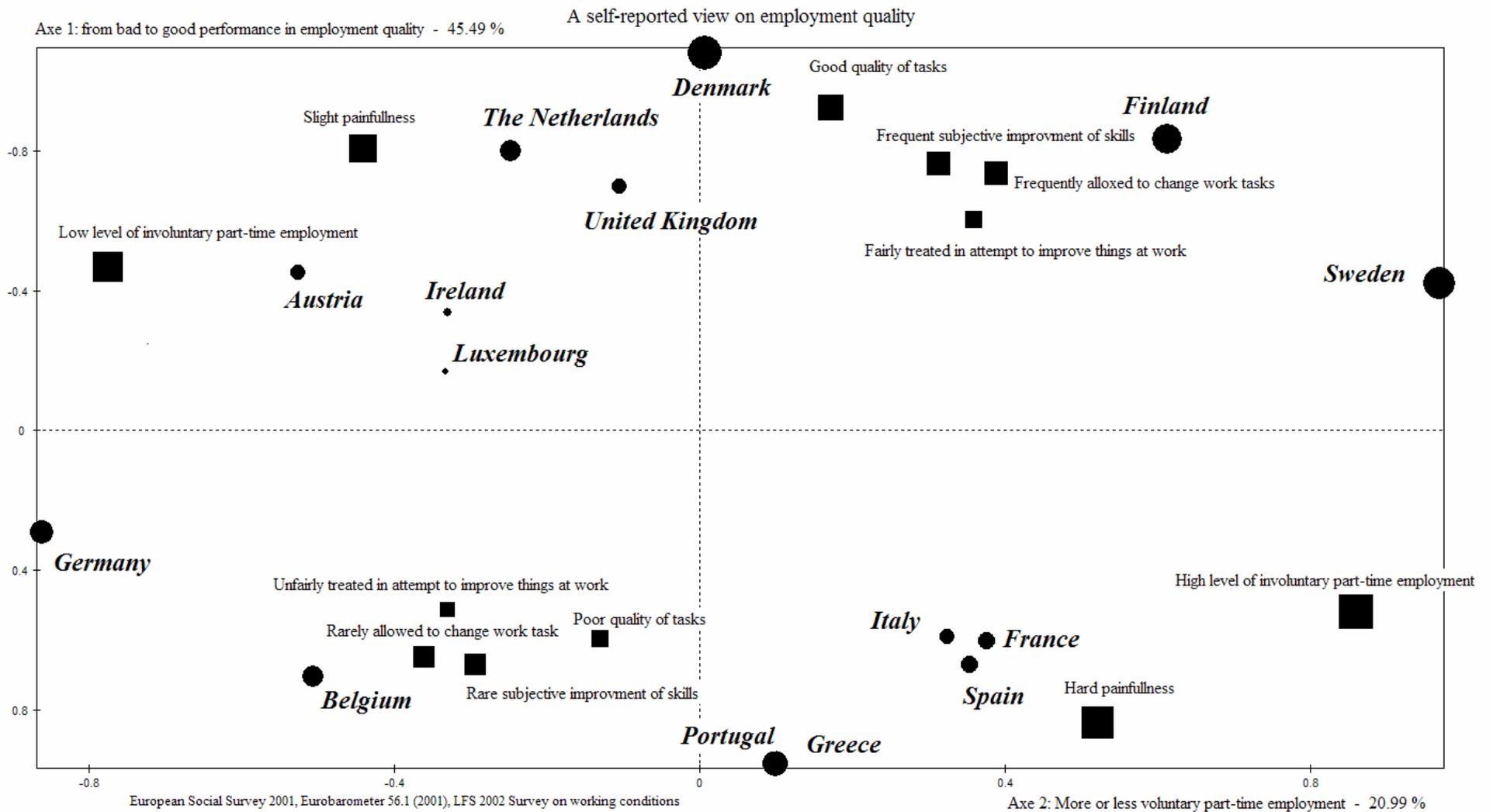
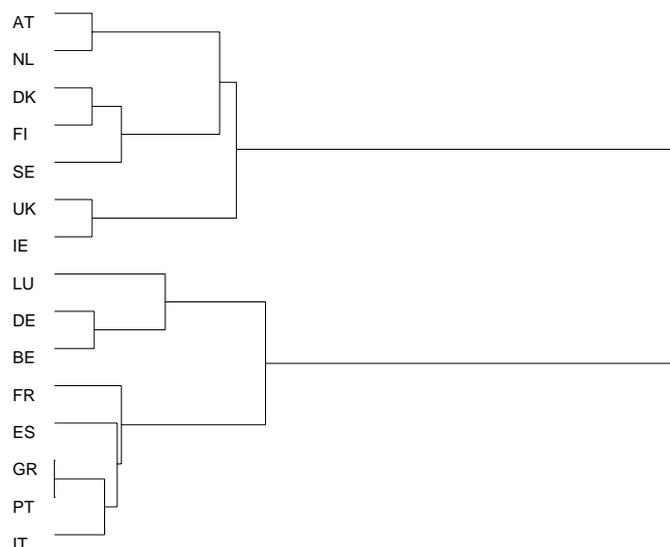


Figure 3b

Five clusters can be identified: The Netherlands and Austria compose the first group; Sweden, Denmark and Finland the second one; United Kingdom and Ireland the third one; Belgium, Germany and Luxembourg the fourth one; whereas in the last cluster are France, Portugal, Spain, Greece and Italy. Here again, the Southern countries appear to lag behind. It is worth noting that France has joined the group of the Southern countries.

To sum up the data analysis with subjective and objective indicators, workers seem to know a good quality of employment in the Nordic countries, in United Kingdom, Austria and the Netherlands where the employment rate is high. By contrast, in South European countries, quantity and quality of jobs are lower. These results suggest synergies between employment and quality of employment at a macro level. In order to have a firm conclusion, we used a Pearson correlation between the employment rates and the employment quality, using the coordinates of the country in the vertical axis of both figures 1a and 2a (see Table 2).

Table 2

Pearson correlation and approximated significance		
	Subjective quality (figure 2a)	EES quality (figure 1a)
EES quality (figure 1a)	0,78 ***	
Employment rate	0,69 ***	0,74 ***
Notes: ***=significant at 1%; **=significant at 5%; *=significant at 10%		

It is worth noting the close correlation between the two measures of employment quality. This result contrasts with results of Muñoz de Bustillo Llorente and Fernández Macías (2005) that do not plead the use of job satisfaction as a measure of job quality. These authors use rough indicators of employment quality (for example the GDP per capita as a proxy variable of average salaries) and include in their panel Asian countries where the determinants of subjective well-being are different from the European determinants (Diener

and Suh, 2000): in their studies, the correlation between objective and subjective well-being would have been higher without Japan, for example⁶. In other words, despite its limits, subjective measures of employment quality cannot be rejected so easily.

The correlation between employment quality and employment rate is positive and significant with this cross-section analysis. A longitudinal analysis from Florent Fremigacci and Yannick L'Horty confirms this result: in France, employment quality becomes better within the economic growth (Fremigacci and L'Horty, 2005). We conclude that quantity and quality of jobs are highly correlated. The next section confronts our results with usual and recent typologies from different academic disciplines. This confrontation gives us an opportunity to discuss our indicators and to analyse our most surprising results.

4. INTERPRETATION: DISPUTABLE INDICATORS OR DISPUTABLE MODELS?

A convergence of typologies in political sciences and economics?

Our results fit in with previous comparative studies of labour market institutions (Cadiou *et al.*, 2000; L'Horty and Rugani, 2000), or working conditions and management (Paugam and Gallie, 2002; Gallie, 2003; Molinié, 2003; Gollac and Volkoff, 2000; Tangian, 2004; Lorenz and Valeyre, 2004). Moreover, typologies based on diverse indicators of employment quality meet the typologies of Welfare State drawn by Esping Andersen (1990), complemented by Ferrera (1996) and confirmed by the cluster analysis (Obinger and Wagschal, 2001; Saint-Arnaud and Bernard, 2003 and Arts and Gelissen, 2002, for an overview). Yet, some dimensions of the employment quality are not *a priori* correlated with Welfare State model. Some links between Welfare State and labour market institutions exist (Amable, 2003) and could explain the convergence of typologies that appeared in our analysis.

The diversity of Welfare State system can also introduce some bias. The in-work accident rate indicator is a good example that illustrates this matter. Even after controlling for differences in the structure of economic activity and trying to harmonize data, problems of comparability remain, the main one coming from differences in reporting arrangements reflecting differences in health care systems (see European Commission, 2001b). In countries with insurance-based systems such as in Germany or France, there is a financial incentive for both employers and employees to report accidents. In other countries the data relies on legal reporting data which underestimate the number of accidents, leading Member States to provide an estimation of the reporting level in order to help Eurostat in correcting this bias. This example shows that indicators must be commented carefully. In this case however, the surveys of the European Foundation of Working Conditions give a ranking similar to the administrative data.

The general consensus should not mask the slight differences between typologies. Beyond the differences between Southern countries and North European countries, the differences between Anglo-Saxon and Nordic countries need to be clarified. In most of the studies, Anglo-Saxon countries contrast with the Nordic ones. Furthermore, according to the Human Development Index and the Index of economic well being constructed by Lars Osberg and Andrew Sharpe, Nordic countries are "good pupils", whereas countries from the Anglo-Saxon models know a growth of the GDP with a stagnation of well-being's indicators

⁶ It is obvious in the figure 3, 5 and 6 of their article.

(Osberg and Sharpe, 2002). However, in our graphics, United Kingdom is surprisingly close to the Nordic countries with regards to employment quality and workers well-being. According to the indicators of ILO's decent work (Ghai, 2003), United-Kingdom is also a good performer (certainly with a worst record than Nordic countries, but better than France).

First of all, the area of our analysis and the indicators chosen do not allow a clear distinction between Scandinavian and Anglo-Saxon models. In our panel, only two countries, the United Kingdom and Ireland, are supposed to belong to the Anglo-Saxon model. If we added other countries like Canada, USA and Australia, the Anglo-Saxon countries could be more distinguished. Secondly, recent British reforms may improve employment quality. The National Minimum Wage launched in April 1999 has caught up with the French SMIC and working poverty has reduced thanks to the Working Family Tax Credit. It is also worth noting that Sweden, Denmark and the United Kingdom have a common Beveridgian past and do not join the Euro Club.

Our results suggest in the end, that countries said to be market-oriented can perform as well as countries said to be state-oriented. The more or less state oriented dimension is not the latent variable of our analysis.

The search of a latent variable

The specialization of countries may be one explanation. In services-oriented economy, employment quality and employment rate may be higher. Industry-oriented countries may have to face more competition and worst working conditions. Indeed, the in-work accidents rate is higher in construction, agriculture, manufacturing or transports activities than in trade, finance or business activities (Eurostat, 2003). In the EU15, the proportion of workers in the services is 70%, whereas it is 79% in United Kingdom, 77% in The Netherlands and 74% in Sweden and Denmark. This higher proportion can explain the liberal and Nordic good results in terms of working conditions. But Belgian and French economies are also tertiary (75% and 74%) and still see more accidents at work. Employment quality may be low in some services (Meisenheimer, 1998; Goos and Manning, 2004). Moreover, it has to be said that an adjustment is performed to get standardised incidence rates, which take into account the frequency of work accidents that is higher in some branches which are not equally spread in Europe. Concerning more subjective data, the quality of working life is still higher in Scandinavia after having controlled occupational structure (Gallie, 2003).

The latent variable of our analysis may be the economic activity of women, which could explain the difference in employment rates between men and women, the incidence of part-time employment, and also the in-work poverty risk: the "dual bread winner" model can prevent working couple from experiencing poverty. The heterogeneity in family culture and family structure could be a key for explaining cross-national and cross-temporal heterogeneity of European labour markets (Algan and Cahuc, 2005).

A simple opposition between "Liberal" and "Coordinated" economies, tertiary and industrial one, or more or less employment friendly for women may not be sufficient. Management style and public awareness of these issues may be as important. Gollac and Volkoff (2000) suggest, for example, three explanations of the bad working conditions in France: the weakness of trade unions and the Government's lack of interest in this field could explain the unawareness of the problems, but also the distinction between managers and workers, which is less important in other continental countries such as Germany (Maurice, Sellier, Silvestre, 1986). Employment quality is not only the reflection of economic development, national specializations and public spending, but also the echo of industrial relations, firms'

organisation, class structure and culture. Different combinations of institutions may offer similar performance in terms of employment rate and employment quality. Evidence let think that there is not “one best way”, but rather a diversity of capitalism, equally able to succeed (Freeman, 2000).

CONCLUSION: A POLITICAL AGENDA?

The graphics and maps included in this analysis suggest reinforcement between quality and quantity of jobs. Ranking was not the main goal of this contribution, even if it produces an implicit classification: the Nordic countries and the liberal ones seem to have the best performance in terms of employment quality and employment quantity. In this field, as in the field of social inclusion, “rankings are necessarily fuzzy, and their real value, rather than in crude headlines, is pointing to underlying mechanisms and areas where policy can fruitfully be focused” (Atkinson *et al.*, 2004). Our graphics and maps suggest synergies, but it is still difficult to disentangle the tangle of “good practices”, leading to quantitative performances in the realm of employment, quality of employment and social inclusion. The existence of multiple equilibriums is also acknowledged in economics, suggesting different ways to improve employment quality and employment rate.

The Lisbon strategy may still be relevant, since data treatment lead to unambiguous conclusions with regard to the strong correlation between quantity and quality of jobs. So, improving employment quality does not endanger employment growth. In the same way, comparative analysis shows that there is no trade-off between social and economic goals, between efficiency and equity (Sapir, 2005). However, the fragile equilibrium between the pillars of Lisbon Strategy did not last for long. Few years after Lisbon, the supremacy of the economic and employment goal seems undisputable, while employment quality and social issues are overshadowed in the European arena today. Yet, the stake of job quality may be more important in an enlarged Europe. Furthermore, empirical evidence of a declining job quality in many affluent economies (Green, 2006) stresses the urgency for policy makers and social partners to implement policies aimed at improving the quality of working life.

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ANNEX

THE SOURCES USED FOR OUR OWN DATA ANALYSIS

For the figure 1a and 1b, we used 7 indicators of employment quality as defined by the European Commission (2003a). The indicator selected is most of the time the “key indicator” of each dimension.

- For the “intrinsic job quality” (dimension n°1), the key indicator is the transitions between non-employment and employment and within employment by pay level. We do not select the transition by each pay level because it is not a synthetic indicator of mobility easy to analyse. An indicator of in-work poverty risk is added in the analysis in order to take into account the wage and benefits in work (Source: ECHP/EU SILC, 2001). The fact that work can be a way to evade from poverty is an important dimension of quality in work to our point of view. Moreover, the European Commission initially proposed the in-work poverty risk as an indicator of the employment quality. The in-work poverty risk indicator was rejected by the EES process, but adopted by the Open Method of Coordination dedicated to social inclusion. It is now part of the Laeken portfolio of indicators.
- For “Skills, lifelong learning and career development” (dimension n°2), the key indicator is the percentage of working age population participating in education and training, including initial education and continuous vocational training, excluding leisure training (Source: Labour Force Survey –LFS, 2002)
- For “gender equality” (dimension n°3), the key indicator is the ratio of women's hourly earnings index to men's for paid employees at work 15+hours. As this indicator is not available for France, Luxembourg and Sweden, we use the gender pay gap in unadjusted form, available on the Eurostat website. The gender pay gap is given as the difference between average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. The gender pay gap is based on several data sources. The population consists of all paid employees aged 16-64 that are 'at work 15+ hours per week'.
- For “Health and safety at work” (dimension n°4), the key indicator is the number of accidents at work per 100 000 workers (Source: European Statistics on Accidents at Work-ESAW, 2000).
- For “flexibility and security” (dimension n°5), the key indicators are the number of employees working voluntary and involuntary part-time as % of total number of employees and of those with voluntary and involuntary fixed-term contracts as % of total number of employees (Source: LFS, 2002). We use the proportion of involuntary part-time employment in our analysis with subjective data.
- For “inclusion and access to the labour market” (dimension n°6), the key indicators are the transitions between employment, unemployment and inactivity. In order to avoid redundancy between these indicators, we select only the first one, that is to say the percentage of transitions of non-employed people at t-1 into employment at t (Source: LFS, 1999-2000).
- For “work organization and work life balance” (dimension n°7), the key indicator is the difference in employment rates without the presence of any children and with presence of a child aged 0-6, by sex (age group 20-50); As this indicator is not

available for Denmark, Finland and Sweden, we use the difference in employment rates between women and men in percentage points (source: LFS, 2002).

- For “social dialogue and worker involvement” (dimension n°8) and for “diversity and non-discrimination” (dimension n°9), there is no agreement as yet.
- For “overall work performance” the key indicator is the growth in labour productivity, measured as change in the levels of GDP par capita of the employed population (Source: Eurostat, DG ECFIN, 2002).

That is why this first analysis uses 9 indicators for 8 dimensions out of 10.

For the figure 2a and 2b, we used self-reported and subjective data.

- Persons employed part-time involuntary (share in total part-time employment) from LFS 2002. Persons working involuntary part-time are those who declare that they work part-time because they are unable to find full-time work. The distinction between full-time and part-time work is made on the basis of a spontaneous answer given by the respondent. See Eurostat website

For the next three indicators, the data come from the tables of Paugam and Gallie (2002) who used Eurobarometer 56.1 (2001).

- To simplify the analysis of job tasks characteristics, Paugam and Gallie (2002) construct a scale of intrinsic job quality from four items. Score by country are presented in table 4.5
- Percentage of workers experiencing changes in skills. Data by country are presented in table 5.3
- Percentage of workers experiencing painful work. Data by country are presented in table 5.3

We added two indicators of employees' autonomy of the workers thanks to two questions of the European Social Survey (2001):

- How fairly or unfairly treated in attempt to improve things at work?
- How much the management at your work allow you to change your tasks if you wish to?

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