



**PROF. DR. GERHARD BOSCH**

**DR. ALEXANDRA WAGNER**

**WORKING TIME AND  
WORKING TIME PREFERENCES  
IN EUROPE**

8th International Symposium  
of Working Time

Amsterdam  
14 - 16 March 2001

The paper presents a data analysis based on a large scale representative survey on "Working Options of the Future" which was conducted in 1998 by Infratest Burke Sozialforschung and a consortium of national fieldwork institutes in EU15+NOR on behalf of the European Foundation for the Improvement of Living and Working Conditions in Dublin. The survey makes it possible to analyse whether or not current working time structures reflect the preferences of employed and not employed. The working time preferences are analysed at country, individual and household level.

The paper shows that actual hours are highly differentiated in Europe because of different levels of economic development, social and labour market institutions and especially female employment rates. However, the preferences show a clear trend of convergence at all three levels of the analysis. The preferences are highly concentrated around a corridor of working hours duration which could be described by moderate full-time or substantial part-time. Those with very long hours want to reduce their working hours, those with very short working hours expressed the desire to work longer. The preferred working hours in all 16 countries are shorter than the actual hours.

The realisation of the preferences in all countries would require the creation of jobs for the non-employed who wish to work. In countries with very low female employment rates (EL, E, I), both the volume of working hours in the whole economy and the employment rate have to be increased substantially. The volume of working hours can be increased only by economic growth. To rely only on work sharing in these countries would continue the exclusion of women from the labour market. In countries with a high employment rate (S, DK, NOR) the desired volume of work will shrink and work sharing will be more important in relation to growth policy. To fulfill all the working time preferences would probably lead to labour shortage in these countries.

The paper shows that the policy of the European Union to increase the employment rate corresponds to the wishes of the EU-population in working age. It also shows that this goal can not be reached within the existing institutional framework. In many countries social institutions are still designed around the traditional or modernized breadwinner model and not around a more equal distribution of paid and unpaid work between men and women.

## **1 Growth or redistribution – a mendacious dichotomy?**

If employees' working time preferences and the employment and working-time preferences of the economically inactive were to be realised, the consequences for the economy in general and for employment policy in particular would be far-reaching. As we will see, it would not be sufficient to distribute a given volume of work differently by making a few organisational changes at the micro level, since important macroeconomic parameters, such as the volume of paid work and the number of jobs in the economy, would also be affected. In order to be able to determine these macroeconomic changes more precisely, the following two questions in particular must be answered:

1. If working-time preferences were to be realised, would the volume of work in the economy as a whole have to be reduced or increased or simply redistributed?
2. Would the number of jobs and the employment rate have to be increased or would it be only the working time of those already in employment that would have to change?

The demands on employment policy differ considerably depending on how these questions are answered. If the answer to the first question is that the volume of work would have to be increased, then working-time preferences cannot be realised without growth over and above the employment threshold. The employment threshold is the rate of growth in GNP from which employment begins to rise and hence exceeds the increase in productivity. The employment threshold varies considerably from country to country, depending on how fast the pace of innovation and rationalisation is<sup>1</sup>. Particularly high rates of productivity increase can be achieved by countries seeking to catch up with those in a more advanced state of modernisation. If the desired volume of work equates to the actual volume of work, then a rate of growth equivalent to the employment threshold is sufficient. If the desired volume of work is lower than the actual volume, then it is even possible to remain below the employment threshold for a period without causing employment problems. There are many examples to show that employment can be increased both by increasing the volume of work and by keeping the volume of work constant. The strong employment growth in the Netherlands in recent decades was achieved by redistributing work while keeping the overall volume of work more or less constant; in the USA, on the other hand, employment growth required a rapid expansion in the total volume of work in the economy (ILO 1996: 16). The consequences of these different development paths for employment policy are obvious. In the Netherlands, growth and working time policy were linked and the result was a considerable reduction in individual working times. In the USA, individual

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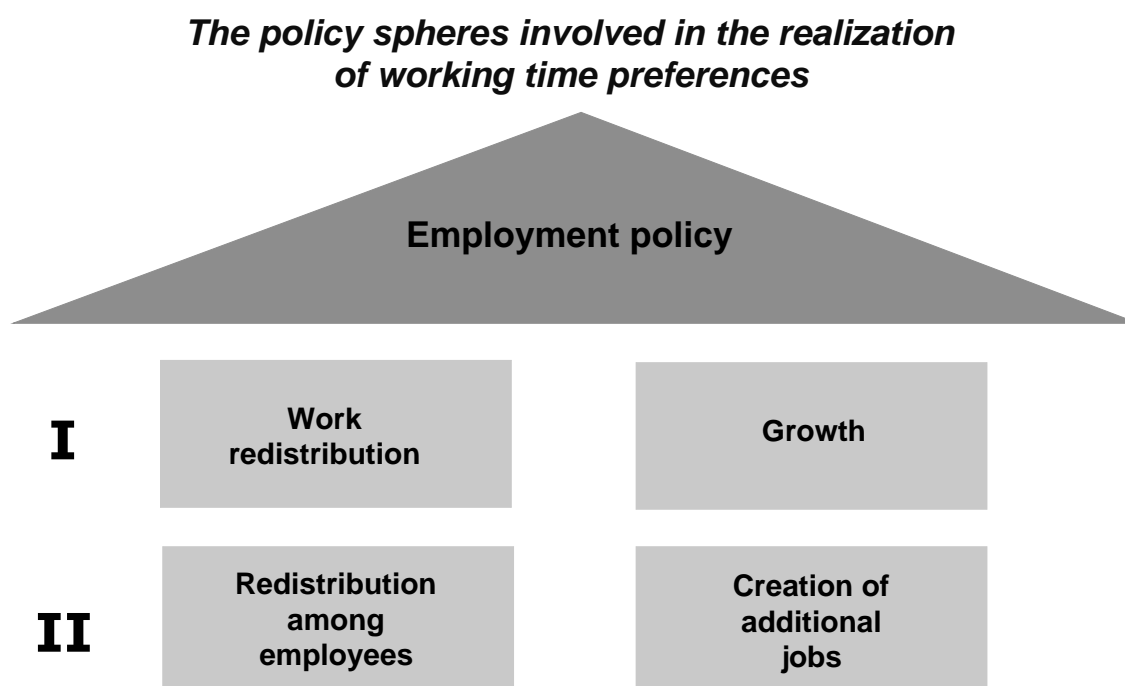
1 The ILO has calculated the employment threshold for numerous countries. Between 1971 and 1995, the average rate of growth required for the economy to start creating jobs was 0.7% in the USA and 1.9% in the EU 12. Within the EU, the rates fluctuated very sharply. Since they are still lagging behind somewhat in the modernisation process, the less developed EU member states have a somewhat higher employment threshold than the more developed ones. Thus the employment threshold in Sweden is 1.4%, in Denmark 1.7% and in Germany 1.4%. In Ireland, on the other hand, it is 3.4% and in Spain 2.6% (ILO 1996: 20).

working times have increased (OECD 1998) and the growth in employment was achieved solely through economic growth. It is important at this point to stress that growth and working time policy do not have to be opposites – as the Dutch example shows, they can also complement each other. And in a competitive economy in which firms attempt to create advantages for themselves through rationalisation, there is no doubt that the volume of work will decline permanently if there is no growth.

The answer to the second question also has far-reaching implications for employment policy. If all that has to be done in order to realise all preferences is to redistribute working time among employees, then priority must be given to increasing the opportunities for choice available to those already in employment and to making work organisation more flexible. The problem in this case is one of the reorganisation of the available work. On the other hand, if those not currently in employment are to be integrated into the labour market, then it will be necessary to create additional jobs and to put in place labour market policy measures to ensure that such integration is possible in the first place (e.g. training programmes). The two strategies will have to be combined if the dual objective of redistributing work within the employed population and at the same time raising the employment rate is to be achieved and if the additional jobs are to be created by redistributing working time between the employed and the non-employed. Here too, it is important to stress that work reorganisation and job creation are complementary and not contradictory strategies. However, the two strategies must be weighted differently, depending on the initial situation and on working time preferences. The same is true of the relationship between work redistribution and growth policy. As a result, attempts to implement working time preferences in the individual countries will require different mixes of measures from the four policy spheres, which are summarised in Figure 1. It is clear from that diagram that the four spheres are located at very different levels. Level I (work redistribution and growth) is where the necessary changes in macroeconomic parameters take place. Level II is where employees' preferences are actually implemented, which may require a redistribution of working time between those already in employment or the creation of new jobs.

We are unable, on the basis of our investigation, fully to answer the question of how the volume of work and the number of jobs in the economy as a whole would have to change if all working time preferences were to be realised. Data were gathered on employees' actual and preferred working times and on the employment and working time preferences of those not currently in employment, from which we calculated the actual and preferred volume of work. However, the existing volume of work cannot be easily redistributed. It would not remain constant if redistributed, since firms react to a reorganisation of work by putting in place rationalisation measures. The volume of work and the number of jobs are not constant values (Bosch/Lehndorff 2001). Moreover, even if the volume of work in the economy as a whole remains constant, new jobs are continuously being created while others disappear, so that any strategy aimed solely at achieving redistribution and ignoring the need to create jobs as well would be doomed to failure.

Figure 1:



We are well aware that the volume of employment and work in the economy as a whole is an aggregation of very dynamic individual values. Furthermore, the desired volume of employment and work is also influenced by changes in the number of people of working age, which is not the subject of our investigation. To this extent, it is not possible with the data available to us to determine the finer points of the policy mix required (see Figure 1) in the individual countries. Nevertheless, the data do show pronounced differences between the countries in the macroeconomic challenges they will have to meet, which suggests that the appropriate policy mix will also turn out to differ very considerably from country to country.

## **2 The actual and preferred volume of work**

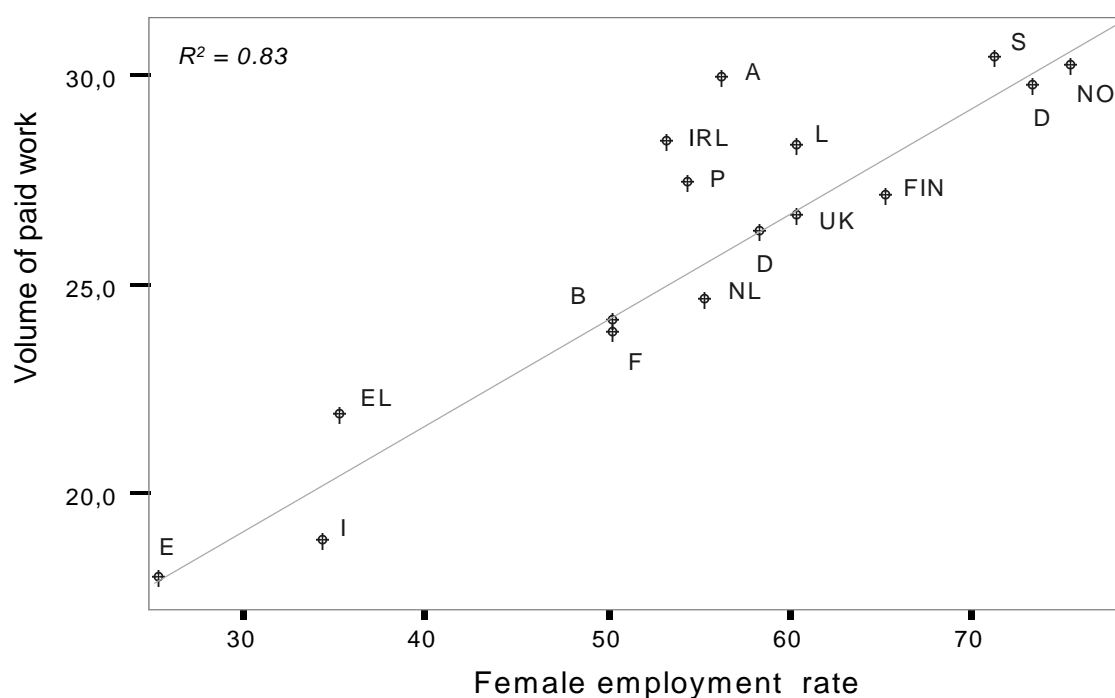
In order to make the volume of work, which is normally given in hours worked per country, comparable across countries, we relate it to the number of people of working age. In the EU 15+NO, the average volume of paid work per person of working age is 23.7 hours per week (Table 1). This average figure conceals considerable differences between countries. In Spain, the volume of work is only 17.7 hours per week, while in Sweden it is 30.2 hours, that is 70% greater. It is noticeable that the Southern European countries, with the exception of Portugal, have the lowest volume of paid work, while the Scandinavian countries lead the table by a considerable distance. The decisive factor influencing the actual volume of work in a country is

the level of female labour market participation. Calculation of a simple bivariate correlation calculation confirms that the volume of paid work increases as the female employment rate rises. The Bravais/Pearson correlation coefficient  $R$  between the female employment rate and the volume of work is 0.913, which explains 83% of the variation between the countries (Figure 2). The relative weight of the service sector also exerts a significant influence ( $R=0.616$ ), which is hardly surprising, since most women are employed in the service sector.

Table 1: *Volume of paid work per person of working age (hours per week)*

		Actual	Preferred	Difference (col. 3 – col. 2 as % of col. 2)
Austria	(A)	29.7	28.1	-5.4%
Belgium	(B)	23.9	24.0	0.4%
Denmark	(DK)	29.5	26.9	-8.8%
Finland	(FIN)	26.9	26.5	-1.5%
France	(F)	23.6	24.9	5.5%
Germany	(D)	26.0	26.4	1.5%
Greece	(EL)	21.6	23.8	10.2%
Ireland	(IRL)	28.1	28.2	0.4%
Italy	(I)	18.6	22.2	19.4%
Luxembourg	(L)	28.1	26.6	-5.3%
Netherlands	(NL)	24.4	24.1	-4.7%
Portugal	(P)	27.1	27.5	1.9%
Spain	(E)	17.7	23.4	32.2%
Sweden	(S)	30.2	29.6	-2.0%
United Kingdom	(UK)	26.4	25.1	-4.9%
Norway	(NO)	30.0	28.6	-4.7%
EU15 + NO		23.7	25.0	5.5%

Figure 2:



*Table 2: Volume of paid work per person of working age and average working hours of dependent employees*

	<b>Volume of paid work</b>	<b>Average working hours of dependent employees</b>
Sweden	30.2	38.1
Norway	30.0	36.7
Austria	29.7	41.1
Denmark	29.5	36.4
Ireland	28.2	38.9
Luxembourg	28.1	38.6
Portugal	27.1	39.7
Finland	26.9	39.1
United Kingdom	26.4	37.3
Germany	26.0	37.5
Netherlands	24.4	33.7
Belgium	23.9	37.5
France	23.6	38.0
Greece	21.6	39.8
Italy	18.6	37.4
Spain	17.7	39.3

Correlation coefficient R=0.01

Contrary to what is generally assumed, however, the length of individual working times does not have any significant influence on the total volume of work in the economy as a whole (cf. Table 2). All combinations can be found here, as Figure 3 shows.

*Figure 3:*

	<b>Average working time high *</b>	<b>Average working time low *</b>
<b>Volume of work high<sup>°</sup></b>	<b>Austria Ireland Luxembourg Portugal</b>	<b>Norway Denmark Sweden</b>
<b>Volume of work low<sup>°</sup></b>	<b>Finland Greece Spain</b>	<b>United Kingdom Germany Netherlands Belgium France Italy</b>

<sup>°</sup> Volume of work: high >27 hours, low < 27 hours

\* Working time: high > 38,5 hours, low < 38,5 hours

If all working time preferences were to be realised, then with the current potential labour force the volume of work in EU15+NO would have to rise by 1.3 hours per week per person of working age, which equates to a 5% increase. The differences in the preferred volume of work between the countries are considerably less marked than those in the actual volume. The difference between the country with the highest preferred volume (Sweden) and the country with the lowest preferred volume (I) is only 7.4 hours, which is considerably lower than the widest gap in the actual volume of work (12.5 hours). This convergence comes about because in those countries with high volumes of work there tends to be a preference for a reduction, while in those with lower volumes of work the reverse is the case. In this regard, the countries can be divided into the following three groups:

- In eight countries (B, FIN, D, IRL, NL, NO, P, S), the volume of work would remain virtually unchanged (+/- 5%).
- In four countries (F, EL, I), the volume of work would have to rise sharply (by more than + 5%).
- In four countries (A, DK, L, UK) the volume of work would decrease sharply (by more than - 5%).

Once again, the female employment rate is the most important factor influencing the rate of change in the volume of work. In those countries in which the female employment rate is already very high, the preference tends to be for a reduction of the volume of work (but not of employment rates, as we will see in 4.3 below). In those countries where the female employment rate is low, the preference will be for a sharp increase in the volume of work. The correlation coefficient between the two values is  $R = -0.880$  (Table 3).

*Table 3: Factors determining the change in the preferred volume of work*  
(Bravais/Pearson correlation coefficient  $R$ )

	Change in the preferred volume of work
Female employment rate	-0.880
Easy to find a job	-0.725
Unemployment rate	0.699
Average hourly wage*	-0.535
Share of the service sector*	-0.645
Trade union density*	-0.520
Income inequality*	0.458

Significance > 0,5

\*These data were taken from other sources.

There are also significant correlations between the change in the preferred volume of work and other influencing factors. True, these correlations must be interpreted with some caution, since the various factors are also correlated with each other. Nevertheless, the following statements can be made without too much fear of contradiction.

- In countries with a bad employment situation, a greater increase in the volume of work will be desired than in countries with a more favourable labour market situation. There is a strong negative correlation between the desired change in the volume of work and declarations by employees that it is easy to find a job. This suggests that many working time and employment preferences have already been realised because of the favourable labour market situation and that as a consequence there is no desire for any major changes. On the other hand, there is a positive correlation between the unemployment rate and the desired change in the volume of work. When unemployment is high, many preferences cannot be realised and in consequence there will be a desire for considerable increases in the volume of work in the economy as a whole. When the hourly wage rate is high, the general preference will be for smaller increases in the volume of work than in countries with a lower hourly rate, or even for a reduction. This negative correlation between the desired change in the volume of work and the level of the hourly wage rate suggests that as incomes rise free time becomes more attractive than additional earnings.
- In countries with high income inequalities, there will be a preference for an increase in the volume of work. In these countries, many low earners will seek to boost their earnings by working longer hours.
- In countries where the service sector has a high share of total employment, the general preference will be for a reduction in the volume of work. One possible reason for this is that many women are employed in the service sector. Another is that there are more opportunities in the service sector for those seeking jobs with working times below the full-time norm, so that many working time and employment preferences are likely to have been realised already.
- In countries with a high trade union density there will tend to be a preference for a reduction in the volume of work. We know from OECD studies (OECD 1996) that there is a strong correlation between income inequality and trade union density. Where trade unions are strong, income equality is greater than where they are weak. Thus in countries with strong trade unions there are fewer low earners seeking to extend their working hours. Moreover, strong trade union representation may also ensure that working time preferences are realised, since those preferences will not even be expressed unless workers see some likelihood of their being implemented. And trade unions in those countries with a high trade union density have a more positive attitude than those in countries with a lower trade union density towards flexible forms of working time, which offer many women their only realistic employment opportunities.

- It has become clear that growth policy and working time policy must be differently weighted in the various countries if working time preferences are to be realised. In those countries in which the general preference is for no change or even a reduction in the actual volume of work, the realisation of working time preferences will be dependent on the existence of an active working time policy to lay the foundations for the desired redistribution of the available work. In those countries in which the preferred volume of work is significantly greater than the actual volume (F, EL, I, E), the volume of work must be increased by means of an active growth policy. Otherwise, it will prove impossible to realise preferences. Thus countries in the latter group need higher growth rates than those in the former group. In part, this is a question of catching up with other, more developed countries, since particular preferences for a sharp increase in the volume of work were expressed in countries such as Greece, Spain, Italy and Portugal, where per capita incomes are relatively low. However, it is also clear that there would be greater scope for working time policy if incomes were more evenly distributed. Furthermore, it can be seen from our figures that tensions can develop between growth and working time policy. Thus the sharp reduction in the desired volume of work in A, DK, L, UK and NO, all of which currently have low unemployment rates, could lead to labour shortages and declining growth rates.

### **3 Increasing the employment rate or redistribution among employees**

Whereas the volume of work would evolve very differently in the various countries, the employment rate would have to be increased in all of them if the working time preferences of those surveyed were to be realised. In the EU15+NO, the employment rate would have to rise by 11%, from 63% today to 74% (Table 4).

This would bring the European employment rate to the US level, which in 1997 was also 74% (EU 1998). The employment rate among women would have to rise more sharply than that among men, by 13 and 8 percentage points respectively. The difference becomes even clearer when measured in terms of the rate of change rather than absolute percentage points. The 24.1% increase required in the female employment rate is more than twice as high as that required in the male employment rate. Women in Greece, Italy and Spain prefer an employment rate that is 20% higher than it is at present. Measured in terms of the rate of change, the differences become even greater. In Spain, for example, the desired increase in the employment rate among women is no less than 103%, while in Denmark it is only 4%.

Table 4: *Actual and preferred employment rates*

Country	Employment rate at present 1	Preferred employment rate at present 2	Difference (2-1)- 3	Growth rate
<b>Men and Women</b>				
Austria	72	78	6	8,3%
Belgium	64	70	6	9,4%
Denmark	80	83	3	3,8%
Finland	69	77	8	11,6%
France	63	74	11	17,5%
Germany	69	79	10	14,5%
Greece	56	65	9	16,1%
Ireland	70	81	11	15,7%
Italy	50	65	15	30,0%
Luxembourg	72	75	3	4,2%
Netherlands	71	77	6	8,5%
Portugal	67	75	8	11,9%
Spain	48	68	20	41,7%
Sweden	80	86	6	7,5%
United Kingdom	70	76	6	8,6%
Norway	82	88	6	7,3%
EU15 + NO	63	74	11	17,5%
<b>Men</b>				
Austria	83	87	4	4,8%
Belgium	74	78	4	5,4%
Denmark	84	88	4	4,8%
Finland	69	78	9	13,0%
France	72	81	9	12,5%
Germany	76	85	9	11,8%
Greece	72	69	-3	-4,2%
Ireland	84	91	7	8,3%
Italy	62	73	11	17,7%
Luxembourg	81	82	1	1,2%
Netherlands	84	89	5	6,0%
Portugal	77	83	6	7,8%
Spain	65	76	11	16,9%
Sweden	84	89	5	6,0%
United Kingdom	78	83	5	6,4%
Norway	85	90	5	5,9%
EU15 + NO	73	81	8	11,0%
<b>Women</b>				
Austria	61	70	9	14,8%
Belgium	53	62	9	17,0%
Denmark	76	79	3	3,9%
Finland	69	76	7	10,1%
France	55	68	13	23,6%
Germany	63	72	9	14,3%
Greece	40	60	20	50,0%
Ireland	56	72	16	28,6%
Italy	37	59	22	59,5%
Luxembourg	62	66	4	6,5%
Netherlands	59	65	6	10,2%
Portugal	56	68	12	21,4%
Spain	29	59	30	103,4%
Sweden	75	84	9	12,0%
United Kingdom	63	69	6	9,5%
Norway	79	86	7	8,9%
EU15 + NO	54	67	13	24,1%

The preferred increase in the employment rate turns out to be all the higher, the lower the actual rate is ( $R = 0.863$ ). In countries that already have very high employment rates (notably DK, S, NO), only a slight increase is desired. Here, working time preferences would be realised largely by redistributing working time among employees, that is by reorganising work. In those countries where the employment rate is very low (notably E, EL, I), a considerable increase is required. Here, the creation of additional jobs, particularly for women, and the development of the service sector are of greater importance than in the first-named group. At the same time, however, those already in employment in these countries also express a clear preference for a reduction in working time, which means that the reorganisation of work should not be ignored if working time preferences are to be realised. An exclusive focus on working time policy in these countries would give rise to significant gender bias. The preferences being realised would be largely those of men, while the preferences of women not yet in employment would be ignored. In other countries, however, the balance of policy measures between additional job creation and work redistribution would be broadly gender-neutral, since men's and women's preferences in respect of the desired increase in employment rate are fairly similar. In Denmark, for example, men would like to see the employment rate rise by 4.8% and women by 3.9%.

As we have already seen, respondents in countries with a low employment rate would like to see a greater increase in the employment rate than their counterparts in countries with a high employment rate. Nevertheless, the absolute level of the preferred employment rate is very clearly determined by the existing employment rate ( $R = 0.908$ ). This suggests that experience of employment gives rise to increase demand for employment, and that expressed preferences can therefore change with actual experience of employment. Preferences are also influenced by the existence of an environment favourable to their realisation (Table 5). In those countries in which employees rate the chance of finding a job as good and where the childcare infrastructure is well developed, the preferred employment rate is higher than in countries in which these conditions are not met. The preferred employment rate is also high in those countries with a high trade union density, possibly because the unions are seen as a powerful actor campaigning for realisation of employees' preferences. Finally, the higher the level of human capital is, the higher the preferred employment rate is. This correlation is hardly surprising, since there is adequate evidence from other sources (EU 1998) that both male and female employment rates increase as educational levels rise. There are two reasons why this should be so. Firstly, the 'knowledge economy' is creating increased demand for skilled workers, with the result that employment opportunities increase as educational levels rise. Secondly, individuals who have invested heavily in their education and training have a considerably stronger desire to put that investment to use in a job than those with less advanced skills and qualifications.

*Table 5: Factors determining the level of the preferred employment rate  
(Bravais/Pearson correlation coefficient R)*

	Change in the preferred employment rate
It is easy to find a job now	0.655
Childcare*	0.615
Trade union density*	0.62
Human capital per 25-65 year-old in purchasing power parities	0.607

Significance > 0.5

\*These data were taken from other sources.

## 4 Summary and conclusions

It has been shown that there is a preference in EU15+NOR for an increase in employment rates. The EU is able to use employees' preferences as a basis for implementing its strategy of bringing employment rates in Europe up to the US level<sup>2</sup>. However, since most employees also want shorter working hours, the preference in Europe is for a combination of high labour market participation and short individual working times rather than the American combination of high employment rates and long working times.

Furthermore, by recording the employment and working time preferences of those not currently in employment, the survey shows that working time policy cannot focus solely on the redistribution of working time among those already in employment. Working time also has to be redistributed from the employed to the non-employed, which in turn requires the creation of additional jobs. The gender bias inherent in merely redistributing working time among those already in employment is obvious, particularly in those countries in which female employment rates are very low. The creation of more jobs for women requires measures extending far beyond the scope of traditional working time policy.

The working time preferences expressed by employed and non-employed persons surveyed cannot be realised in all EU15+NR countries with the same mix of macroeconomic measures, since the effects of these preferences on the volume of employment and work are very different. It was noted at the beginning that the volume of work always changes when working time is redistributed. We should consequently be on our guard against a mechanistic approach to the redistribution process.

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2 At the Lisbon summit, the European Council formally declared its objective of raising the EU employment rate to 70% (EC 2000: 5).

Nevertheless, the differences between the countries are striking and serve as a starting point for determining the main focal points of an employment policy designed to aid realisation of employee preferences. The following differences can be noted: (Figure 4):

Figure 4:

***Preferred change in the volume of work and the employment rate***

	Volume of work °		
	decrease	stagnates	grows
Employment rate: slight increase *	Austria Denmark Luxembourg Norway Utd. Kingdom	Belgium Netherlands Portugal Sweden	
Employment rate: large increase *		Germany Finland Ireland	France Greece Italy Spain

° volume of work: decrease of more than 5%; Stagnation: +/-5%; Increase more than +5%

\* Employment rate: low increase < +9%, large increase > +9%

- In F, EL, I and E, a large increase in both the volume of work and the employment rate is desired. In these countries, therefore, it is not sufficient simply to redistribute the existing volume of work; it must also be considerably increased through economic growth if employees' preferences are to be realised.
- In D, FIN and IRL, a sharp increase in the employment rate is desired without any increase in the volume of work. Consequently, there has to be a major redistribution of working time from the employed to those not yet in employment.
- In A, DK, L, NO and the UK (declining volume of work) and B, NL, P and S (stagnating volume of work), the primary objective must be to redistribute working time among those already in work.

Possible conflicts between different employment policy strategies should also be noted. This applies in particular to A, DK, L, UK and NO. The preferences in those countries for working time reduction would considerably reduce the total volume of work in the economy. This would lead in turn to a decline in growth that could be avoided only through an increase in the size of the economically active population (e.g. through migration).

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