

EMPLOYMENT PAPER

2001/26

**Stable or unstable jobs:
Has job stability decreased in
industrialized countries ?**

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ISBN 92-2-113056-8

First published 2002

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Printed by the International Labour Office, Geneva, Switzerland

Preface

This paper is part of a series of papers that have been prepared for the research programme “Adjustment of labour markets to economic and structural change: labour market flexibility, security and labour market policies” by the labour market policy team (LMPT) of the ILO’s Employment Strategy department.

It is common today to ask for changes in the policies and institutions of the labour market. Numerous authors have proposed an overhaul of these and the social protection systems in general, because the labour markets are said to face a secular change towards more and more short-term and flexible jobs. These jobs would not allow workers – as did the longer-term employment relationships from earlier decades – to qualify for many of the benefits of the social protection system, such as unemployment, health, and retirement. The increase in non-standard work arrangements would therefore require a new look at social protection and labour market policies.

However, many of these prescriptions were not based on a thorough analysis of the changes in the labour market but on some emerging trends, which seemed to indicate such a secular shift (especially in the “end-of-work” literature). A certain scepticism remained about the actual extent of changes. Was salaried work really vanishing? Was long-term commitment between workers and employers a thing of the past? Had job stability gone or was it on the way to fade away?

The present paper takes a closer look at such assertions and found an astonishing degree of job stability, accompanied by flexibility for some groups – but not for the whole labour market. This was especially true for Europe, but even in the United States, as research has noted, the link between workers and their companies was weakened, but not broken.

For the developed world this hints to the fact that longer duration wage and self employment is still the dominant segment of labour markets in the industrialized world and instead of a dramatic overhaul of the social protection systems, marginal adjustments seem to be required. The fact that a considerable degree of employment stability – combined with some degree of internal and external flexibility – seems to underpin high levels of development, has far reaching implications for developing countries. Instead of searching for a secular rise towards ever more flexible labour markets it seems more adequate to introduce basic stability in their labour markets. This in turn requires the building of labour market institutions that permit such stability while also providing firms and workers with adjustment flexibility.

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Contents

1. Introduction	1
2. Evaluating job stability	2
2.1 Indicators of job stability	2
2.2 What determines employment tenure: some theoretical Background	2
3. Preliminary evidence	4
3.1 Changes over time (1992-99): descriptive analysis	4
3.2 Interpreting the preliminary evidence	11
4. Regression Analysis	14
5. Concluding Remarks	16
 References	 18
Annex: Sources and definitions of data	19

1. Introduction

Labour Markets in the industrialized countries are said to have changed dramatically in the last years. According to the “end-of-jobs” theories, long-term jobs with a single employer are a thing of the past: job stability has gone and is not going to return. The image presented is that of a labour market offering mostly short-term and unstable jobs, which may be of high or low quality in terms of wages, skills and working conditions. Individuals are being told to prepare for a flexible labour market with frequent changes between jobs or between jobs and other activities or spell of inactivity. This new labour market is supposed to require constant adaptation through lifelong education and learning together with a general preparedness for change. In fact, individuals are told to behave like “entrepreneurs”, to manage their careers efficiently and to maintain a constant state of “employability”, some sort of potential status that would allow them to change jobs easily both internally and externally. Linked to this image is the strong likelihood that traditional social protection, typically based on continuous employment, is not sufficient to protect the growing contingent and volatile workforce.

The reasons given for the change from a stable to a flexible workforce are manifold, but globalization and information and communication technologies (ICT) are among those most commonly advanced. Another reason is said to be deregulation of the labour market itself. Globalization is affecting and displacing low-skilled labour in particular, while the ICT sector is said to require a highly adaptable workforce because the sector itself is prone to constant changes.

Compared with the image of the stable, long-tenured industrial labour markets of the 1970s and the 1980s, today’s popular discourse about a volatile, basically unorganized and unregulated labour market might suggest that changes have been dramatic and that supply must react in the way described above in order to match demand. According to the media at least, the “old” labour market, offering stable (if not “lifetime”) jobs, seems to have vanished for good.

Have the labour markets of industrialized countries changed as dramatically as is often claimed? There have been numerous studies on job stability, most of them focusing on the United States and the United Kingdom where the issue has retained the most attention. While a number of researchers¹ have tried to compare job stability across time in one country, few have examined changes over time across countries (except OECD, 1993 and 1997; ILO, 1996). This paper tries to shed some light on the actual changes that have occurred in the labour markets of the European Union, United States and Japan using data from different sources, though primarily labour-force survey data up to 1999. It opens with a presentation of some evidence on job stability measured through employment tenure²- i.e. the length of time a worker has been continuously employed by the same employer-, and its evolution over the nineties. The second part of the paper turns to an econometric analysis to test the existence of a time trend in average employment tenure over the decade. Finally, we conclude by suggesting some tracks for further research to provide possible explanations of our results.

1 See, for example, Neumark’s (2000) introductory chapter.

2 Although “job tenure” is the most commonly used term for this concept, this paper will refer to it as “employment tenure” to capture the idea that continuity of tenure is not broken by job changes within the same enterprise. The term “employee tenure” excludes self-employment and is therefore too restrictive for the purposes of this paper.

2. Evaluating job stability

2.1 Indicators of job stability

As said previously, the length of time employed individuals have spent with their present employer, or employment tenure, is a commonly used variable in studies of the labour market that focus on labour market stability. In the following we are mainly interested in the question whether or not there has been a marked change in average tenure over time and across countries of the industrialized world, which would indicate a trend towards a labour market with more flexible, shorter time jobs. To evaluate this possible evolution of the labour markets, we consider two different statistics: the average tenure and the mode³ (i.e. the typical duration of employment tenure) and look at their changes over the nineties.

2.2 What determines employment tenure: some theoretical background

The high incidence of long-term employment relationships is one of the most remarkable features of labour markets in industrialized countries. On average, about 56 per cent of employees in OECD have a job duration longer than five years (OECD, 1997).

Another noteworthy feature is that firms tend to hoard labour during recessions, even if this behaviour involves the cost of paying a wage rate higher than labour productivity (Hamermesh, 1989). These two pieces of evidence tend to suggest that *both workers and firms* attach a positive value to long-term employment relationships. Economic theory provides different – and possibly complementary – explanations for these observed patterns.

The first refers to the existence of firm-specific human-capital, which creates an obvious incentive for both workers and firms to establish long-run employment relationships. Indeed, if there is something valuable in the particular match between the worker and the firm – that has a lower value outside their relationship, the worker's wage in the firm will be higher than the wage offered by other firms: moreover the worker's productivity will also be higher than the productivity of other workers outside the firm. This match-specific capital can be the result of investment in firm-specific skills (e.g.: training) or, more generally, of any non-recoverable expenditure that has no value outside the employment relationship (e.g.: fixed costs of searching for the worker and/or job and hiring the worker). Specific capital can also take the form of information about the quality of the match between worker and the firm when the productivity of a particular worker is not observable *ex ante*. In this case, the value of a long-term relationship stems from the fact that the quality of the match is revealed over time as tenure accumulates (Jovanovic, 1979).

According to that theory, an employment relationship will be terminated if a production shock is sufficiently negative to offset the value of the specific capital. Then, to have a permanent decrease in employment tenure, either larger fluctuations in production or a lower value of the specific capital are necessary. In this respect, two opposite tendencies have emerged in industrialized economies in recent years. On the one hand, globalisation has led to an increased integration between markets and to more economic volatility, so that shocks in production appear to be more frequent and more pronounced. Similarly, ICT require a higher degree of flexibility in production and a more rapid adjustment to changes in demand. On the other hand, the increasing importance of knowledge as a productive factor is likely to raise the return to training and to increase the importance of firm-specific human capital. The net impact of these two tendencies on

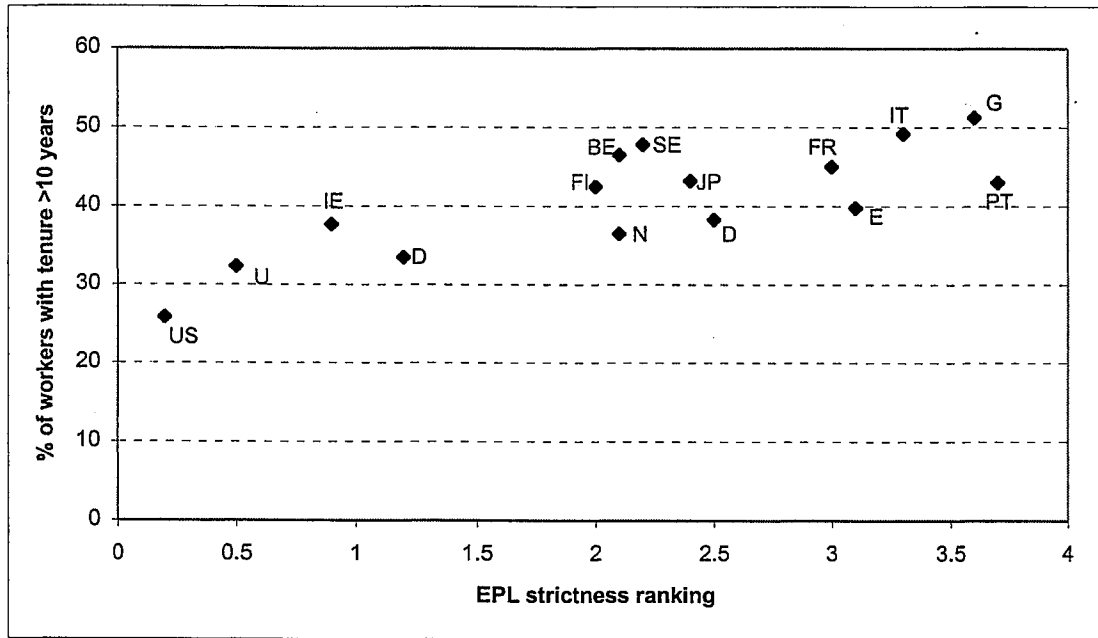
³ We used the mode instead of the mean because the distribution is discrete (the mode shows the most frequent tenure duration class)

employment tenure is then ambiguous: while globalisation and ICT may shorten employment tenure, the increasing importance of human capital may act in the opposite direction.

Secondly, the institutional settings, and in particular Employment Protection Legislation (EPL), may explain why employment tenure differs across countries. Some labour market observers have argued that tight rules governing employment protection are to be blamed for poor labour market performance, pointing in particular to the low mobility of European workers. This controversial proposition has generated a considerable literature and much debate. Theoretical models conclude that the impact of employment protection is rather ambiguous on the level of employment and unemployment (stocks); however, they clearly indicate that employment should be more stable and individual employment relationships more durable when EPL is stricter: given a constant (or any other) cyclical wage pattern, higher firing costs stabilize employment in downturns but also deter employers from hiring in upturns. More stringent EPL should therefore be associated with less cyclical volatility of employment (for a complete survey, see Bertola et al., 2000). On this basis, we would expect jobs last longer in countries with stringent job security provisions. However, employment tenure depends not only on the dismissal rate but also on the quit rate, so the overall outcome is not clear to the extent that one effect may dominate the other. It follows that the role played by employment protection in determining labour market outcomes is mainly an empirical question. Looking at some cross-countries evidence, we find that employment tenure correlates quite well with the degree of employment protection (see figure 1).

The last explanation for employment tenure results from workers' heterogeneity (Blumen et al, 1955). According to this theory, a decrease in employment tenure, for example, would reflect a change in worker's attitude towards a higher preference for mobility. However, the available evidence seems to show that this is not the case. According to the results of the International Survey Research (1995), in the large majority of OECD countries the percentage of workers satisfied with their job security has significantly decreased over the last few years. Similarly, there is increasing concern among workers that they may lose their jobs despite good individual performances. So, although workers differ in their attitude towards mobility, a majority of them seem to still have a preference for stable employment relationships. The typical explanation for this preference is that long-run relationships provide workers with an insurance against fluctuations in their income (Parsons, 1986) and enable them to build family and community relations through stable dwelling arrangements (house purchase) school attendance, care for aging relations, etc.

Figure 1: Employment tenure and Employment Protection Legislation, 1998
% workers with tenure over 10 years and EPL ranking



X axis: Overall EPL strictness (OECD, 199b).

Y axis: % of workers with employment tenure over 10 years (Eurostat, national sources).

3. Preliminary evidence

3.1 Changes over time (1992-99): descriptive analysis

In a previous paper, we found significant differences in employment tenure between countries, with Japan and most European countries still characterized by considerably longer tenures than the United States (Auer, Cazes, 2000). In the following we are mainly interested in whether in recent years there has been a shift in tenure distribution towards shorter employment tenure and more flexible labour markets. The findings, tables and figures presented below are based on an exploitation of EUROSTAT data, supplemented by national aggregate data from Japan and the United States (see Appendix 1 for details).

Table 1 shows the changes that occurred in the tenure distribution between 1992 and 1999 in the most of the European Union countries (data for Austria were non reliable), the United States and Japan. Two different statistics are presented to summarize the changes in tenure distribution: the average tenure and the mode (i.e. the typical duration of employment tenure).

Table 1: Synthetic statistics of tenure distribution (1992-99)

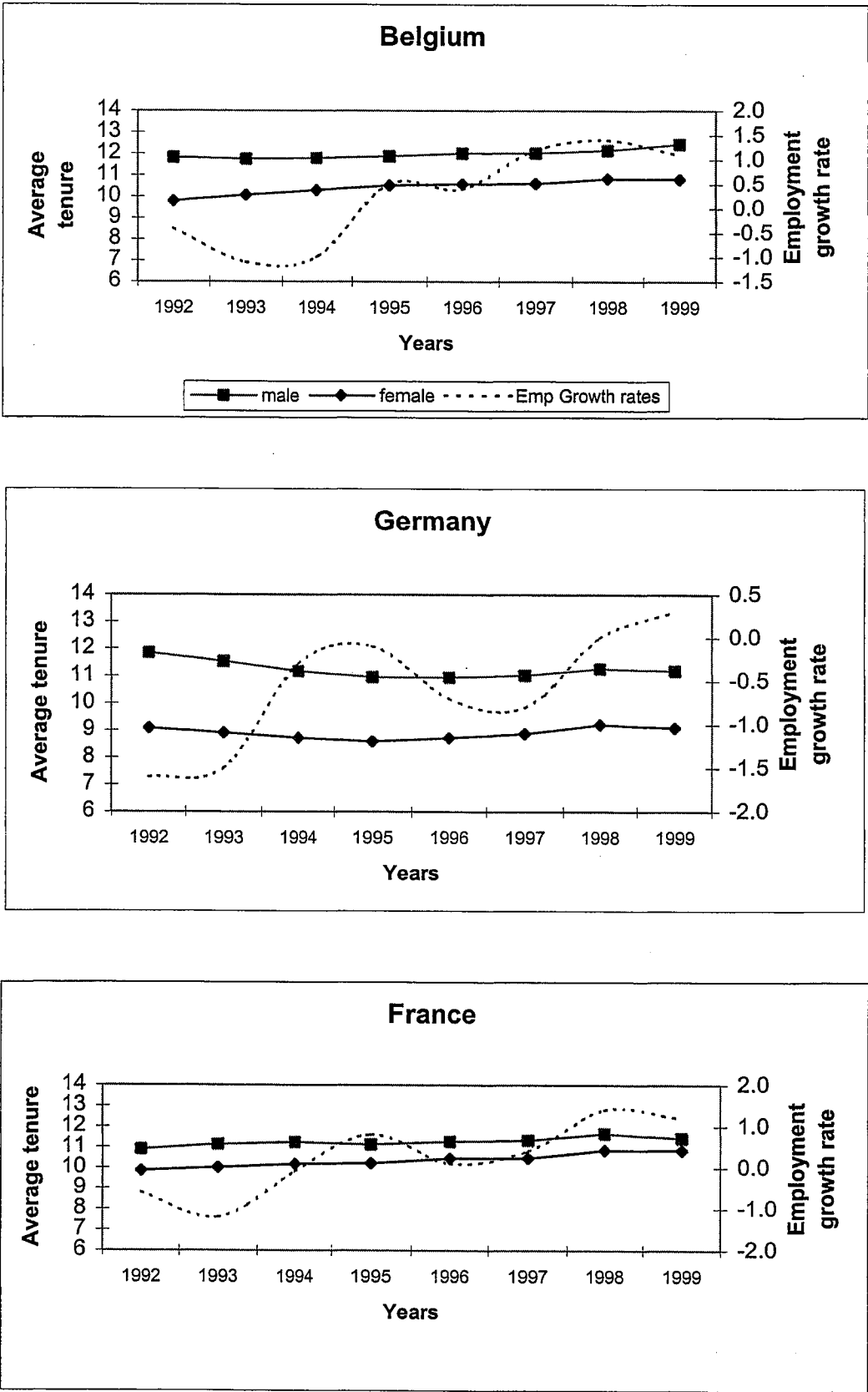
<i>Country</i>	<i>Mode</i>				<i>Average tenure</i>	
	1992	Frequency	1999	Frequency	1992	1999
Belgium	10-20 years	0.25	10-20 years	0.25	11.1	11.7
Denmark	2-5 years	0.20	10-20 years	0.18	8.8	8.5
Finland	5-10 years	0.23	10-20 years	0.23	10.7	10.0
France	10-20 years	0.25	10-20 years	0.23	10.4	11.3
Germany	10-20 years	0.22	5-10 years	0.23	10.7	10.4
Greece	>20 years	0.27	10-20 years	0.26	13.5	13.0
Ireland	10-20 years	0.23	10-20 years	0.18	11.1	9.6
Italy	10-20 years	0.27	10-20 years	0.27	11.9	12.2
Luxembourg	10-20 years	0.22	10-20 years	0.25	10.1	11.3
Japan	n.a.	n.a.	n.a.	n.a.	10.9	11.6*
Netherlands	2-5 years	0.23	10-20 years	0.21	8.9	9.5
Portugal	10-20 years	0.23	10-20 years	0.22	11.1	11.5
Spain	10-20 years	0.21	10-20 years	0.20	9.9	10.1
Sweden	10-20 years	0.23	10-20 years	0.25	10.6	11.9
United Kingdom	2-5 years	0.25	10-20 years	0.21	8.1	8.3
United States	n.a.	n.a.	n.a.	n.a.	6.7	6.6*

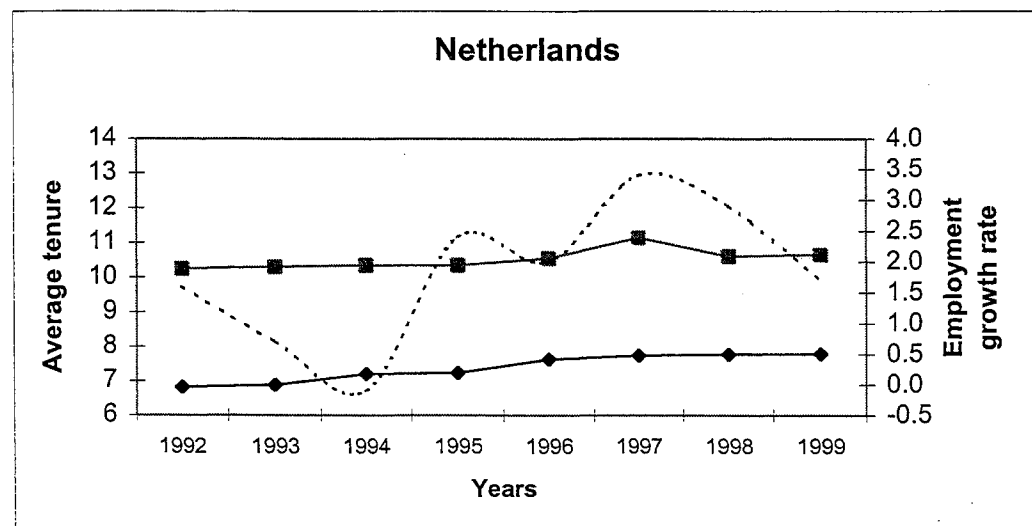
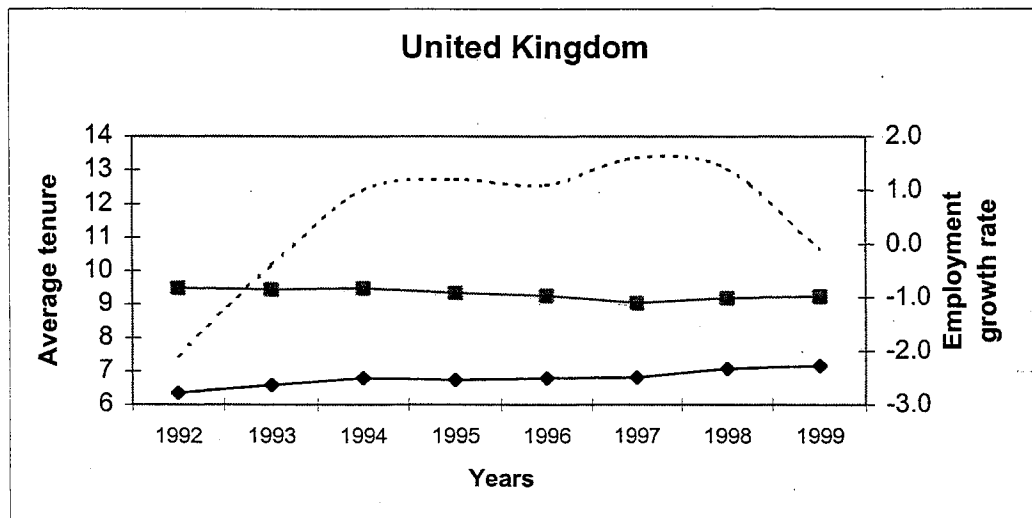
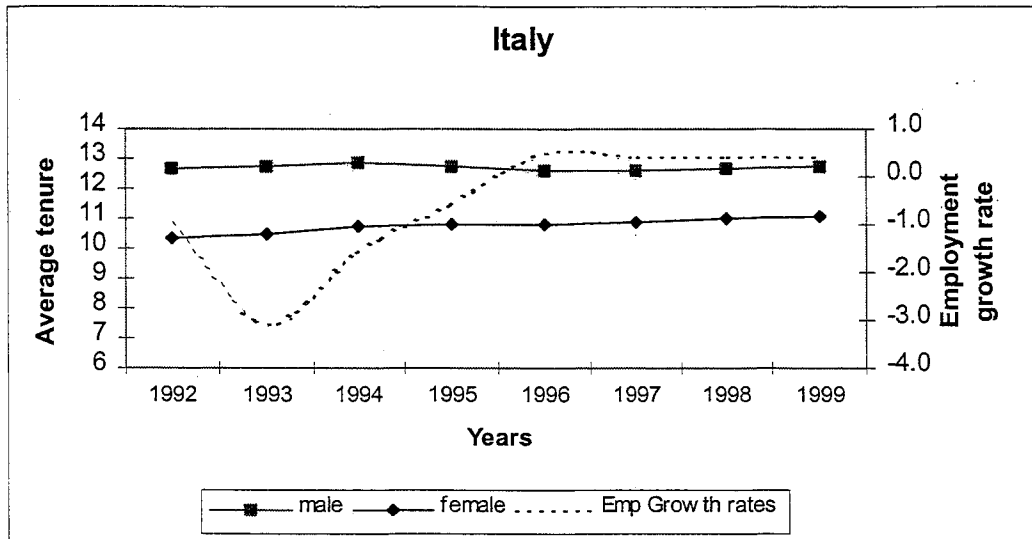
The analysis of the mode shows that labour markets in industrialized countries are still characterized by a high-incidence of long-run employment relationships. In 1999, the typical duration of employment tenure, as measured by the mode, appeared to be between 10 and 20 years (except for Germany where the typical duration was 5-10 years in 1999), with about a quarter of workers having a job of this duration. In comparison to 1992, the mode decreased only in Germany⁴ and Greece (from 10-20 years and more than 20 years to 5-10 years and 10-20 years, respectively) while in all the other countries it remained constant or even increased (this is the case of Denmark, Finland, the Netherlands and the United Kingdom). Therefore, the high incidence of long-run employment relationships has been a persistent feature of labour market during the last decade.

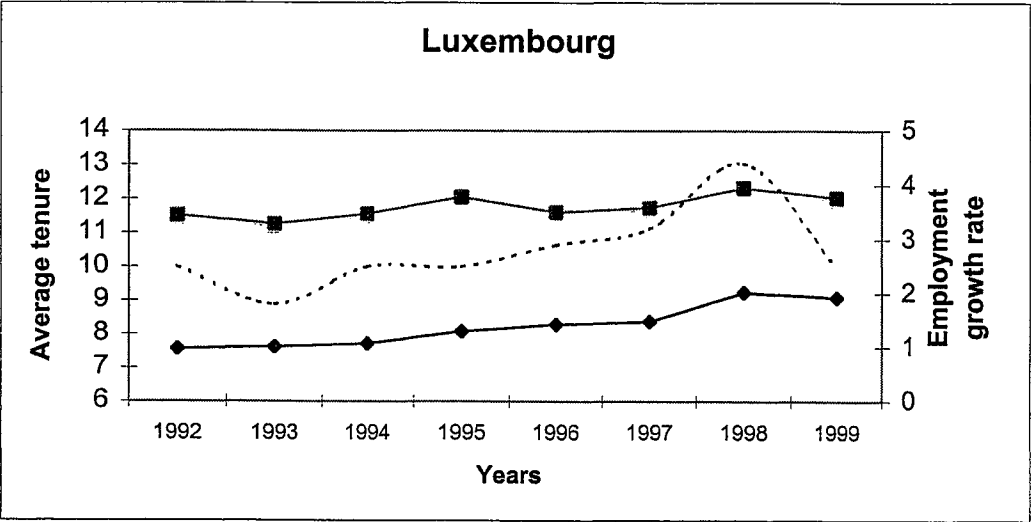
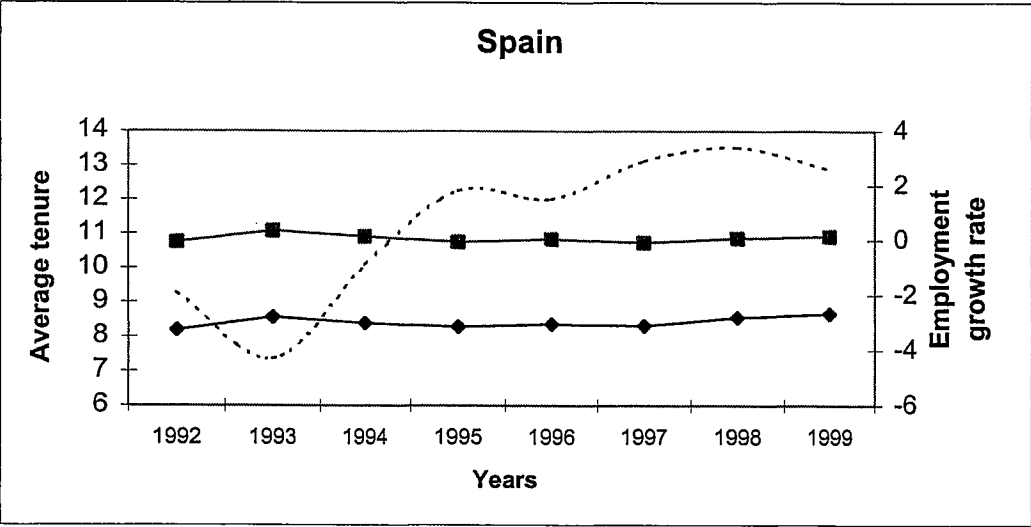
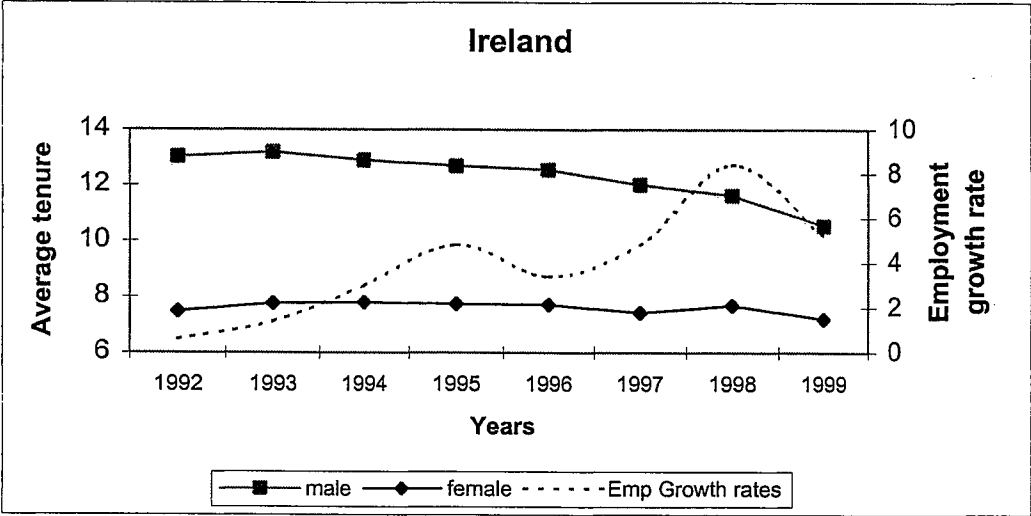
A similar pattern in tenure seems to emerge by looking at the changes in the mean of the distribution. Between 1992 and 1999, average tenure decreased in Denmark, Finland, Germany, Greece and Ireland but increased or remained unchanged in all other countries. If we analyse tenure by sex, the following pattern emerges. First, in almost all countries, average tenure is shorter for women than it is for men, except in Portugal and in the Scandinavian countries where the two are about the same. Female tenure, however, generally increased over the period. This certainly reflects the changing career patterns of women, including their higher labour-force rates and their growing access to more qualified jobs, which in turn, entail longer careers and a trend towards stabilization of jobs, even if they are part-time. Increasing possibilities of childcare had also a positive effect on participation rate and tenure for mothers. Male tenures remained broadly stable or increased in most countries. They slightly declined in Germany, Denmark, Portugal (from 1993), the United States and (lately) Finland. In Ireland, the shortening of average tenure since 1993 is quite marked. In Japan, average tenure increased over the 1980s and the 1990s, for both men and women. (See annex.)

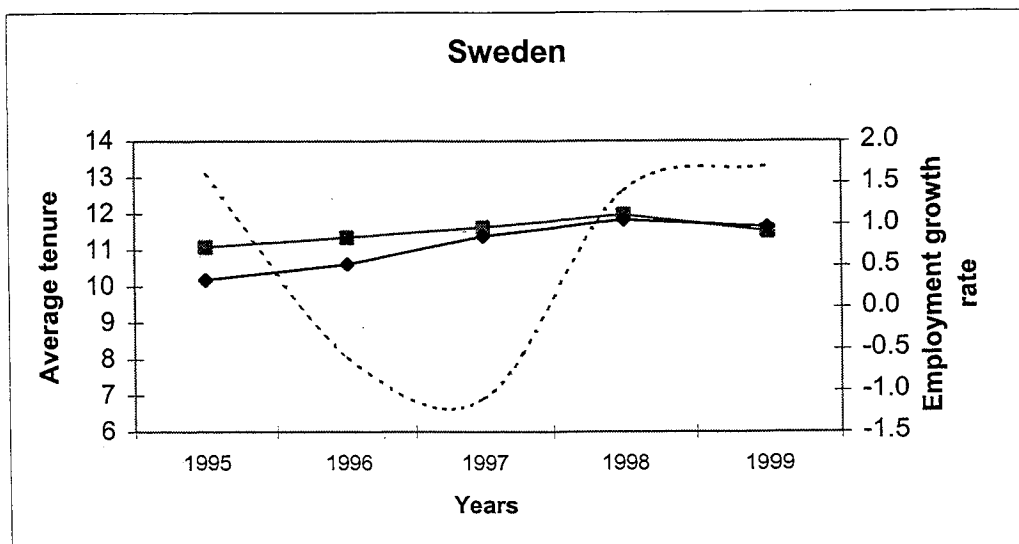
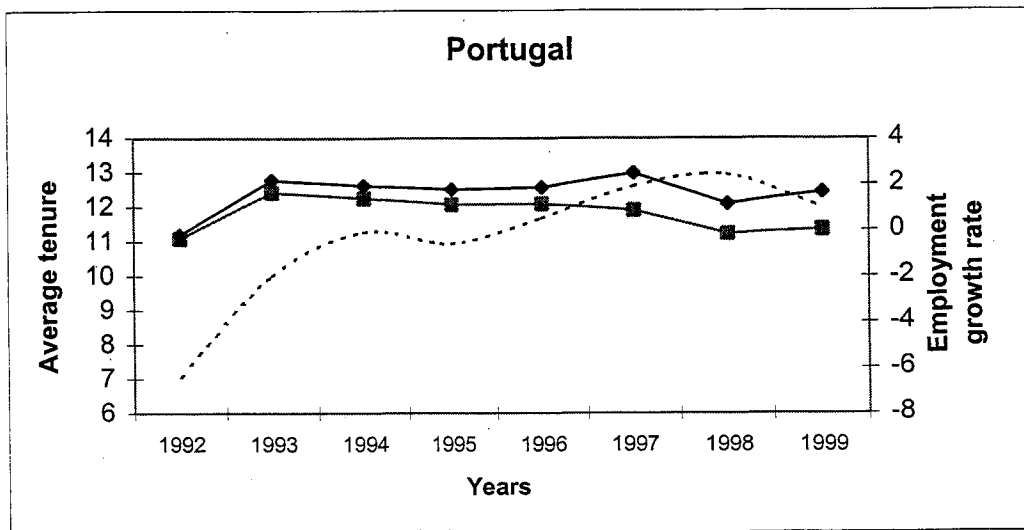
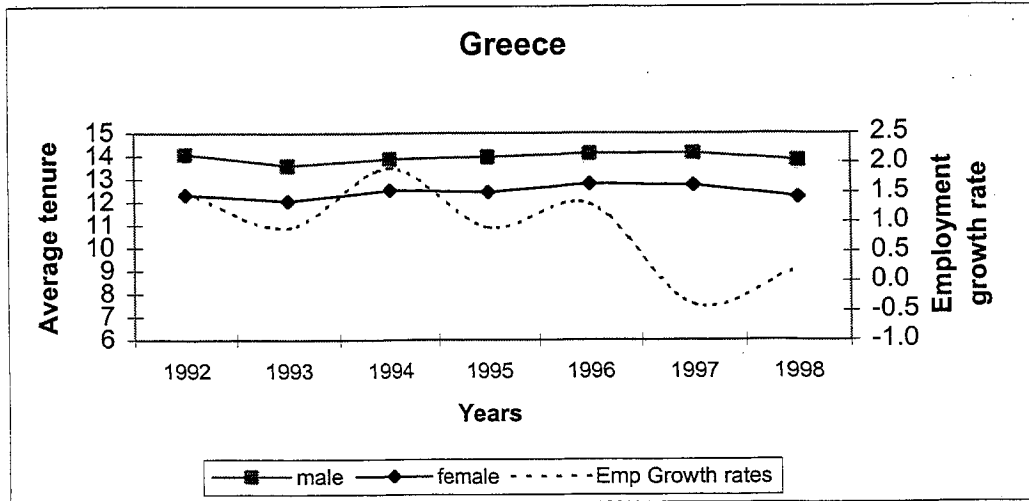
⁴ In Germany, employment tenure probably decreased because of mass lay-offs following reunification.

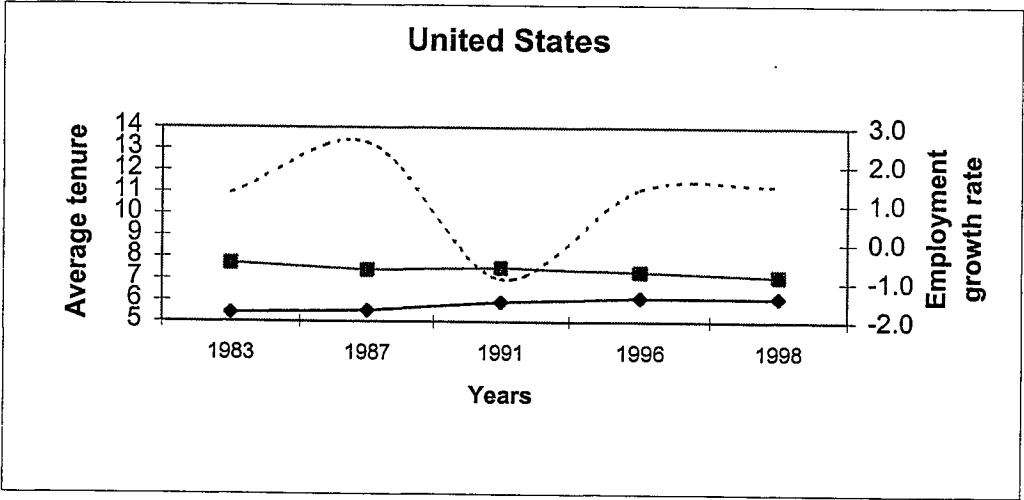
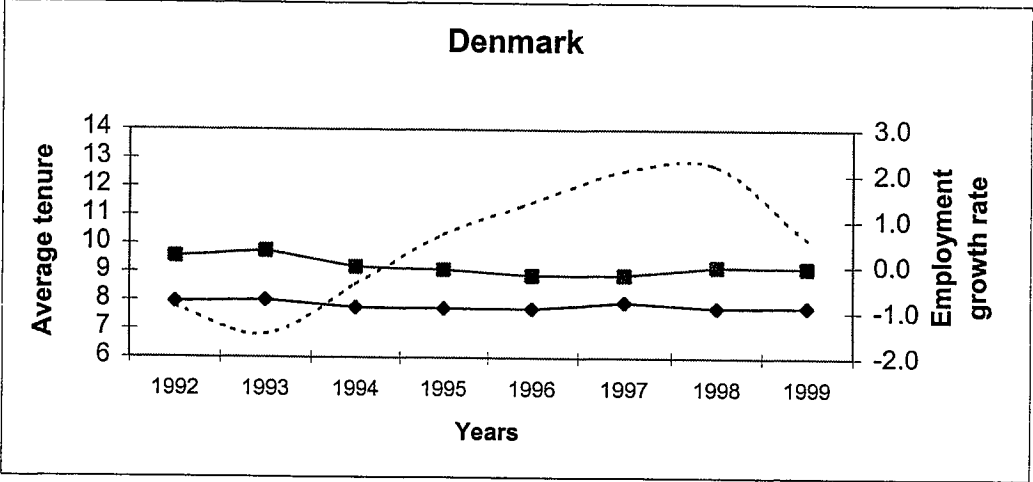
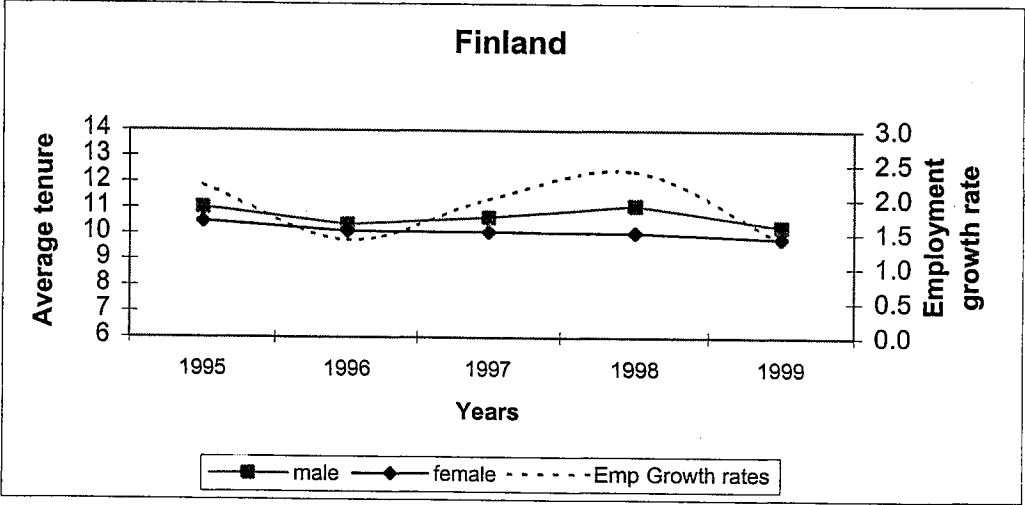
Figure 2: Average job tenure by gender

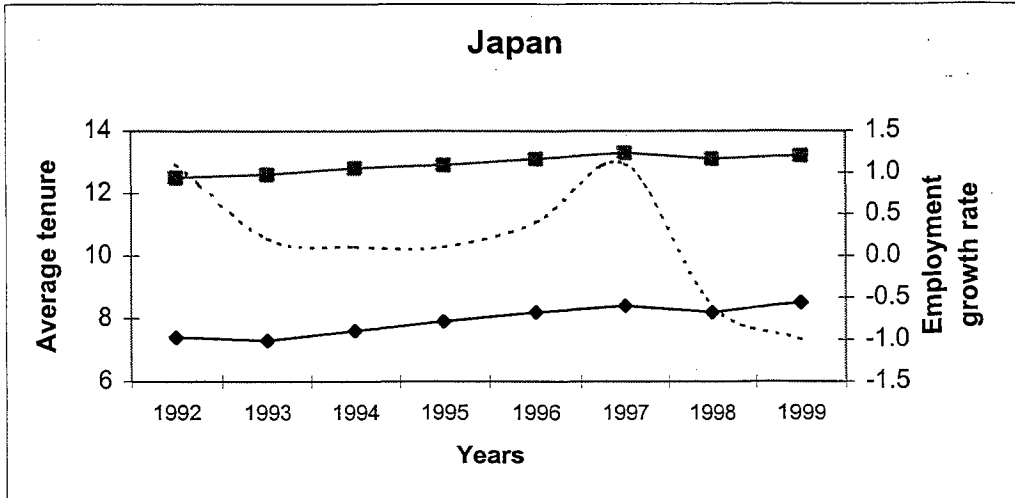












Source for employment growth rates: OECD, 1999a.

This direct investigation of job stability over the past ten years does not therefore support any alarmist view nor confirm the belief that there has been general increase in job instability in recent years in the industrialized countries.

3.2 Interpreting the preliminary evidence

In what follows we focus our analysis on average tenure. As just showed, average tenure did not show a tendency to decrease in the industrialized countries between 1992 and 1999. However, these patterns have to be interpreted carefully, because of two effects: composition and economic cycle. The composition effect stems from the fact that, as the average tenure is a weighted sum with respect to groups of workers with different characteristics, changes in the weights can mask the actual variation in tenure within each group. So aggregate trends in employment tenure may also reflect changes in the demographic composition of the labour force and in the economic cycle. Average tenure indeed highly depends on the age structure of the working population: workers change jobs more often when they are young – either because they want to accumulate different experiences and get promotions by changing jobs or because they are a target for dismissals. As a result, a country with a relatively young population (such as Ireland) will exhibit shorter average tenures than one with an ageing population (such as Japan). The same phenomenon occurs over time: given that older workers have longer tenure on average, an ageing population could be masking a shift towards less secure jobs.

In order to take into account this effect, the 1992-1999 variation in the average tenure was decomposed in two components⁵. The first component reflects the variation in the average tenure

⁵ By definition, the average tenure (AT) can be written as: $AT = \sum_i \sum_j \frac{n_{ij}}{n_j} \cdot \frac{n_j}{n} \cdot i$

where n_{ij} = number of workers having age j and job tenure i .

$$\Delta AT = \sum_i \sum_j \frac{n_{ij}}{n_j} \cdot \Delta \left(\frac{n_j}{n} \right) \cdot i + \sum_i \sum_j \Delta \left(\frac{n_{ij}}{n_j} \right) \cdot \frac{n_j}{n} \cdot i$$

change in the
age distribution

change in the unweighted
average tenure

due to changes in the age distribution; the second component measures the variation in the unweighted average tenure, i.e. the variation in the average tenure that would have occurred if the age distribution had remained unchanged as in 1992.

As shown in table 2, in the large majority of the countries considered, the shift in the age distribution towards elderly workers - whose tenure tends to be longer than for younger workers - seems to have determined an increase in the average tenure. Only in Finland, Greece and Ireland the age distribution has changed as to reduce it.

Once the effect of age is taken away, it becomes apparent that eight of the fourteen European countries in the samples show some reduction in average tenure. In Belgium for example, the increase in tenure seems mainly due to the “mechanical” effect of population ageing. So, this decomposition exercise shows that in some countries, the apparent stability in tenure was the result of the counteracting process of ageing workforce. This suggests that it is appropriate to analyse average tenure by age group.

Table 2: Decomposition of the changes in average tenure (1992-99)

Country	Age distribution	Unweighted average tenure	Total
Belgium	0.64	-0.04	0.60
Denmark	0.22	-0.49	-0.27
Finland ¹⁾	-0.21	-0.44	-0.65
France	0.56	0.34	0.90
Germany	0.26	-0.61	-0.35
Greece	-0.13	-0.34	-0.46
Ireland	-0.32	-1.25	-1.56
Italy	0.53	-0.30	0.23
Luxembourg	0.66	0.35	1.01
Netherlands	0.54	0.12	0.65
Portugal	0.28	0.17	0.45
Spain	0.15	0.06	0.20
Sweden ¹⁾	0.14	0.93	1.07
UK	0.25	-0.11	0.14

¹⁾ 1995-1999

Source: EUROSTAT

Table 3 reports the average tenure by age group in 1992 and 1999. In almost all countries (Portugal, the Netherlands and Spain being exceptions) tenure decreased for the age group 15-24, suggesting that job instability has increased for the new cohorts of entrants into the labour market. Only in some countries (Denmark, Finland, Germany, Greece, Ireland and the United States) the reduction in tenure appears generalised to all age groups, whereas in the remaining countries tenure of mature (25-44) and elderly workers (over 45 years) stayed constant or even increased. The analysis, therefore, shows that in some countries and for some age groups there has been a decrease in tenure and that this decrease has been more pronounced for young workers (15-24).

Table 3: Average tenure by age groups (1992-99)

Country	15-24		25-44		45+	
	1992	1999	1992	1999	1992	1999
Belgium	2.1	1.6	9.4	9.4	19.1	19.1
Denmark	1.9	1.6	7.0	6.4	14.9	14.5
Finland ⁽¹⁾	1.8	1.1	8.2	7.7	16.2	15.9
France	1.8	1.5	8.9	9.1	16.7	17.4
Germany	2.7	2.3	8.4	8.3	17.5	16.1
Greece	2.9	2.8	9.8	9.5	21.0	20.6
Ireland	2.5	1.9	9.5	8.5	19.6	17.4
Italy	3.2	2.5	9.9	9.5	19.2	19.2
Luxembourg	2.6	2.2	8.6	9.2	18.7	18.7
Netherlands	2.2	2.2	7.9	8.1	15.9	16.0
Portugal	2.6	2.8	8.9	8.9	18.1	18.5
Spain	1.6	1.6	7.9	7.9	17.0	17.2
Sweden ⁽¹⁾	2.2	1.9	8.2	8.8	15.9	17.5
UK	2.5	1.9	7.2	7.4	12.4	12.2
US	1.5	1.3	5.7	5.4	12.1	11.4

(1) 1995-1999

(2) 1991-1998

Source:EUROSTAT

This evidence, however, is not sufficient to establish the existence of a trend towards shorter tenure because of the economic cycle effect. As average employment tenure is a distribution, it is clear that the hiring rate matters as much as the separation rate. This implies that changes in hiring and firing do affect tenure, which will therefore depend *inter alia* on the business cycle. How does tenure react then to the economic cycle? It could be assumed to increase in boom periods – since firms are more inclined to offer stable jobs in times of economic buoyancy- and to decrease in recession periods, as people are laid off and general economic uncertainty induces firms to increase the flexibility of their labour force. Theoretically, the sign of the impact of the economic cycle on employment tenure is uncertain: during the upward phase of the cycle, tenure may either decrease (because of more people quitting and because of the shorter duration of newly created jobs) or increase (because of less lay-offs). In recessions, not only quits decrease (tenure increases) and lay-offs increase (tenure decreases) but available evidence also shows that job destruction occurs mainly for jobs of shorter duration (tenure increases again). Therefore, if we compared tenure in two points in time and these two points belong to different economic cycles or to different phases of the same cycle, we could conclude that tenure has decreased whereas this variation was simply due to the economic cycle.

In fact, research finds that both flows in and out employment tend to be counter-cyclical, so average employment tenure declines in upswings and increases in downturns (ILO, 1996). This counter-cyclical behaviour can be explained by different effects. As mentioned previously, when economic growth and employment recovers, more people are hired; this mechanically has the effect of reducing tenure as newly hired labour comes in with zero tenure. Voluntary quits also increase, because workers are offered better opportunities and change jobs. These two factors tend to *shorten* average employment tenure. But at the same time lay-offs are reduced, which at the opposite effect of *lengthening* tenure. So the resulting effect will depend on the quit rate and the lay-off rate: typically, the negative impact of voluntary quits offsets the positive effect of reduced lay-offs, thus generating an overall increase in the number of separations and a decline in length of tenure during economic upswings. The opposite happens in a recession: average tenure increases because the reduction in voluntary quits offsets the increases in lay-offs. However, the picture

becomes quite complicated if the distribution of lay-offs by tenure is considered as well. Voluntary quits usually concern more workers with shorter tenures. So, an increase of voluntary quits would result in lengthening average tenure of those remaining. However, those quitting voluntarily also go for new jobs and come in as newly hired labour, thereby shortening average tenure. For dismissals labour market institutions have to be taken into account. For example while firms usually apply an explicit or implicit rule of seniority (last in first out), early retirement rules reverse this since it is then the older staff with long tenures who will depart first; this has a shortening effect on average tenure (general and by age group). Generally speaking, a labour market characterized by high mobility exhibits shorter average tenure than a more static one, and a high rate of job creation has a shortening effect on average tenure.

Figure 2 clearly shows that counter-cyclical effect, at least for male tenure, in almost all countries. As a matter of fact, the decline in employment tenure observed in recent years could reflect the economic recovery that has taken place in some countries, such as the United States, rather than a structural shift towards increased job instability. In Ireland, employment tenure has been decreasing since 1993, clearly in opposite direction with the country's strong employment creation. To some extent, the recent slight shortening of employment tenure in Portugal and Denmark also coincides with employment growth. Similarly, an increase in employment tenure, in other European countries, could be the result of economic slack and hide a medium term decline in job stability.

4. Regression Analysis

In order to investigate whether there has been a tendency towards job instability we have tested the existence of a time trend by carrying out a panel regression analysis (across industries and over time) for each country⁶ of the European Union⁷ and each age group, taking into account the economic cycle effects. According to the estimates reported in table 4, a negative and statistically significant time trend was detected for some age groups in European Union. First of all, average tenure of young workers (age group 15-24) has decreased as an effect of time in most countries considered, except for Portugal, Denmark and Luxembourg. In the United Kingdom, Germany and Denmark, elderly workers (45+) experienced a similar negative trend while Portugal registered also a decrease in the tenure of mature workers (age group 25-44). A significant but positive time trend was instead found in the Netherlands for mature and elderly workers and in Luxembourg for mature workers only. Only in Italy and Ireland the decrease in tenure seems generalized to the workers of all age groups.

This can be due among other things to the restructuring in the economy (e.g. cuts in long-tenured public jobs as in Italy) or to a general increase in employment creation over all age groups (Ireland) or early retirement policies affecting the older age groups.

6 The equation estimated is: $AT_{js} = \beta_0 + \sum_{s=1}^{m-1} \beta_s \cdot d_s + \sum_{C=R,B} \beta_C \cdot \frac{\Delta E_{tC}}{E_t} + \beta_t \cdot Time$

where $s = 1, 2, \dots, m$ denotes the industry, d_s = industry-specific dummy and $\frac{\Delta E_{tC}}{E_t}$ accounts for the effect of economic cycle on average tenure in recession (R) and booms (B).

7 As said previously, data for Austria were excluded because they were unreliable. Data were not available for the United States nor Japan.

Table 4: Time trend in average tenure by age groups (1992-99)

Country	Age	Time	t-ratio	signif.	Adj R2	N. obs.
Belgium	15-24	<u>-0.078</u>	-3.988	99%	0.28	114
	25-44	-0.057	-1.514	not sign.	0.83	117
	45+	0.004	0.143	not sign.	0.92	125
Denmark	15-24	-0.127	-1.569	not sign.	0.27	113
	25-44	0.014	0.261	not sign.	0.63	123
	45+	<u>-0.039</u>	-1.768	90%	0.46	121
Finland1)	15-24	<u>-0.092</u>	-2.774	99%	0.64	64
	25-44	0.029	0.571	not sign.	0.82	70
	45+	-0.011	-0.165	not sign.	0.70	69
France	15-24	<u>-0.040</u>	-2.477	95%	0.20	124
	25-44	-0.021	-0.662	not sign.	0.87	126
	45+	-0.027	-0.733	not sign.	0.83	126
Germany	15-24	<u>-0.053</u>	-4.008	99%	0.47	123
	25-44	0.019	0.619	not sign.	0.88	123
	45+	<u>-0.020</u>	-1.945	90%	0.77	123
Greece	15-24	<u>-0.037</u>	-2.802	99%	0.48	116
	25-44	-0.009	-0.361	not sign.	0.93	119
	45+	-0.047	-1.425	not sign.	0.87	118
Ireland	15-24	<u>-0.067</u>	-8.466	99%	0.77	119
	25-44	<u>-0.038</u>	-5.010	99%	0.91	121
	45+	<u>-0.023</u>	-2.378	95%	0.89	121
Italy	15-24	<u>-0.090</u>	-5.619	99%	0.28	118
	25-44	<u>-0.016</u>	-3.512	99%	0.89	119
	45+	<u>-0.016</u>	-3.091	99%	0.91	119
Luxembourg	15-24	-0.027	-0.331	not sign.	0.29	108
	25-44	<u>0.039</u>	5.161	99%	0.89	117
	45+	0.064	1.510	not sign.	0.79	117
Netherlands	15-24	<u>-0.028</u>	-1.710	90%	0.28	119
	25-44	0.022	1.730	90%	0.62	126
	45+	0.038	2.401	95%	0.58	126
Portugal	15-24	-0.076	-1.273	not sign.	0.61	114
	25-44	<u>-0.036</u>	-4.775	99%	0.86	119
	45+	<u>-0.025</u>	-2.027	95%	0.71	119
Spain	15-24	<u>-0.031</u>	-3.004	99%	0.51	112
	25-44	-0.049	-1.315	not sign.	0.83	119
	45+	0.029	1.053	not sign.	0.91	118
Sweedeen1)	15-24	<u>-0.128</u>	-3.792	99%	0.71	58
	25-44	-0.047	-0.561	not sign.	0.61	65
	45+	0.036	0.681	not sign.	0.89	62
UK	15-24	<u>-0.063</u>	-4.314	99%	0.54	126
	25-44	0.005	0.162	not sign.	0.88	126
	45+	<u>-0.017</u>	-1.746	90%	0.79	126

1) 1995-1999

Source:EUROSTAT

To sum up, there was no general trend towards declining employment tenure over the period 1992-99 in the European Union: average tenure of young workers (15-24) seems to have decreased in most countries considered; as for mature and elderly workers, tenure has shown a more diversified pattern, increasing in some countries and decreasing in others. Moreover, these findings do not imply a general increase in job instability for young workers: indeed, the key issue is whether young people are primarily confronting a labour-market access problem -i.e. they have to queue up in temporary jobs-, while waiting for a permanent job, or whether they are "trapped" in insecure, secondary jobs with no bridge to stable employment. Since age is by definition a

temporary characteristic, the first hypothesis would imply that young workers would be only “temporarily outsiders” of the labour market. The interpretation of our results would therefore need further investigation in the light of the different theoretical tracks we briefly reviewed in section two. The concluding section goes quickly through them.

5. Concluding Remarks

This paper has shown that in most of the industrialized countries considered there was no systematic negative trend in average tenure over the period 1992-99. Job stability as measured by employment tenure seems to be generally stable in the great majority of these countries. This confirms earlier findings on the subject. However, controlling for the effects of age and the business cycle on employment tenure, econometric analysis shows several countries to have experienced some decline in average tenure. Such a trend was not general for all workers but affected mainly young workers. Although the interpretation of this finding requires further analysis, the different theories of tenure permit to formulate some preliminary hypotheses.

One possible explanation of the downward trend in average tenure of young workers is that they have a lower level of firm-specific human capital as a result of their shorter work experience. Therefore, as globalization and ITC make shocks in production more frequent and more pronounced, young workers are likely to experience a reduction in their employment tenure. If this interpretation proved correct, it would imply that the observed increase in job instability would remain limited to young workers.

A second possible explanation is that the deregulation of the labour markets over the last decade (that occurred in most industrialized countries through the weakening of employment protection legislation) affected new entrants in the labour market more than mature workers. This could be due to a bias in the legislation, to the extent that it reduces the degree of protection of newly created jobs while preserving larger guarantees on existing jobs. For example, there has been a general tendency towards significant deregulation of temporary contracts over the 1990. To the extent that young workers are likely to start by holding a fixed-term contract, it may be interesting to explore if our hypothesis is true by comparing the link between EPL for both regular and temporary work and employment tenure at the beginning and at the end of the 1990s. If this is confirmed, we may expect lower employment tenure to become progressively a persistent feature of industrialized economies as mature workers exit the labour market.

A final, possibly complementary, interpretation refers to workers’ heterogeneity, namely that the new cohorts of entrants in the labour market may have a preference for higher work mobility. While the results of the surveys reviewed in section two do not permit to assess the validity of this explanation, this change in the attitude towards work would result in a persistent reduction in employment tenure.

The paper presented could not go into details on a series of important questions and opens up an important research agenda.

For example, data restrictions remain: it could well be that a long-term employment relationship is an addition of several temporary contracts in the same firm or even with several firms belonging to the same holding. It could also be the result of a long-term relationship with one temporary agency and in reality mask a very flexible and changing job market. In general, the relationship between forms of contract and tenure could be subject to deeper analysis in the future.

There is also research needed on the life-cycle behaviour of tenure. Given the age relatedness of tenure, important changes in the life-cycle related labour supply behaviour of individuals might impact on employment tenure. One example: child bearing age has shifted about

three years from around 27 years to around 30 years. This could have implications as mothers (and likewise fathers) might seek for stable jobs later in life. It would be particularly enriching to know more of this behaviour changes in a cross-country comparative analysis.

Another important topic is also research on productivity and tenure. It is often argued that long tenure (which corresponds also to more advanced age) impacts negatively on productivity as skills get outdated and older workers are less willing to start training. Experience could compensate for the loss in trainability but there is some reason to assume that the tenure/productivity curve is actually one of decreasing returns. In developed countries, the practice of early retirement might be an answer to this, but because of demographic and cost reasons the policy of early exit could come to a halt. Would this imply that older workers will earn lower wages or will this lead to state policies compensating the loss by "in-work benefits" for older workers?

Finally, the relationship between tenure and the perception of security is also a paradox that needs some answers. Long average tenure, while it is loosely positively correlated with the perception of employment security, does in many cases not lead to a correspondingly high perception of employment security. Japan, where tenure is long but insecurity also, is a case in point. Denmark, with lower average job tenure and more mobility shows a much higher share of people perceiving their jobs as secure.

Such diverging patterns of tenure and employment security, as well as the question of data reliability show that there is still more research needed in order to answer the question of employment stability and flexibility and its economic and social impact.

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Annex: Sources and definitions of data

1. Data sources

Employment tenure statistics generally refers to the length of time a worker has been with his or her current employer. Sometimes the tenure question is: "When did you start working for this employer or as self employed"? Or "How long have you been working continuously for your present employer" The wording is very important as it may result in different responses. The use for example in the CPS supplements of "job" was ambiguous as a promotion could be interpreted by the respondent as a change of job. Usually tenure questions are asked in households survey; the only exceptions here are Japan, where most of the data come from employer responses.

European Union

Unpublished data from the European Community Labour Force Survey provided by EUROSTAT are used for employment tenure. These data are available from 1992. The month and the year when each person started working for his/her current employer or as self-employed is recorded. Average and median employment tenure data were provided in months.

Japan

Tenure data are from *Chingin Kozo Kihon Tokei Chosa Hokoku* (Basic Survey on Wage Structure), Policy, Planning and Research Department, Ministry of Labour. This is a yearly survey of private sector enterprises and public corporations under the National Enterprise Labour Relations Law or the Local Public Corporation Labour Relations Law. It includes establishments with ten or more regular employees and excludes agriculture, forestry and fisheries. Regular employees include persons hired for an indefinite period, as well as those hired for a fixed period longer than one month and temporary or daily workers hired for eighteen days or more in April and May.

United States

Data on employment tenure are unpublished figures from the Current Population Survey supplements. Data refer to wage and salary workers.

2. Quality of the data

An issue that arises when examining employment tenure data is the quality of the data. Information on how long individuals have worked continuously for their current employer is available periodically. Yet this information often is viewed as being relatively crude, given that durations are sometimes measured in years and the frequency distributions tend to exhibit spikes at years that are multiple of five. Hence the information may contain substantial recall or rounding errors. Evidence from the Panel Study of Income Dynamics indicates for example that the responses to employee tenure questions were often inconsistent with calendar time⁸ (Brown, Light, 1992).

⁸ For example in a particular year an individual might claim to have been working for an employer for three years, but in the subsequent year the same person would claim to have been working with the same employer for six years.