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ABSTRACT

Gender Gaps in Unemployment Rates in OECD Countries*

There is an enormous literature on gender gaps in pay and labour market participation but virtually no literature on gender gaps in unemployment rates. Although there are some countries in which there is essentially no gender gap in unemployment, there are others in which the female unemployment rate is substantially above the male. Although it is easy to give plausible reasons for why more women than men may decide not to want work, it is not so obvious why, once they have decided they want a job, women in some countries are less likely to be in employment than men. This is the subject of this Paper.

We show that, in countries where there is a large gender gap in unemployment rates, there is a gender gap in both flows from employment into unemployment and from unemployment into employment. We investigate different hypotheses about the sources of these gaps. Most hypotheses find little support in the data and the gender gap in unemployment rates (like the gender gap in pay) remains largely unexplained. But it does seem to correlate with attitudes on whether men are more deserving of work than women so that discrimination against women may explain part of the gender gap in unemployment rates in the Mediterranean countries.

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Introduction

There is an enormous literature on gender gaps in pay and a vast literature on gender gaps in labour force participation rates (see Altonji and Blank, 1999, for an overall survey and Blau and Kahn, 2003, for a recent international comparison). Yet, there is very little written on gender gaps in unemployment rates (though see Ham, Svejnar and Terrell, 1999, for an examination of two transition countries): for example a recent OECD paper on the economic position of women baldly stated on the first page that “the analysis concentrates on gender differences in employment, the organisation and characteristics of jobs and their remuneration, leaving aside the examination of unemployment or inactivity” (OECD, 2002, p63). If there were no interesting gender gaps in unemployment rates then this lack of literature might be understandable. But, as Table 1 shows, this is not the case: while the gender gap in unemployment rates (measured as the female minus the male) is small (or even negative) in some countries, there are others in which it is very large. For example in the UK, the prime-age female unemployment rate is 1.1 percentage points below the male while in Spain it is 11.8 percentage points above. It should be emphasized that the unemployment rates in Table 1 are all computed using the standardized ILO definition¹ so are meant to be comparable across countries. In terms of the gender gap in unemployment rates, one can identify several distinct groups of countries in Table 1. First, the highest gender gaps in unemployment rates are to be found in the Mediterranean countries (Spain, Greece, Italy and France). Next come the Benelux countries (Belgium, Netherlands and Luxembourg), then the ‘Germanic’ countries (Germany, Austria and Switzerland), then the ‘Nordic’ countries (Sweden, Finland and Norway) and, finally the ‘Anglo-Saxon’ (US, UK, Ireland, Australia, Canada and

¹ To be unemployed according to the ILO definition, one must not be currently in employment, one must have looked for work in the last 4 weeks and be available to start work within 2 weeks.

New Zealand). In a number of the Mediterranean countries the ‘unemployment problem’ is largely a problem of female unemployment². For future use we will refer to the countries in which the female unemployment rate is much higher than the male as the ‘high-gap’ countries and those in which the female-male gap in unemployment rates is small or even negative as the ‘low-gap’ countries.

One might wonder whether the pattern of gender gaps in unemployment rates across countries has always been as Table 1 shows it is now. Figure 1 looks at the evolution of male and female unemployment rates over time. One can see that there is an interesting reversal. Most of the countries that now have large gaps used to have small or non-existent gaps and the gap only emerged in the 1960s and 1970s whereas some countries like the US used to have a gender gap but now do not (although it was always much smaller than seen in some countries today).

This paper starts from the premise that this gender gap in unemployment rates is interesting and attempts to understand why this gap exists and how the cross-country variation can be explained. One should emphasize that the question we are interested in answering is not ‘why are women less likely to be in employment than men?’ (either measured as the employment-population ratio or the labour force participation rate) for which there are fairly obvious answers in terms of the allocation of domestic responsibilities and a large literature on the subject but the question ‘why, once they have decided they want a job, are women in some countries much less likely to be in employment than men?’³.

² Typically these countries also have very high youth unemployment rates though we do not consider this issue here.

³ Of course, it may not be so easy to separate participation from unemployment decisions and the possible links between the two are discussed below.

The structure of the paper is as follows. In the next section we consider the gender gap in unemployment rates in more detail, investigating whether the aggregate figures (as presented in Table 1 and Figure 1) can be explained by gender gaps in characteristics among those in the labour force. The answer, probably unsurprisingly, is ‘no’. This section also investigates variation in the gender gap in unemployment rates across different characteristics: we find that the gender gap in unemployment rates tends to be larger for the young, married women and those with young children.

The second section then looks at gender differences in labour market dynamics, the flows into and out of employment, unemployment and inactivity. Women tend to have higher flows out of employment into unemployment in the ‘high-gap’ countries and higher flows into inactivity in all countries. But, the ‘high-gap’ countries also tend to have large gender differentials in the flow out of unemployment into employment. We need to understand both why employed women in some countries leave employment for unemployment at a faster rate than men and why unemployed women in some countries find it so much more difficult than men to get a job.

The third section investigates in more detail flows out of employment into unemployment. We show that, in most countries, one cannot explain much of the gender gap in these flows using gender differences in the types of jobs that men and women do. We also show that domestic responsibilities (primarily child care) only account for a small fraction of job endings that result in unemployment (most job endings for these reasons end up in inactivity) so that it is not primarily gender differences in domestic responsibilities that can account for the gender differences in the flows from employment to unemployment.

The fourth section investigates the flow from unemployment to employment. We find no evidence that the female unemployed are less ‘serious’ about wanting work than their male counterparts in the ‘high-gap’ countries. The gender gap in reported search activity seems similar in both ‘high-gap’ and ‘low-gap’ countries and the receipt of welfare benefits by women in ‘high-gap’ countries is typically quite low.

The fifth section considers the hypothesis that it is the behaviour of employers that makes it difficult for unemployed women to get jobs in some countries. We present evidence that in countries where attitudes are more gender biased the gender gap in unemployment rates is higher. We suggest that, when the overall unemployment rate is high and there are queues for most jobs, it is relatively easy for employers to indulge in discriminatory behaviour.

The sixth section investigates the hypothesis that, in some countries, there is a mismatch between the types of jobs that unemployed women want and employers are offering. Perhaps the most notable possible example is the availability of part-time work. It is true that there is a lot of variation in the extent of part-time employment and that it tends to be relatively rare in the ‘Mediterranean’ countries which have large gender gaps in unemployment rates. But, the unemployed women in these countries do not report that they are looking for part-time jobs and it seems likely that the lack of availability of part-time work can explain low female participation rates in some countries but not their high unemployment rates.

Our conclusion is that it is easier to provide evidence against certain hypotheses about the source of gender gaps in unemployment rates than it is to provide evidence for hypotheses. In this there is perhaps a parallel to the gender pay gap that is also hard to fully explain. However, we do suggest that attitudes towards

male and female unemployment may be important in explaining the gap in countries where unemployment is high.

1. Variations in the gender gap in unemployment rates

It is conceivable that the gender gaps in unemployment rates observed in Table 1 can be explained away by gender gaps in characteristics that vary across countries. Some descriptive statistics of men and women in the labour force are presented in Table A1 in the Data Appendix. For the European countries, we use data from the first six waves of the European Community Household Panel Survey (ECHPS) that cover the period 1994-1999⁴ and, for the United States, we use data from the Current Population Survey (CPS) from 1996-2000 (to have an approximately comparable period).

Table A1 contains a lot of information but the following seem the most noteworthy features. There are some features that seem true of most countries: unemployed women tend to be younger than unemployed men, and a higher fraction of women (both in employment and unemployment) are divorced or separated. But there are some features of the raw data that differ across countries. For example in Spain, Greece, Ireland, and Italy women (both employed and unemployed) tend to have higher education levels than their male counterparts and lower levels of work experience, while France, Belgium, UK, US and the Netherlands do not have marked gender gaps in these variables. This pattern fits with differences in the labour force participation rates and suggests a stronger relationship between education and labour market participation in countries with a low overall female participation rate.

⁴ For details of the ECHPS see Peracchi (2002) and Nicoletti and Peracchi (2002) who discuss, among other things, sample attrition. Because there may be concerns about the representativeness of the ECHPS we have checked the results for the UK and Spain using their respective Labour Force Surveys: these results are very similar and are available on request from the authors.

Regarding the number of children, there are, crudely, three groups of countries. In Spain, Greece, Italy, France, Luxemburg, and Ireland, there are no differences between unemployed men and women, but there are more employed women that have either no children or young children. In Belgium, the Netherlands, Denmark, Sweden there are no differences among the employed workers but there are more unemployed females that have young children. Finally, in the UK, US, Portugal and Finland there are no significant differences between males and females in these variables.

To investigate the hypothesis that differences in characteristics can explain gender gaps in unemployment rates we estimate probit models for the probability of being unemployed (conditional on being in the labour force so that we are looking at unemployment rates) including a variety of characteristics as well as a female dummy. The other characteristics included are dummies for age, education, marital status, and the presence of kids in the household. The results are reported in Table 2 where countries are ordered by the gender gap in unemployment rates among prime-age workers as reported in Table 1 (we also follow this practice in all subsequent Tables). The first column reports the marginal effects when only a female dummy is included i.e. we estimate a model of the form:

$$\Pr(U = 1) = \Phi(\beta_0 + \beta_1 \text{female}) \quad (1)$$

These marginal effects should be comparable to the gender gaps in aggregate unemployment rates presented in Table 1. They are similar though not identical, the reason being that the data come from different sources and refer to different periods. The second column then reports the marginal effect of the female dummy when the other characteristics are included in the model (their coefficients are not reported to save space) i.e. we estimate a model of the form:

$$\Pr(U = 1) = \Phi(\beta_0 + \beta_1 \text{female} + \beta_2 x) \quad (2)$$

where x is the vector of other characteristics. Although there is a very slight tendency for the gender gap in unemployment rates to fall in the ‘Mediterranean’ countries the amount of the gender gap that can be explained using these characteristics is small and substantial gender gaps in unemployment remain in the countries where they exist in the aggregate data.

The model estimated so far assumes that all women, whatever their other characteristics, have a higher chance of being unemployed. But, it may be the case that the gender gap varies with characteristics. So, we then estimate a model in which all the characteristics are interacted with a female dummy i.e. a model of the form:

$$\Pr(U = 1) = \Phi(\beta_0 + \beta_1 \text{female} + \beta_2 x + \beta_3 \text{female} * x) \quad (3)$$

The marginal effects of these interactions are reported in the third through twelfth column of Table 2. Because the probit model is non-linear one cannot exactly read off the gender gaps in unemployment rates for different sorts of workers from this part of Table 2 but, to a first approximation, one can work out the gap in unemployment rates between men and women with a given set of characteristics, x , by adding the coefficients that apply to them. So, to work out the gender gap for married people with young children one would add the marginal effects for having young children and being female, the marginal effect for being married and female and the marginal effect for being female. There is obviously a lot of information here so the results are hard to digest. But, the coefficient on the female dummy itself remains large and significant in the ‘high-gap’ countries and, where the interaction terms are significant, it seems to be that it is among the young, the married and those with young children that the gender gaps in unemployment rates are largest.

All of the discussion so far has been about whether differences in observed characteristics can explain the gender gap in unemployment rates. But, it is possible that differences in unobserved characteristics might also be important, especially in countries where the female participation rate is low and selection into the labour force by women is an important question. But, it seems plausible to think that these unobservable characteristics related to labour market participation would actually exacerbate the gender gap in unemployment rates, not explain them away. To illustrate this suppose that individuals differ in their ‘employability’, denoted by x , and that the unemployment rate is a negative function of x (denote it by $u(x)$). Further, assume that, in the population, x is equally distributed across men and women so that the ‘true’ gender gap in unemployment rates is zero. If all men participate in the labour market then we will have $p_m(x)=1$ where $p_m(x)$ is the labour force participation rate for a man with characteristics x ⁵. For women in countries where female labour force participation is low (e.g. Spain), we have $p_f(x)<1$ and it seems likely that $p_f'(x)>0$ so there is a positive relationship between ‘employability’ and labour market participation (we saw evidence of this earlier in the fact that Spanish women in the labour force are better educated than men). In this example we would observe the female unemployment rate to be below that of the male simply because the women in the labour force are more positively selected than the men in terms of their employability. This means we would tend to underestimate the true gender gap in the unemployment rate that, in this example, is zero.

This section has shown that the raw gender gaps in unemployment rates cannot be explained away by gender gaps in characteristics and that, in ‘high-gap’ countries, even women without the burdens of a partner or children are more likely to

⁵ The conclusion will also go through if we assume that male participation rates are a function of x as long as the sensitivity to x is weaker than for women.

be unemployed than equivalent men (though having a partner and/or children worsens this disadvantage).

A natural next question is whether the gender gap in unemployment rates that we observe in some countries is the result of gender differences in flows into unemployment or flows out of unemployment: this is the subject of the next section.

2. Gender gaps in Labour Market Dynamics

Most labour economists are familiar with the following formula for the steady-state unemployment rate:

$$u = \frac{h_{eu}}{h_{eu} + h_{ue}} \quad (4)$$

where h_{eu} is the rate at which workers leave employment for unemployment and h_{ue} is the rate at which they leave unemployment for employment. But, the formula in (4) is based on the assumption that an individual can only be either employed or unemployed. Given the importance of inactivity for women (and increasingly for men in many countries) using this formula to understand gender differences in unemployment rates might be thought to be a bit limiting. If one introduces the extra state of inactivity then one can show that the steady-state unemployment rate (note – not the unemployment-population ratio) can be written as:

$$u = (1 - \alpha) \frac{h_{eu}}{h_{eu} + h_{ue}} + \alpha \frac{(h_{ei} / h_{ui})}{(h_{ei} / h_{ui}) + (h_{ie} / h_{iu})} \quad (5)$$

where:

$$\alpha = \frac{h_{ie} h_{ui} + h_{iu} h_{ei}}{h_{ie} (h_{ui} + h_{eu} + h_{ue}) + h_{iu} (h_{ei} + h_{eu} + h_{ue})} \quad (6)$$

The interpretation of (5) is the following. It says that the overall unemployment rate can be thought of as a weighted average of two ‘component’ unemployment rates.

The first term on the right-hand side of (5) is the unemployment rate if there were never any flows into or out of inactivity (it is simply the formula in (4)). The second term on the right-hand side of (5) is what the unemployment rate would be if there were never any direct flows between employment and unemployment only indirect flows via inactivity. Note that, for this unemployment rate, it is the relative size of flows from employment/unemployment to inactivity and vice versa that is important. So, if workers flow at a faster rate from employment to inactivity than from unemployment to inactivity this will tend to raise the unemployment rate.

So, one of the terms in (5) assumes inactivity is unimportant in determining the unemployment rate and the other that it is very important. The weight α is then a measure of the relative importance of flows via inactivity in generating unemployment though it is hard to give an intuition for its exact functional form.

If there are gender differences in unemployment rates this must be because of gender differences in some (or all) of the hazard rates in (5). Which differences are most important is likely to be helpful in understanding gender differences in unemployment rates. We now consider this issue.

Table 3a presents estimates of the hazard rates and computation of the different components in (5) for men and Table 3b the corresponding information for women. The data we use for this comes from the retrospective monthly employment history that all individuals in the ECHPS are asked to complete and from consecutive monthly CPS files matching those individuals who are in the sample in consecutive months. Our method for estimating the labour market transition rates is the following. We have observations on the labour market state an individual is in one month

(denote this by S_0 that can take the values e,u,i) and then again a month later (denote this by S_t). As the interval between the two observations is a month it is a reasonable approximation to assume that individuals cannot make two transitions in that period. Then the simplest way to estimate a hazard rate (h_{eu} say) is to note that:

$$\Pr(S_t = e | S_0 = e, S_t \neq i) = e^{-h_{eu}t} \quad (7)$$

The left-hand side of (7) is readily computed using our data and we take the negative of the log to compute the hazard rate⁶. The hazard rates in Table 3 are multiplied by 100 so can be interpreted as the percentage of individuals in one labour market state moving to another in the course of a month.

One noticeable feature of this data is that flows between different labour market states are much higher in the US than in the European countries. While this is probably true, there are reasons for thinking that the gap as it appears in Table 3 is larger than in reality as the European data comes from retrospective information that probably tends to ‘forget’ transitions and the US data is known to have misclassification problems (see Abowd and Zellner, 1983, or Abraham and Shimer, 2002) that tend to over-state transitions. However, the main interest here is not the comparison across countries but the gender gaps within countries so we do not attempt to correct the data in any way.

As well as the hazard rates, Tables 3a and 3b also reports the three components of the steady-state unemployment rate as presented in (5) – the steady-state unemployment rate one would calculate ignoring inactivity (the eighth column), that one would calculate ignoring direct flows between employment and unemployment (the ninth column), and the ‘share’ of the two components using the

⁶ When the interval between observations is small the estimated hazard rate will be very similar to a simple-minded estimate of the probability of moving states. For example h_{eu} as defined in (7) is the probability of moving from employment to unemployment given there is not a move to inactivity.

formula in (5) and (6) (the tenth column) . Finally, the penultimate column presents the steady-state unemployment rate computed using the hazard rates and the final column the actual unemployment rate in the data as a check on the internal consistency. The last two columns are similar, differences arising from the fact that the labour markets are not in a steady state.

Looking at the results for men in Table 3a one can see that the ' α ' is small, implying that flows into and out of inactivity are relatively unimportant in explaining the male unemployment rate. Also, the two component unemployment rates are very similar. So, the bottom line is that the difference in the steady-state unemployment rates computed using the formulae in (4) and (5) are very small and that, to a first approximation, one can ignore inactivity. Given the high labour force participation rates for men this is probably not that surprising.

What might be found more surprising are the results for women in Table 3b. It is true that ' α ' is larger for women than for men, implying a more important role for inactivity but, in many countries, it is still very low. This is quite consistent with a low female participation rate if inactivity is a very stable state. And, again the two component unemployment rates tend to be quite similar with the conclusion that the use of (4) rather than (5) will not lead to seriously misleading conclusions.

Given the results in Tables 3a and 3b we will, in the interests of keeping the paper to a manageable length, concentrate in the rest of this paper on gender gaps in flows between employment and unemployment and largely ignore gender differences in flows involving inactivity. One must be careful here: the results in Tables 3a and 3b do not suggest that gender gaps in flows involving inactivity are non-existent, it is simply that they (for some reason) mirror gender gaps in flows that do not involve inactivity. This needs to be borne in mind.

We now estimate the hazard rates including other relevant controls. As the hazard rates must be non-negative a convenient empirical model is:

$$h_{eu} = e^{\beta_{eu}x} \quad (8)$$

where x is a vector of characteristics (that will include female dummies). Substituting (8) into (7) suggests that a simple way to estimate β_{eu} is to restrict the sample to those who are initially in employment and not subsequently in inactivity and then use a complementary log-log model to estimate the probability that the individual is in employment. A similar methodology can be used to estimate all the other hazard rates. The coefficients on a female dummy are reported in Table 4a (without any other controls) and in Table 4b (with controls for personal characteristics)⁷.

Note that the coefficient estimates will be the extent to which the hazard rate for a particular labour market transition is proportionately different for women. So, when we see in the column headed h_{eu} that the coefficient on the female dummy for Germany is 0.067 this means that women are 6.7% more likely to leave employment for unemployment than men⁸.

There is a lot of information in Tables 4a and 4b but the most important points are the following. If we consider direct flows between employment and unemployment, the ‘high-gap’ countries seem to have large gender gaps in both the

⁷ Because we want a common specification for all the hazard rates, the controls do not include any variables that are ‘state-specific’ e.g. characteristics of a job if one is in employment. But, Tables 6 and 12 do provide information on the importance of these characteristics.

⁸ One might wonder whether proportionate or absolute differences in hazard rates are the more important: we think proportionate differences for the following reason. To keep things simple, consider the formula for the steady-state unemployment rate in (4). Then simple, differentiation shows that:

$$\frac{\partial u}{\partial \ln(h_{eu})} = u(1-u) = -\frac{\partial u}{\partial \ln(h_{ue})}$$

so that a proportionate change in h_{eu} will have the same impact on unemployment (though with the opposite sign) as an equal proportionate change in h_{ue} . This means that we can, more or less, compare the coefficients on the female dummy for different transition rates.

flows from employment to unemployment and the flows from unemployment to employment than ‘low-gap’ countries (read down a column to see this). Both of these gender gaps need to be understood to get a good understanding of the source the gender gap in unemployment rates. One might be concerned about the robustness of this conclusion but other data support it. If women find it harder than men to leave unemployment in some countries then we would expect their durations of unemployment to be higher on average. This is what we see in Table 5.

If we consider flows involving inactivity, women in all countries tend to have higher flows into inactivity both from employment and unemployment. But, as the discussion of (5) above made clear, it is the proportional difference in the hazard rates from employment and unemployment to inactivity that is important for the unemployment rate so that one should look at the difference between the female dummy on the EI transition and the UI transition in Table 4a or 4b. In the ‘high-gap’ countries there is some indication that the gender gap in the flow from employment to inactivity is larger than the gender gap in the flow from unemployment to inactivity: this will tend to increase the unemployment rate. There is a less systematic pattern in the gender gap in flows from inactivity to employment or unemployment.

Given the evidence in Tables 4a and 4b we focus first on the flows from employment to unemployment, then on the flows from unemployment to employment.

3. Gender Differences in Flows from Employment to Unemployment

As Table 4 has shown, women in the ‘high-gap’ countries leave employment for unemployment at a higher rate than do men. The flow from employment to unemployment is investigated further in Table 6. These regressions are similar to

those we estimated in Tables 4a and 4b except that, in some specifications, we include some characteristics of the job – notably, industry, occupation, the size of employer, the type of contract and whether the job is public sector to investigate whether gender gaps in these variables can help to explain gender gaps in flows from employment to unemployment⁹. Also, because the information on the characteristics of the job held are only available for jobs held at the annual interview, these equations are estimated on annual data.

In the first column of Table 6 we report estimates of models for the transition from employment to unemployment that include only a female dummy. The qualitative pattern of these coefficients that are based on annual data is the same as those in Table 4a (that were based on monthly data) with women having higher rates of transition from employment to unemployment than men in the ‘high-gap’ countries. The second column then introduces personal characteristics as extra controls: this has only marginal effects on the coefficient on the female dummy. The next four columns then report results when we interact the female dummy with marital status and the number of children to see whether there is significant variation in the gender gap in the flow from employment to unemployment. Almost all of these interaction terms have coefficients that are insignificantly different from zero suggesting that domestic responsibilities do not play a big role in transitions from employment to unemployment. This is not to say that domestic responsibilities do not play an important role in women’s flows out of employment, just that women with children are more likely to leave employment for inactivity than unemployment. This conclusion is consistent with information on the reasons given for why jobs end. Table 7a tabulates the reasons given by the currently unemployed for why their

⁹ We did not do this in Tables 4a and 4b because we wanted to adopt a common specification for all the hazard rates so could only include covariates that are defined in all labour market states.

previous job ended and in Table 7b reasons are given by the currently inactive for why the previous job ended. With the exception of a couple of countries, reasons connected with ‘caring’ account for a very small fraction of jobs ending where the individual is currently unemployed¹⁰. This is not surprising: most women leaving employment to have children go directly into inactivity.

In many countries men are more likely than women to be laid-off. In countries like the UK this difference is extreme – 45% of male jobs end because the worker is laid-off compared to 23% of women. In the ‘high-gap’ countries, the most striking feature of Table 7a is that there does not seem to be a large gender gap in the reasons for why workers leave employment for unemployment in the ‘high-gap’ countries. This hints that it may be employers who are choosing to end the contracts of married women with children rather than those women choosing to quit.

The final column in Table 6 reports the coefficient on the female dummy when job characteristics (industry, occupation, public/private size of firm, full-/part-time, permanent/temporary, job tenure) are also included in a model of the transitions from employment to unemployment. Petrongolo (2003) has documented how female workers are over-represented in temporary and part-time jobs that are generally at more risk of ending. In France and Spain (which are heavy users of temporary contracts) the introduction of these variables does significantly reduce the coefficient on the female dummy but the addition of these variables makes little difference to the gender gap in most countries.

Now, let us turn to flows in the opposite direction, from unemployment to employment.

¹⁰ In fact, Table 7a probably overstates the proportion as women who had children and left employment for inactivity but are now trying to get a job again will be included in the ‘currently’ unemployed category.

4. Flows from Unemployment to Employment: The behaviour of workers

The actions of both individuals and employers are likely to affect the flow from unemployment to employment. In this section we consider the actions of the unemployed themselves and the following section considers the actions of employers.

The unemployment rate is meant to measure the fraction of people who want a job but do not have one. The ILO definition of unemployment uses evidence that people have looked for work in the recent past and are available to start work in the near future to determine whether people without work currently want it. But some economists think that, while there is a meaningful distinction between employment and non-employment, the distinction between unemployment and inactivity is meaningless. On this view the fact that fewer women want paid work (largely because of domestic responsibilities) ‘spills over’ into a higher unemployment rate and does not simply show up in a lower labour force participation rate. If this is true then, in some sense, the female unemployed in ‘high-gap’ countries may be less serious about wanting a job and taking steps to get one than the male unemployed. There are a number of ways in which one might test this hypothesis.

Whether unemployment and inactivity are distinct labour market states was a question first posed by Flinn and Heckman (1983) and subsequently also addressed by Jones and Riddell (1999). The basis of their tests is to see whether there is a significant difference between the probability of entering employment between those who are unemployed and those who are inactive.

Table 8 reports results for this exercise for the countries in the ECHPS. The sample is those who are either unemployed or inactive in the initial observation and the dependent variable is binary according to whether the individual is subsequently in employment or not. We report the marginal effect of being in employment in a

month's time of being unemployed rather than inactive. We also interact a female dummy with this variable to see whether there are significant gender differences. In all countries the unemployed are more likely to get a job than the inactive. The extent of this is similar in 'high-gap' and 'low-gap' countries. Further, the interaction of the 'initially unemployed' variable with the female dummy is not noticeably smaller in the 'high-gap' countries as one would expect if the female unemployed are less serious about getting work than their male counterparts: indeed the interaction term is largest in some of the 'high-gap' countries. There is no evidence here that, in the 'high-gap' countries, the difference between the unemployed and the inactive is more blurred than in the 'low-gap' countries.

Another way to consider the hypothesis that the female unemployed in some countries are less serious about getting work is to look at evidence on job search intensity. Measuring search intensity is problematic and the only available evidence is on numbers and types of job search methods that the unemployed report using (though it should be noted that those who report using more search methods do typically have lower durations of unemployment so these measures do seem to capture something of what we might expect). Table 9 presents evidence for the three countries for which we have been able to obtain it – Spain, the UK and the US. There are sizeable and well-known differences in the use of different search methods across countries with, for example, the unemployed in the US being much less likely to report use of the public employment service and to report the use of personal contacts and the UK unemployed report the use of more search methods than those in the US and Spain¹¹ (see Pellizari, 2003, for a cross-country comparison of search methods used to get jobs and the wage premia associated with them). In all countries men

¹¹ One should not make too much of this as the different countries allow respondents a different maximum number of search methods to be listed and this may influence responses although very few report the maximum allowed.

report using slightly more search methods than women but this gap is similar in Spain (a 'high-gap' country) and the US/UK (both 'low-gap' countries). The limited evidence presented provides no support for the view that the women in 'high-gap' countries are much less serious in their desire for work as evidenced by their search effort.

Another variant of this hypothesis is that the level and availability of welfare benefits affects exit rate from unemployment through an effect on the reservation wage. Table 10 presents some data on the fraction of the unemployed of different genders who report receiving any form of welfare benefit. In most countries women are less likely to receive welfare benefits than men, probably because their weaker employment history makes them less likely to have established entitlement and because unemployed women may be living with employed men so are not eligible for means-tested benefits. Looking at this table it is very hard to see how it could possibly form the basis of an explanation as to why, in some countries, there is such a large gender gap in unemployment rates. For example, virtually no-one, male or female, in Italy receives any benefits and the proportions of men and women doing so in Spain and the UK are very similar even though they have very different gender gaps in unemployment rates.

However, while we might expect reservation wages to be influenced by welfare benefits, there are other factors that might be important in determining the minimum level of wages acceptable to the unemployed. The ECHPS directly asks the unemployed about the minimum acceptable wage at which they would work. The female unemployed report lower reservation wages than the male unemployed but this is unsurprising given the existence of a gender pay gap and a more pertinent question is whether the gap between reservation wages and the average level of wages is higher

for women than for men. We used the ECHPS to compute gender gaps in both wages and reservation wages corrected for personal characteristics (note that to maintain comparability with our measure of the gender gap in unemployment rates as the female minus the male we measure all gender gaps in this way even though the gender gap in wages is normally measured the other way round). We then computed a gender gap in the log of the reservation wage minus the log of the wage (we will call this, with some abuse of terminology the gender gap in the replacement ratio) and, in Figure 2, plot this against the gender gap in unemployment rates. The gender gap in the replacement ratio is generally positive indicating a smaller gender gap in reservation wages than in actual wages. But, there is no indication that the countries with a large gender gap in replacement ratios have a large gender gap in unemployment rates: indeed the regression line (shown on Figure 2) is negatively sloped albeit with a t-statistic of only 1.1.

This section has explored the hypothesis that, for some reason, women in some countries who are classified as unemployed are not as serious about wanting work as the male unemployed or are more selective about the jobs they will take. But, there is no evidence whatsoever for this hypothesis.

Another possible hypothesis about why women in some countries seem to find it hard to get jobs is that employers are less likely to give women jobs. The next section considers this.

5. Do Employers favour Men?

There are a number of possible economic and social reasons why employers in some countries might favour men when it comes to filling jobs.

A natural first place to start is the relationship between the gender gap in unemployment rate and the gender gap in wages: this is explored graphically in Figure 3¹². There is a weak positive relationship between the two (the t-statistic is 1.2) suggesting that countries in which women's pay is a lot below men's pay have lower gender gaps in unemployment rates. As Blau and Kahn (2003) have suggested that cross-country differences in the gender pay gap can be better explained by gender-unspecific labour market institutions like the minimum wage and collective bargaining (all OECD countries now have some form of equal pay legislation), this could be taken as weak evidence that compressing the wage structure results in higher unemployment rates for those workers (here, women) who would, in a free market, earn relatively low wages. But, this evidence is hardly overwhelming and the decision to employ a man rather than a woman may not be based on a comparison of wages alone.

For example, one sometimes hears the argument that employers prefer to appoint men because hiring is costly and men are more likely to stick in their jobs or because women are more likely to take time off work because their children are sick¹³. Even if this is true it cannot really explain why there is a gender gap in unemployment rates in some countries but not others. In fact, in the Mediterranean countries where firing costs are high one would expect employers to be relatively more favourably inclined towards employing women as groups with a higher voluntary separation rate will be relatively attractive workers. So, this hypothesis does not seem to have much mileage. An alternative hypothesis is that differences in

¹² These gender gaps come from a regression in which personal characteristics are also included.

¹³ Or that because women are likely to work fewer hours than men, employers find it harder to cover the fixed costs of employment. However these differences seem small: to give one example, among full-time workers men in Spain work 2.1 hours per week more than women while in the UK the gap is 4.6 hours. Among part-time workers Spanish women work 1.3 hours less than the men whereas British women work 0.4 hours more than the men (figures from the Labour Force Surveys).

maternity leave legislation make employers more favourably inclined towards men in some countries. But, as Table 11 shows, the differences in maternity leave regulations across EU countries are relatively small and the Nordic countries which have generous maternity provisions also have small gender gaps in unemployment rates. Ruhm (1998) found that maternity leave was positively associated with female employment to population ratios (he did not consider unemployment rates).

Of course, it may not be legislation that makes men more attractive to employers than women: it could be lower levels of accumulated labour market experience among unemployed women. This might particularly be thought to be true in some of the ‘Mediterranean’ countries where, until recently, female labour market participation was very low. To investigate this we estimated a model for the flows from unemployment to employment excluding and including information on the work history of the individual. The ECHPS does not contain information on actual labour market experience and the best we can do is to include a variable denoting whether the individual has ever worked before and, if so, a variable measuring the length of time since last worked. As Table 12 shows the inclusion of these variables does little to reduce the gender gap in flows from unemployment to employment, suggesting that differences in work history are relatively unimportant.

Another hypothesis is prejudice or discrimination. Employers may simply feel that women are less deserving of employment than men and make their hiring decisions accordingly. We can get some idea as to how widespread are discriminatory attitudes from the 1996 Eurobarometer survey that asks respondents whether they agree with the statement “when jobs are scarce, men should have more right to a job than women”. In all countries men are more likely than women to think that women are less deserving of employment. But, there are also substantial

differences across countries with, crudely, the Nordic countries being less discriminatory and the Mediterranean countries more so. There are also differences across regions within countries e.g. Southern Italy is more discriminatory than Northern Italy. Figure 4 plots the proportion against the gender differential in the unemployment rate at regional level, marking the observations with a two-letter code for the country to which they refer. There is a clear positive relationship between the two variables [with a t-stat of 4.65]. One might think that all of this is driven by differences across countries but a regression for the 139 regions shown in Figure 4 that also includes country fixed effects leads to the following results (standard errors in parentheses):

$$\text{Gender gap in unemployment rate} = 2.47 + 5.71 * \text{prejudice} + \text{country fixed effects} \\ (0.69) (1.98)$$

so that there is a significant relationship between the gender gap in the unemployment rate and the extent of prejudice against women even within countries suggesting that some degree of discrimination may be partly responsible for the gender gap in unemployment rates.

However, a problem with this hypothesis is that the discriminatory attitudes have been around for a long time (as can be confirmed by examination of the 1973 and 1986 Eurobarometer surveys that contain similar questions) but, as Figure 1 showed, large gender gaps in unemployment rates are a relatively recent phenomenon. One way to reconcile this is the following idea. When overall unemployment rates are high and there are many applicants for most jobs, employers may be faced with a large number of job applicants who are more or less equivalent. In this situation they are more or less free to indulge any slight discriminatory preferences they may have without suffering any loss in profits from doing so (Becker's, 1957, model of

discrimination would predict this). In contrast, in tight labour markets, waiting for a male job applicant rather than hiring a female one may be a much more costly strategy. Hence, putting prejudices into practice is easier when unemployment is high and there are long queues for jobs as has been the situation in most of the ‘high-gap’ countries in the 1980s and 1990s. This does not mean that the exercise of such prejudice is costless: to the extent that certain groups are protected from competition for jobs from other groups, the result is likely to be higher wage pressure and a higher natural rate of unemployment. This conclusion is usually derived in the context of prejudice against the long-term unemployed (see, for example, the ‘ranking’ model of Blanchard and Diamond, 1994) but the same principles apply to other sorts of prejudice.

A similar idea to this can be found in a recent paper by Algan and Cahuc (2003) who focus on gender differences in employment-population ratios across countries. They suggest that a ‘male breadwinner’ mindset, associated with the Catholic religion, can explain the cross-country variation. This is similar to the idea we have expressed here but they argue that the institutional form that this discrimination takes is job protection legislation that penalizes groups of workers (like women who have more domestic responsibilities) who have weaker labour market attachment. But, it is not obvious that this hypothesis can explain much of the gender gaps in the flows between employment and unemployment that we have found.

6. Mismatch

The previous two sections have explored the hypotheses that the female unemployed in some countries might be less serious about getting work than men and that employers might be less inclined to give jobs to women. Another possibility is that

there is simply a mismatch between the desires of the female unemployed in terms of jobs they like and the jobs that employers are offering. Perhaps the most plausible form of mismatch is that women may want part-time jobs but these are very rare in some countries.

We do have some way of investigating this mismatch hypothesis as a number of surveys ask the unemployed whether they are looking for full- or part-time employment. Table 13 presents the raw data. There is not much evidence here that there is a large disparity between the type of jobs that women report they want and the type of jobs that are available. For example in Spain the desire for part-time employment among the unemployed is lower than the incidence of part-time working in the employed population (see also Petrongolo, 2003, for evidence that, in ‘high-gap’ countries a higher proportion of women working part-time report that they would prefer a full-time job which is also consistent with this). It seems more likely that, if there is a deficit of part-time jobs in some countries, this results primarily in lower female labour force participation and not in higher unemployment rates.

7. Conclusions

In many of the European countries with high unemployment rates, the female unemployment rate is substantially above the male. This important gender gap has hardly been studied: remedying that deficiency is the purpose of this paper. We show that, in the countries with a large gender gap in unemployment rates, there tends to be a large gender gap in both flows from employment into unemployment and from unemployment into employment.

Providing explanations for this is not so easy and it is much simpler to present evidence against hypotheses than evidence in favour of them. For example, the

gender gap is not well-explained by differences in the type of jobs that men and women do, by differences in benefit receipt, by differences in the gender wage gap, by differences in search intensity and by differences in labour market transitions caused by the allocation of domestic responsibilities. There does seem to be some correlation with social attitudes about whether men are more deserving of work than women but, at the end of the paper one is left with a large part of this gender gap that we are incapable of explaining. This, of course has its parallels in the literature on the gender pay gap, which economists have also struggled to fully account for. An unsatisfactory conclusion, but one that can, as usual, be used as a call for further research.

References

Abowd, John M. and Arnold Zellner, (1985), "Estimating Gross Labor Force Flows", Journal of Business and Economic Statistics, 3(3), pages 254-83.

Abraham, Katherine G. and Robert Shimer, (2002), "Changes in Unemployment Duration and Labor-Force Attachment", in Alan B. Krueger and Robert M. Solow (eds) The Roaring Nineties: Can Full Employment Be Sustained?, New York: Russell Sage Foundation.

Algan, Yann and Pierre Cahuc, (2003), "Job Protection and Family Policies: the Macho Hypothesis", University of Paris I-Pantheon Sorbonne, October.

Altonji, Joseph, G. and Rebecca, M. Blank, (1999), "Race and Gender in the Labor Market", in Ashenfelter, Orley and David Card (eds) Handbook of Labor Economics. Volume 3C. Handbooks In Economics, vol. 5. Amsterdam: North-Holland, pages 3143-3259.

Becker, G. S., (1957), The Economics of Discrimination, Chicago: The University of Chicago Press.

Blanchard, Olivier J. and Peter Diamond, (1994), "Ranking, Unemployment Duration, and Wages", The Review of Economic Studies, Vol. 61, No. 3, July, pages 417-434.

Blau, Francine D. and Lawrence M. Kahn, (2003), "Understanding International Differences in the Gender Pay Gap", Journal of Labor Economics, 21, pages 106-144.

Cohen, B. et al., (1999), Parental Leave: Progress or Pitfall?. Research and Policy Issues in Europe, Peter Moss and Fred Deven (eds), NIDI CGGS Publications.

Flinn, Christopher J. and James J. Heckman, (1983), "Are Unemployment and Out of the Labor Force Behaviorally Distinct Labor Force States?" Journal of Labor Economics; 1(1), January, pages 28-42.

Ham, John C., Jan Svejnar and Katharine Terrell, (1999), "Women's Unemployment During Transition", Economics of Transition, 7, pages 47-78.

Jones, Stephen R.G. and W. Craig Riddell, (1999), "The Measurement of Unemployment: An Empirical Approach", Econometrica; 67(1), January, pages 147-61.

Nicoletti, Cheti and Franco Peracchi, (2002), "A cross-country comparison of survey participation in the ECHP", ISER Discussion Paper, University of Essex.

OECD, (2002), "Women at work: who are they and how are they faring?", OECD Employment Outlook, 2002, pages 61-126.

Pellizari, Michele, (2003), “Do Friends and Relatives Really Help in Getting a Good Job?”, Centre for Economic Performance, LSE.

Peracchi, Franco, (2002), “The European Community Household Panel: A review”, Empirical economics, 27, pages 63-90.

Petrongolo, Barbara, (2003), “Gender segregation in employment contracts”, Centre for Economic Performance, LSE.

Ruhm, Christopher J., (1998), “The Economic Consequences of Parental Leave Mandates: Lessons from Europe”, Quarterly Journal of Economics, pages 285-317.

Table 1
Gender Gaps in Unemployment Rates Among OECD Countries

Country	All Working Age (15-64)				Prime-Age (25-54)			
	Male	Female	Difference	Ratio	Male	Female	Difference	Ratio
Spain	11	22.91	11.91	2.08	9.2	21	11.8	2.28
Greece	7.56	17.92	10.36	2.37	6.2	15.2	9	2.45
Italy	8.67	15.71	7.04	1.81	6.6	12.7	6.1	1.92
France	9.66	12.96	3.3	1.34	9	12.6	3.6	1.4
Belgium	6.1	9	2.9	1.48
Netherlands	2.74	4.49	1.75	1.64	2.1	3.8	1.7	1.81
Luxembourg	1.77	2.68	0.91	1.51	1.4	2.9	1.5	2.07
Germany	8.15	9.22	1.07	1.13	7.2	8.5	1.3	1.18
Denmark	4.69	6.54	1.85	1.39	3.7	4.9	1.2	1.32
Portugal	3.84	5.05	1.21	1.32	3.4	4.6	1.2	1.35
Finland	9.58	10.73	1.15	1.12	7.9	9	1.1	1.14
Switzerland	2.52	3.68	1.16	1.46	2.2	3.2	1	1.45
Japan	4.82	4.46	-0.36	0.93	3.7	4.4	0.7	1.19
Sweden	7.5	6.76	-0.74	0.9	5.2	5.9	0.7	1.13
USA	4.05	4.33	0.28	1.07	3	3.4	0.4	1.13
Austria	3.69	3.85	0.16	1.04	3.4	3.6	0.2	1.06
Australia	7.13	6.64	-0.49	0.93	5.5	5.3	-0.2	0.96
Canada	7.78	7.25	-0.53	0.93	6.5	6.3	-0.2	0.97
NZ	6.94	6.58	-0.36	0.95	5.5	5.3	-0.2	0.96
Norway	3.36	3.05	-0.31	0.91	2.6	2.2	-0.4	0.85
Ireland	5.9	5.5	-0.4	0.93	5.7	4.8	-0.9	0.84
UK	6.75	5.07	-1.68	0.75	5.4	4.3	-1.1	0.8
New OECD Countries								
Hungary	7.52	6.26	-1.26	0.83	6.7	5.6	-1.1	0.84
Turkey	7.49	7.5	0.01	1	5.9	5.5	-0.4	0.93
Mexico	1.78	2.58	0.8	1.45	1.6	2.1	0.5	1.31
Czech Rep	7.27	10.5	3.23	1.44	5.9	9.5	3.6	1.61

Notes.

1. Source: OECD Labour Market Statistics (OECD Statistical Compendium), 1999.

Table 2
The Marginal Effects of Characteristics on Gender Gaps in Unemployment Rates

	A Female	B Female	C Female	F*Age(15- 24)	F*Age(35- 44)	F*Age(45- 54)	F*Low Edu	F*High Edu	F*Married	F*Div/Sep	F*Kids(0- 12)	F*Kids(13- 15)
Spain	0.087 [0.001]**	0.086 [0.001]**	0.052 [0.003]**	0.078 [0.004]**	-0.06 [0.003]**	-0.017 [0.003]**	-0.004 [0.003]	-0.012 [0.003]**	0.075 [0.003]**	-0.075 [0.004]**	0.035 [0.003]**	-0.013 [0.004]**
Greece	0.112 [0.001]**	0.102 [0.001]**	0.067 [0.003]**	0.054 [0.004]**	-0.03 [0.002]**	0.004 [0.003]	0.002 [0.003]	0.002 [0.002]	0.03 [0.003]**	-0.011 [0.005]*	0.026 [0.003]**	0.038 [0.004]**
Italy	0.062 [0.001]**	0.056 [0.001]**	0.045 [0.002]**	0.028 [0.003]**	-0.06 [0.002]**	0.002 [0.002]	0.025 [0.004]**	-0.011 [0.002]**	0.036 [0.002]**	0.006 [0.005]	0.007 [0.002]**	-0.011 [0.003]**
France	0.053 [0.001]**	0.053 [0.001]**	0.042 [0.002]**	0.004 [0.003]	-0.03 [0.002]**	-0.019 [0.002]**	-0.023 [0.002]**	-0.001 [0.002]	0.039 [0.002]**	-0.005 [0.003]	0.043 [0.002]**	0.026 [0.004]**
Belgium	0.084 [0.001]**	0.079 [0.001]**	0.058 [0.003]**	0.017 [0.005]**	-0.03 [0.002]**	-0.001 [0.003]	-0.066 [0.002]**	0.003 [0.003]	0.058 [0.004]**	0.086 [0.006]**	0.043 [0.004]**	-0.024 [0.004]**
Netherlands	0.036 [0.002]**	0.033 [0.002]**	-0.004 [0.005]	0.016 [0.009]	0.001 [0.006]	0.009 [0.006]	-0.006 [0.006]	-0.001 [0.004]	0.045 [0.009]**	0.029 [0.013]*	0.028 [0.008]**	0.028 [0.010]**
Luxembourg	0.007 [0.001]**	0 [0.001]	-0.015 [0.001]**	0.013 [0.002]**	0.02 [0.003]**	0.002 [0.002]	0.014 [0.003]**	-0.004 [0.001]**	0.044 [0.003]**	0.014 [0.003]**	0.002 [0.002]	-0.009 [0.002]**
Germany	0.035 [0.001]**	0.028 [0.001]**	-0.009 [0.002]**	0.01 [0.003]**	0.02 [0.002]**	0.015 [0.002]**	-0.024 [0.002]**	-0.026 [0.001]**	0.05 [0.002]**	0.003 [0.003]	0.048 [0.002]**	0.019 [0.003]**
Denmark	0.046 [0.001]**	0.045 [0.001]**	0.043 [0.002]**	-0.023 [0.003]**	-0.02 [0.003]**	-0.023 [0.002]**	-0.022 [0.002]**	0.032 [0.003]**	0.011 [0.003]**	-0.011 [0.003]**	0.059 [0.004]**	0.046 [0.007]**
Portugal	0.049 [0.001]**	0.053 [0.001]**	-0.008 [0.003]**	0.054 [0.003]**	-0.01 [0.002]*	-0.008 [0.002]**	0 [0.005]	0.022 [0.002]**	0.043 [0.002]**	-0.013 [0.003]**	0.041 [0.002]**	0.01 [0.003]**
Finland	0.019 [0.001]**	0.032 [0.001]**	0.007 [0.003]*	-0.009 [0.004]*	-0.01 [0.003]**	-0.003 [0.003]	0.002 [0.003]	-0.007 [0.003]*	0.044 [0.004]**	0.024 [0.005]**	0.021 [0.003]**	-0.003 [0.004]
USA	0.002 [0.000]**	0.002 [0.000]**	-0.002 [0.001]**	0.004 [0.001]**	-0.01 [0.001]**	0.001 [0.001]	0.007 [0.001]**	-0.001 [0.001]*	0.012 [0.001]**		0 [0.001]	
Austria	0.01 [0.001]**	0.005 [0.001]**	-0.006 [0.002]**	0.016 [0.003]**	0.01 [0.003]**	0.011 [0.003]**	-0.002 [0.004]	0.005 [0.002]*	-0.008 [0.002]**	0.023 [0.004]**	0.024 [0.002]**	0.031 [0.005]**
Ireland	-0.049 [0.001]**	-0.035 [0.001]**	-0.006 [0.003]*	0.038 [0.004]**	-0.04 [0.003]**	-0.027 [0.003]**	0.021 [0.004]**	0.005 [0.003]*	-0.042 [0.002]**	-0.06 [0.002]**	-0.027 [0.002]**	-0.019 [0.003]**
UK	-0.037 [0.001]**	-0.036 [0.001]**	-0.044 [0.002]**	0.016 [0.002]**	0 [0.002]	0.012 [0.002]**	0.018 [0.002]**	0 [0.002]	-0.004 [0.002]*	0.004 [0.002]	-0.003 [0.001]*	-0.002 [0.002]

Notes:

1. Data for European countries come from ECHPS, data for US from CPS. The sample is restricted to those aged 15-54 inclusive. Dependent variable is whether individual is unemployed conditional on being in the labour force. The reported coefficients are the marginal effects.
2. Coefficient in Column marked A is that on female dummy in probit model of (1). Coefficient in Column marked B is that on female dummy in probit model of (2) where the controls are age, education (high being college graduates, ISCED 5-7, and low being less than second stage of secondary education, ISCED 0-2), marital status and number of children aged 0-12 and 13-15. Coefficient in Column marked C and subsequent columns is that on female dummy and female dummy interacted with characteristics in probit model of (3).
3. Standard errors in parentheses. ** denotes 1% significance level and * denotes 5% significance level.

Table 3a
Flows between Labour Market States and Implied Steady-State Unemployment Rates: Men

	heu	hei	hue	hui	hiu	hie	heu/heu+hue	(hiuhei) (hiuhei+hiehui)	α	Implied Steady-State U-Rate	Actual U-Rate
Spain	1.5	0.37	7.43	0.85	0.72	1.16	16.8	21.3	0.07	17.1	17.8
Greece	0.63	0.21	9.4	0.61	0.44	0.99	6.3	13.4	0.05	6.6	9.4
Italy	0.52	0.32	3.93	0.71	0.64	0.73	11.7	28.6	0.11	13.5	12.6
France	0.61	0.29	8.43	1.85	0.86	1.33	6.7	9.2	0.12	7	10.1
Belgium	0.35	0.23	5.19	0.68	0.46	0.99	6.3	13.7	0.09	6.9	6
Luxembourg	0.21	0.29	10.69	0.72	0.3	1.82	2	6.1	0.06	2.2	2.6
Germany	0.57	0.29	7.42	1.44	0.42	1.72	7.1	4.7	0.13	6.8	6.1
Denmark	0.69	0.38	10.65	1.72	0.81	2.07	6.1	7.9	0.11	6.3	8.7
Portugal	0.43	0.23	7.44	0.84	0.35	1.14	5.5	7.9	0.08	5.7	5.2
Finland	0.92	1.01	9.06	2.63	0.97	3.44	9.3	9.8	0.19	9.3	11.2
USA	1.26	1.37	51.35	29.22	6.11	10.7	2.4	2.6	0.27	2.5	3.4
Austria	0.61	0.37	14.12	1.35	0.31	1.52	4.1	5.2	0.07	4.2	3.1
Ireland	0.57	0.38	4.57	0.54	0.76	2.54	11.2	17.5	0.09	11.7	12.5
UK	0.61	0.25	7.7	1.49	0.96	1.7	7.4	8.8	0.11	7.5	6.7

Notes.

1. Data for European countries are from retrospective monthly work history data in ECHPS. Retrospective monthly data from Sweden and Netherlands is missing. US data from successive monthly CPS. Sample restricted to those aged between 25 and 54.
2. Hazard Rates are estimated using the methodology described in (7).

Table 3b
Flows between Labour Market States and Implied Steady-State Unemployment Rates: Women

	heu	hei	hue	hui	hiu	hie	heu/heu+hue	(hiuhei) (hiuhei+hiehui)	α	Implied Steady- State U-Rate	Actual U-Rate
Spain	1.9	0.89	5.62	1.49	0.37	0.55	25.3	28.7	0.14	25.8	31.9
Greece	1.05	0.79	5.75	1.1	0.25	0.55	15.5	24.9	0.13	16.7	23
Italy	0.74	0.7	3.62	1.11	0.3	0.45	17	29.5	0.18	19.2	24.2
France	0.76	0.44	6.29	1.99	0.49	0.79	10.7	12.1	0.17	11	16.2
Belgium	0.56	0.65	3.19	0.96	0.33	0.92	14.8	19.3	0.19	15.7	9.7
Luxembourg	0.23	0.66	8.61	2.13	0.09	0.83	2.6	3.3	0.18	2.7	5.9
Germany	0.61	0.45	5.03	1.46	0.23	0.97	10.8	6.8	0.18	10	9.6
Denmark	0.93	0.65	7.11	2.54	0.83	1.97	11.6	9.7	0.2	11.2	9.3
Portugal	0.62	0.43	5.85	1	0.21	0.66	9.6	12.1	0.12	9.8	10.5
Finland	1.14	1.59	8.74	3.45	0.91	3.22	11.5	11.6	0.24	11.5	12
USA	1.09	2.69	51.09	46.41	3.59	7.25	2.1	2.8	0.38	2.4	3
Austria	0.59	0.65	9.23	2.11	0.18	0.77	6	6.6	0.16	6.1	5.4
Ireland	0.62	1.24	8.63	2.32	0.18	1.15	6.7	7.6	0.19	6.9	12.4
UK	0.39	0.85	10.27	4.06	0.39	1.64	3.6	4.7	0.24	3.9	4

Notes.

1. As for Table 3a.

Table 4a
Gender Gaps in Labour Market Transition Rates: No Other Controls

Country	E→U	U→E	U→I	E→I	I→U	I→E
Spain	0.236 [0.045]**	-0.278 [0.037]**	0.564 [0.063]**	0.878 [0.056]**	-0.67 [0.059]**	-0.746 [0.053]**
Greece	0.517 [0.066]**	-0.489 [0.058]**	0.595 [0.127]**	1.32 [0.067]**	-0.544 [0.091]**	-0.578 [0.066]**
Italy	0.351 [0.063]**	-0.081 [0.055]	0.446 [0.077]**	0.775 [0.054]**	-0.772 [0.061]**	-0.487 [0.063]**
France	0.217 [0.062]**	-0.291 [0.059]**	0.077 [0.086]	0.423 [0.064]**	-0.558 [0.088]**	-0.511 [0.072]**
Belgium	0.472 [0.102]**	-0.485 [0.111]**	0.339 [0.172]*	1.017 [0.094]**	-0.327 [0.142]*	-0.062 [0.106]
Luxembourg	0.065 [0.125]	-0.216 [0.112]	1.082 [0.277]**	0.818 [0.081]**	-1.17 [0.207]**	-0.778 [0.089]**
Germany	0.067 [0.043]	-0.385 [0.046]**	0.014 [0.074]	0.45 [0.051]**	-0.614 [0.088]**	-0.566 [0.049]**
Denmark	0.302 [0.072]**	-0.4 [0.069]**	0.392 [0.112]**	0.544 [0.081]**	0.023 [0.116]	-0.049 [0.078]
Portugal	0.36 [0.071]**	-0.237 [0.065]**	0.171 [0.121]	0.603 [0.068]**	-0.517 [0.102]**	-0.548 [0.062]**
Finland	0.206 [0.067]**	-0.029 [0.061]	0.28 (3.22)**	0.458 (7.91)**	-0.06 [0.087]	-0.063 [0.049]
USA	-0.142 [0.013]**	-0.005 [0.012]	0.463 [0.014]**	0.463 [0.014]**	-0.532 [0.014]**	-0.39 [0.010]**
Austria	-0.029 [0.092]	-0.421 [0.103]**	0.452 [0.163]**	0.569 [0.074]**	-0.551 [0.145]**	-0.68 [0.073]**
Ireland	0.074 [0.077]	0.631 [0.077]**	1.457 [0.139]**	1.176 [0.071]**	-1.453 [0.111]**	-0.789 [0.061]**
UK	-0.463 [0.054]**	0.29 [0.054]**	1.001 [0.077]**	1.207 [0.051]**	-0.908 [0.071]**	-0.033 [0.046]

Notes.

1. Data as for Table 3a.
2. These represent the coefficients on a female dummy for the method for estimating hazard rates described in the text i.e. the models of (7) and (8). Standard errors in parentheses.

Table 4b
Gender Gaps in Labour Market Transition Rates: With Controls

Country	E→U	U→E	U→I	E→I	I→U	I→E
Spain	0.275 [0.045]**	-0.354 [0.038]**	0.575 [0.066]**	0.884 [0.060]**	-0.366 [0.067]**	-0.574 [0.061]**
Greece	0.538 [0.067]**	-0.47 [0.058]**	0.551 [0.133]**	1.312 [0.067]**	-0.002 [0.103]	-0.608 [0.081]**
Italy	0.394 [0.064]**	-0.138 [0.057]*	0.359 [0.081]**	0.849 [0.056]**	-0.263 [0.066]**	-0.641 [0.080]**
France	0.266 [0.061]**	-0.341 [0.059]**	-0.008 [0.088]	0.422 [0.065]**	-0.497 [0.111]**	-0.525 [0.085]**
Belgium	0.466 [0.100]**	-0.49 [0.115]**	0.424 [0.187]*	1.059 [0.095]**	-0.245 [0.158]	-0.343 [0.123]**
Luxembourg	-0.189 [0.128]	-0.195 [0.111]	0.94 [0.287]**	0.93 [0.086]**	-0.698 [0.266]**	-0.641 [0.114]**
Germany	0.012 [0.043]	-0.425 [0.046]**	0.05 [0.075]	0.395 [0.053]**	-0.519 [0.110]**	-0.34 [0.059]**
Denmark	0.371 [0.071]**	-0.432 [0.068]**	0.387 [0.116]**	0.609 [0.080]**	-0.064 [0.114]	0.026 [0.075]
Portugal	0.446 [0.073]**	-0.3 [0.068]**	0.16 [0.122]	0.69 [0.069]**	-0.257 [0.111]*	-0.56 [0.069]**
Finland	0.344 [0.066]**	-0.068 [0.060]	0.28 [0.088]**	0.629 [0.061]**	-0.341 [0.093]**	-0.179 [0.048]**
USA	-0.114 [0.013]**	-0.012 [0.012]	0.474 [0.014]**	0.474 [0.014]**	-0.463 [0.015]**	-0.436 [0.011]**
Austria	-0.05 [0.093]	-0.511 [0.102]**	0.578 [0.168]**	0.527 [7.12]**	-0.408 [0.176]*	-0.509 [0.079]**
Ireland	0.062 [0.080]	0.401 [0.079]**	1.058 [0.164]**	1.174 [0.077]**	-0.687 [0.129]**	-0.22 [0.057]**
UK	-0.473 [0.054]**	0.292 [0.053]**	1.019 [0.078]**	1.206 [0.051]**	-0.76 [0.084]**	-0.111 [0.050]*

Notes.

1. Data as for Table 3a. Controls are age, education, marital status and number of children.

Table 5
Gender Gaps in Unemployment Durations

Country	% of unemployed with duration >6mths			% of unemployed with duration >12mths		
	Men	Women	Gender Gap	Men	Women	Gender Gap
Spain	62.1	72	9.9	45.4	55.5	10.1
Greece	69	77.7	8.7	48.6	59.5	10.9
Italy	76.6	77.7	1.1	62.1	60.7	-1.4
France	53.7	57.4	3.7	39	41.7	2.7
Belgium	73.2	73.8	0.6	60.1	60.9	0.8
Netherlands	75.1	84.9	9.8	47.7	40.4	-7.3
Luxembourg	61.6	47.5	-14.1	38.6	27.2	-11.4
Germany	65.3	69.4	4.1	49.9	54	4.1
Denmark	38.6	38.5	-0.1	20.9	20.1	-0.8
Portugal	63.5	64.2	0.7	39.5	42.9	3.4
Finland	49.2	43.7	-5.5	33.1	26.2	-6.9
Switzerland	59.3	63.1	3.8	40.6	38.7	-1.9
Japan	49.5	36.9	-12.6	27.4	14.8	-12.6
Sweden	48.5	41.2	-7.3	33.3	26.1	-7.2
USA	13	11.6	-1.4	7.4	6.2	-1.2
Austria	43.6	39.8	-3.8	32.7	24.1	-8.6
Australia	50.9	44.9	-6	31.8	25.8	-6
Canada	23.3	18.9	-4.4	12.8	10.2	-2.6
NZ	42.5	34.3	-8.2	23	17.9	-5.1
Norway	17.1	15.6	-1.5	7.3	6.3	-1
Ireland	77.8	72.9	-4.9	59.5	47.5	-12
UK	50.1	37.6	-12.5	34.5	21.5	-13

Notes:

1. Source: OECD Employment Outlook 1999.

Table 6
Gender Differences in Flows from Employment to Unemployment

Country	No Controls	Controls on Personal Characteristics	Controls on Personal Characteristics and Interactions				Controls on Personal and Job Characteristics
	Coefficient on Female dummy	Coefficient on Female dummy	Coefficient on Female Dummy	Coefficient on Female* married	Coefficient on Female* kids0-12	Coefficient on Female* kids13-15	Coefficient on Female dummy
Spain	0.222 [0.052]**	0.239 [0.054]**	0.199 [0.080]*	0.01 [0.116]	0.071 [0.141]	0.167 [0.194]	0.141 [0.060]*
Greece	0.531 [0.074]**	0.549 [0.076]**	0.516 [0.114]**	0.01 [0.169]	0.061 [0.214]	0.364 [0.285]	0.554 [0.084]**
Italy	0.056 [0.070]	0.136 [0.071]	0.1 [0.098]	-0.134 [0.160]	0.254 [0.195]	0.205 [0.277]	0.018 [0.077]
France	0.357 [0.096]**	0.432 [0.097]**	0.158 [0.152]	0.394 [0.207]	0.358 [0.232]	-0.393 [0.422]	0.279 [0.118]*
Belgium	0.717 [0.132]**	0.803 [0.134]**	0.449 [0.207]*	0.348 [0.284]	0.677 [0.391]	0.039 [0.657]	0.729 [0.162]**
Netherlands	0.597 [0.133]**	1.007 [0.118]**	0.168 [0.202]	0.527 [0.305]	0.172 [0.353]	0.592 [0.443]	1.152 [0.150]**
Luxembourg	0.334 [0.296]	0.28 [0.302]	-0.43 [0.515]	1.511 [0.688]*	-0.069 [0.796]	-0.014 [1.491]	0.149 [0.394]
Germany	0.153 [0.053]**	0.083 [0.054]	-0.374 [0.090]**	0.486 [0.115]**	0.289 [0.135]*	0.468 [0.213]*	0.108 [0.065]
Denmark	0.612 [0.118]**	0.636 [0.120]**	0.238 [0.173]	0.206 [0.249]	0.586 [0.323]	13.362 [363.531]	0.502 [0.140]**
Portugal	0.448 [0.078]**	0.543 [0.080]**	0.243 [0.136]	-0.006 [0.169]	0.681 [0.191]**	0.427 [0.275]	0.49 [0.086]**
Finland	0.358 [0.124]**	0.435 [0.127]**	0.204 [0.214]	0.405 [0.271]	0.011 [0.290]	-0.071 [0.421]	0.451 [0.153]**
Sweden	0.014 [0.093]	0.205 [0.125]	0.117 [0.169]	0.095 [0.196]	-0.36 [0.211]	-0.02 [0.280]	0.367 [0.151]*
Austria	0.29 [0.122]*	-0.011 [0.111]	0.271 [0.197]	-0.691 [0.260]**	0.712 [0.279]*	0.211 [0.498]	-0.202 [0.131]
Ireland	-0.103 [0.108]	-0.223 [0.089]*	0.12 [0.175]	-0.232 [0.235]	-0.048 [0.271]	-0.521 [0.413]	-0.234 [0.103]*
UK	-0.188 [0.089]*	0.028 [0.094]	-0.211 [0.131]	-0.129 [0.187]	0.091 [0.245]	0.314 [0.341]	0.032 [0.104]

Notes.

1. Data is from ECHPS. The sample is all those who are employed at one interview and employed or unemployed subsequently. Model estimated is a cloglog model where the dependent variable takes the value one if the individual is still employed.
2. Standard errors in parentheses.
3. The ILO main activity status is used for Sweden as the Self-Defined main activity status question, used for the other countries, is not asked.

Table 7a
Reasons for leaving Previous Job (%): Currently Unemployed

		Obliged by Employer	End of Contract	Child Birth/ Care	Sick /Disabled	Retired	Other*	Sample Size
Spain	M	22	63	0	3	0	12	3575
	F	17	64	5	2	0	12	2652
Greece	M	38	37	0	3	2	21	1097
	F	38	39	5	1	2	15	1331
Italy	M	39	36	1	4	8	11	1494
	F	28	46	4	3	10	9	1169
France	M	41	44	0	3	0	12	999
	F	34	44	6	2	0	15	1271
Belgium	M	55	18	0	0	8	19	536
	F	43	22	8	11	1	14	939
Netherlands	M	30	15	2	34	2	17	709
	F	12	12	42	13	1	21	1917
Germany	M	59	20	0	2	9	10	2191
	F	54	22	1	2	9	12	2421
Denmark	M	42	26	1	9	1	21	590
	F	36	29	7	10	3	16	906
Portugal	M	24	40	0	5	2	30	971
	F	24	44	4	5	1	23	1252
Finland	M	28	57	0	2	1	11	1009
	F	22	60	4	3	1	10	1123
Austria	M	43	10	1	1	33	13	464
	F	33	15	18	11	1	22	398
Ireland	M	41	33	1	6	0	19	1393
	F	26	33	3	9	0	29	409
UK	M	45	18	1	6	15	16	1332
	F	23	16	16	7	17	21	611

Note:

1. Data from ECHPS. Question only asked of those who have worked within the last two years.
2. Other reasons includes: Marriage, Move for partner's job, Closure of own business & Study/National service.

Table 7b
Reasons for leaving Previous Job (%): Currently Inactive

		Obliged by Employer	End of Contract	Child Birth/ Care	Sick/ Disabled	Retired	Other*	Sample Size
Spain	M	20	20	0	32	7	21	3259
	F	12	30	16	12	1	28	5105
Greece	M	10	5	0	15	60	10	1895
	F	16	13	22	11	5	33	2374
Italy	M	16	6	0	13	52	13	3832
	F	13	12	21	7	29	17	4645
France	M	33	5	1	19	35	6	1805
	F	17	11	21	13	16	22	3029
Belgium	M	37	2	0	22	32	7	949
	F	21	8	16	16	16	23	1419
Netherlands	M	8	4	1	34	28	24	1598
	F	7	8	38	16	4	27	3490
Germany	M	46	10	0	11	19	15	3416
	F	27	8	19	5	18	24	6850
Denmark	M	10	11	0	30	17	32	969
	F	12	14	5	27	14	29	1737
Portugal	M	4	5	0	32	41	18	1671
	F	6	12	11	26	16	29	2767
Finland	M	10	31	0	23	10	25	2029
	F	9	34	9	16	7	25	2631
Austria	M	12	2	0	36	34	16	1575
	F	9	3	36	15	21	17	2581
Ireland	M	18	7	1	33	10	30	1297
	F	11	10	36	12	1	30	3622
UK	M	22	6	4	18	33	17	1949
	F	12	6	36	8	22	16	6318

Notes:

1. As for Table 7a.

Table 8
Are the Unemployed More Likely than the Inactive to Get a Job?

	Female		Female & Unemployed in t=0		Unemployed in t=0
Spain	-0.124 [0.164]		0.418 [0.069]**		1.702 [0.047]**
Greece	-0.302 [0.253]		0.426 [0.105]**		1.985 [0.074]**
Italy	-1.04 [0.324]**		0.611 [0.100]**		1.452 [0.070]**
France	-0.269 [0.196]		0.19 [0.100]		1.557 [0.077]**
Belgium	-0.836 [0.347]*		-0.513 [0.169]**		1.396 [0.131]**
Luxembourg	-0.203 [0.325]		0.317 [0.159]*		0.793 [0.112]**
Germany	-0.093 [0.157]		0.094 [0.070]		1.392 [0.051]**
Denmark	-0.428 [0.219]		-0.434 [0.104]**		1.78 [0.081]**
Portugal	-0.346 [0.227]		0.289 [0.097]**		1.724 [0.070]**
Finland	0.059 [0.196]		0.137 [0.078]		0.911 [0.059]**
USA	-0.035 [0.026]		0.266 [0.016]**		1.145 [0.012]**
Austria	-0.45 [0.303]		0.171 [0.129]		2.149 [0.092]**
Ireland	-0.341 [0.265]		0.491 [0.104]**		0.972 [0.067]**
UK	-0.179 [0.138]		0.235 [0.073]**		1.579 [0.055]**

Notes.

1. The sample is all those who are not in employment in an initial month and the dependent variable is whether they are still not in employment a month later. The other controls included are: age, education level, gender, presence and age of children and the gender dummy interacted with the other controls.
2. Data for European countries from ECHPS retrospective work history data; data for US from successive monthly CPS files.

Table 9
Methods of Job Search Among the Unemployed (%)

	US (CPS) method mentioned		UK (LFS) method mentioned		Spain (LFS) method mentioned	
	Men	Women	Men	Women	Men	Women
contacted public employment service or other public body	22.2	19.9	83.9	63.0	88.6	86.0
applied directly to employers	66.2	62.8	57.4	49.1	25.4	20.0
placed or answered advertisements	16.5	16.4	65.0	60.6	14.2	16.7
sent out resumes/applications	39.0	44.4	47.1	45.2	5.7	7.1
looked at advertisements	20.9	21.6	90.9	91.7	14.8	17.4
contacted friends/relatives/unions	19.8	13.9	70.1	60.4	51.2	48.0
private employment agency	6.5	6.5	24.1	18.4	3.2	4.0
other	8.6	9.0	9.3	7.5	5.1	7.1
Average number of search methods	2.00	1.94	4.70	4.08	1.98	1.96
Number of observations	92,001	92,001	117,941	70,152	284,684	328,296

Notes.

1. Data from the CPS is from the period 1/97-12/98; from the UK and Spanish LFS is for 3/1992-2/2003.
2. The classification of search methods is different in the three countries and some re-classification has been done.
3. For Spain, data on the method "looked at advertisements" is only available after 1999.
4. For Spain, until 1998, the maximum number of methods respondents could answer was 3. From 1/1999 to 3/2002, the fraction of unemployed answering "4 or more methods" was 15.9% for males and 15.7% for females.

Table 10
Benefit Receipt Among the Unemployed

Country	Male	Female
Spain	34.56	15.86
Greece	13.62	9.41
Italy	4.29	3.28
France	51.01	40.55
Belgium	79.85	73.99
Luxembourg	22.22	17.86
Germany	68.7	69.44
Denmark	85.8	83.72
Portugal	26.92	23.37
Finland	79.66	75.43
Austria	59.45	43.5
Ireland	87.86	44.9
UK	33.25	17.21

Notes.

1. Source: ECHPS. The question asked is “Do you receive unemployment benefit or assistance?”

Table 11
Maternity Leave Legislation, 1999-2000

Country	Maternity Leave			Parental Leave		
	Length (weeks)	Payment (% earnings)	Continuation of payment by employer	Length (months)	Maximum child age (years)	Payment
Austria	16	100	low wage workers	3 –24	2	410 euros/month
Netherlands	16	100	No	6	8	unpaid
Spain	16	100	No	-	3	unpaid
Luxembourg	16	-	No	6	5	1487 euros/month
Germany	14	100	No	-	3	306 euros/month
Greece	14	100	No	3.5	3.5	unpaid
Italy	18	80	No	10	3	30%earnings
France	16-26	84	Yes	-	3	461 euros/month
UK	14	90	No	3.25	5	unpaid
Portugal	12.5	100	No	6	3	unpaid
Denmark	18	67	Yes	2-12	8	920 euros/month
Finland	17.5	66	Yes	6.5	3	10 euros/day
Belgium	15	82 first month, 75 rest	No	3	4	505 euros/month
Ireland	14	70	No	3.5	5	unpaid
Sweden	12	80	-	18	8	80%earnings
USA	12	unpaid	No	-	-	-

Notes.

1. The Council Directive 92/85/EEC of 19 October 1992 sets a minimum of period of 14 weeks (including the two weeks before and after birth) of maternity leave. The amount of maternity pay is fixed by the national legislation of the country and should be at least equal to the value of sick pay.
2. There is no EU regulation regarding paternity leave. In most countries this is, at most, just a few days after birth.
3. Council Directive 96/34/EC of 3 June 1996 sets a minimum period of 3 months of parental leave. Both parents have a three months entitlement, but one parent cannot transfer the right to parental leave to the other. Payment is legislated at country level. Directive 97/75/EC extends the scope of Directive 96/34/EC to the United Kingdom.
4. For the USA, maternity leave is regulated within the Family and Medical Leave Act (1993). It allows eligible employees (tenure >1year) of a covered employer (number of employees > 50) to take unpaid leave (or to substitute paid leave if the employee has earned or accrued it) because birth/care of a child as well as for health conditions of the employee or family member.
5. In Denmark, payments are based on unemployment benefits.
6. In the UK, only employees with tenure of more than 26 weeks are eligible for maternity pay. Employees with more than 1 year of employment with the same employer have the right of “additional” maternity leave.
7. In France, parental leave is paid only for workers having 2 or more children.
8. In Germany, parental leave is paid until the child is 2 years old and for workers below a certain household income.

Table 12
The Impact of Work History on the Flows from Unemployment to Employment

	No Controls for Work History	With Controls for Work History
Spain	-0.217 [0.046]**	-0.286 [0.048]**
Greece	-0.529 [0.065]**	-0.545 [0.069]**
Italy	-0.305 [0.058]**	-0.374 [0.060]**
France	-0.282 [0.092]**	-0.316 [0.095]**
Belgium	-0.52 [0.132]**	-0.511 [0.141]**
Netherlands	-0.69 [0.099]**	-0.513 [0.107]**
Luxembourg	-0.26 [0.441]	1.302 [1.005]
Germany	-0.22 [0.060]**	-0.182 [0.062]**
Denmark	-0.324 [0.117]**	-0.312 [0.124]*
Portugal	-0.245 [0.070]**	-0.223 [0.074]**
Finland	-0.013 [0.118]	-0.074 [0.126]
Sweden	-0.138 [0.103]	-0.166 [0.109]
Austria	0.207 [0.138]	0.275 [0.150]
Ireland	0.54 [0.092]**	0.309 [0.106]**
UK	0.473 [0.087]**	0.381 [0.091]**

Notes:

1. Source is ECHPS Annual Data. Sample is those currently unemployed who are either unemployed or employed at the subsequent interview. Other controls included are age, education, marital status and number of children.

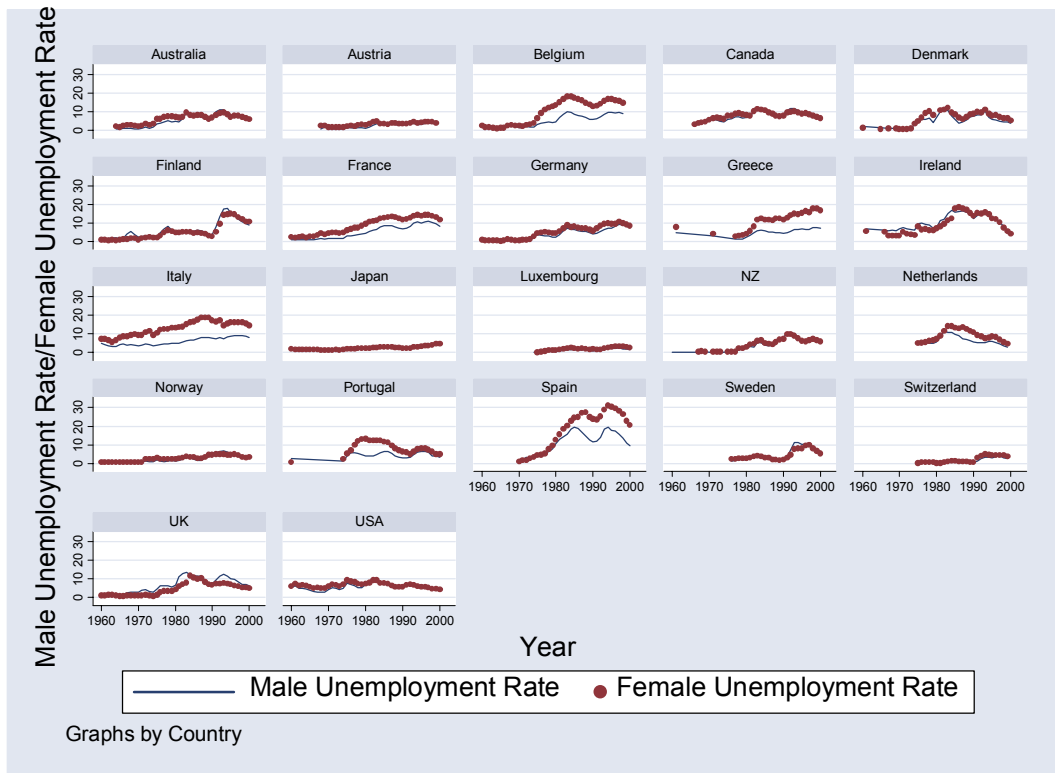
Table 13
Part-time Employment

	Female		Male	
	Unemployed wanting PT work (%)	Employed Working Part-Time (%)	Unemployed wanting PT work (%)	Employed Working Part-Time (%)
Spain	7.8	16.5	1.3	2.6
Greece	6.8	5.7	0	2.6
Italy	34.4	12.4	3.7	2.8
France	23.2	30	2.7	5.3
Belgium	20.1	34	2.1	3.2
Netherlands	72.4	68.7	15.3	16.7
Luxembourg	36.1	18.1	0	1.3
Germany	23.7	33.6	3.2	3.3
Denmark	16.3	35.1	0	11.4
Portugal	0	8.3	0	1.6
Finland	7.1	15.2	0	6.5
Sweden	19.4	42.6	2.9	8.3
Austria	44.8	28.7	3.8	3
Ireland	47.2	22.2	0	5.7
UK	55.1	44.2	5.2	7.5

Notes.

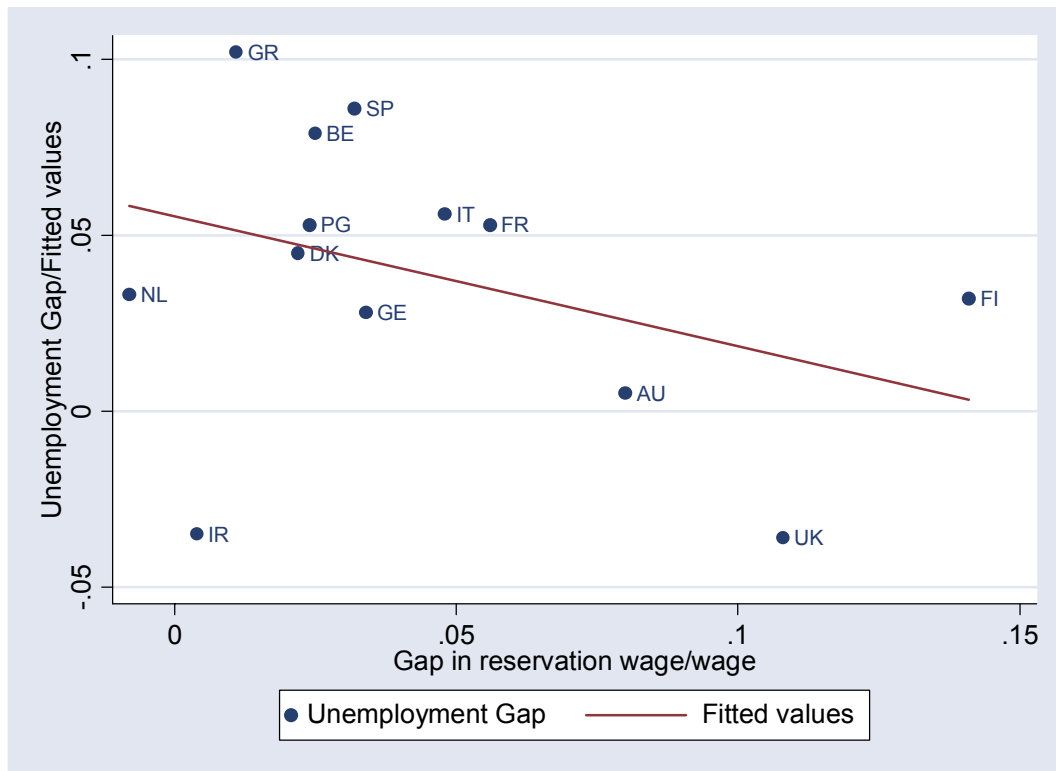
1. Source: Eurostat Labour Force Survey, 1996.

Figure 1
Unemployment Rates by Gender Over Time



Source: OECD. Figures relate to population of working age.

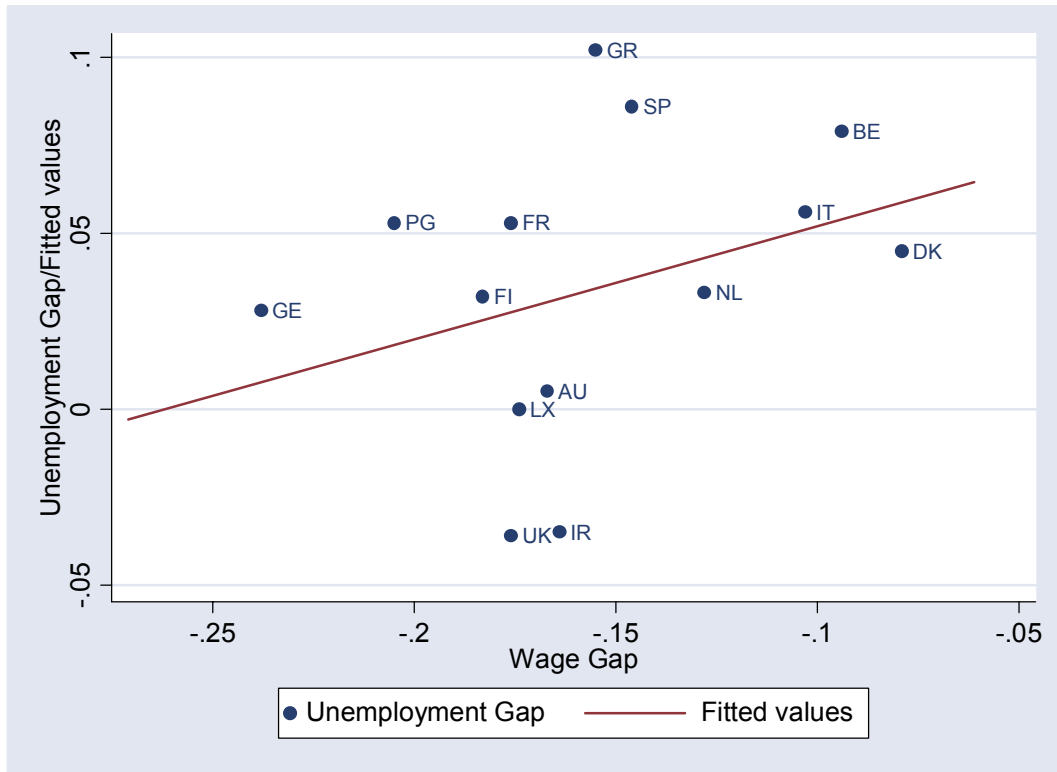
Figure 2
The Gender Gap in Unemployment Rates and Reservation Wage/Wage Ratios



Notes.

1. The gender gaps in unemployment rates come from the coefficient on a female dummy in a probit regression for being unemployed where personal characteristics are included as controls (this is column B of Table 2). The gender wage gaps come from a similar regression where the dependent variable is the log of the hourly wage and the gender gap in reservation wages from a similar regression where the dependent variable is the log of the hourly reservation wage.

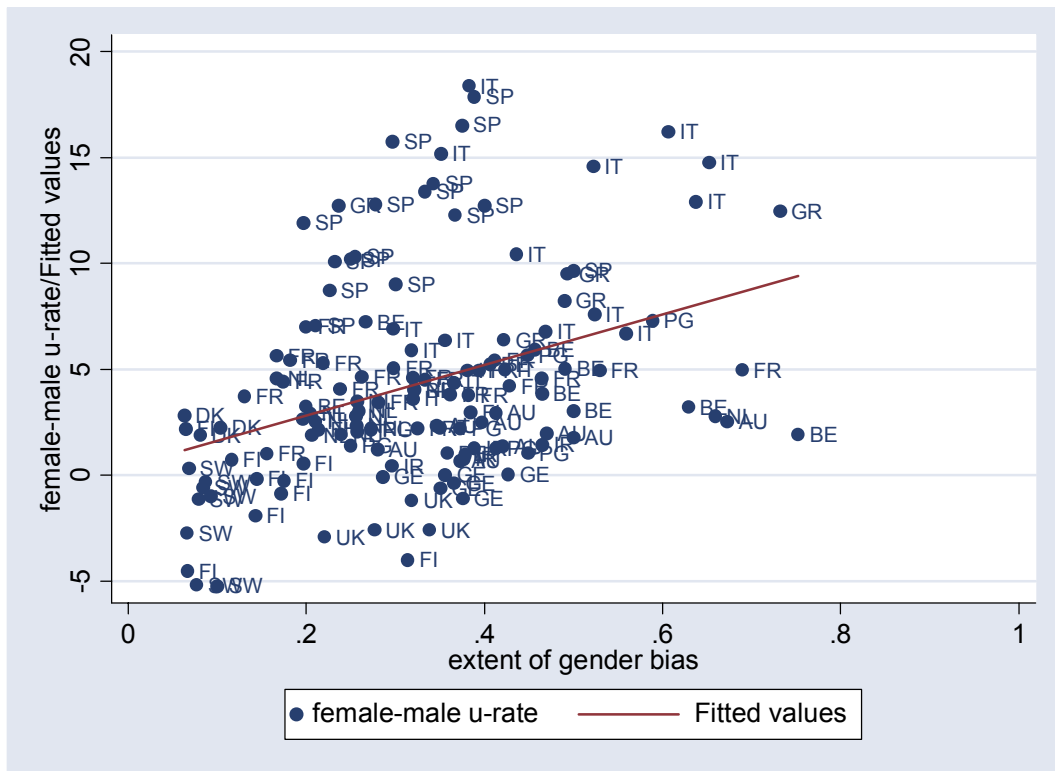
Figure 3
The Gender Gap in Unemployment Rates and in Wages



Notes

1. Data sources as for Figure 3.

Figure 4
Prejudice and the Gender Gap in Unemployment Rates



Notes.

1. The vertical axis is the average of the gap between female and male unemployment rates over the period 1996-2000 inclusive.
2. The horizontal axis is the fraction agreeing with the statement "when jobs are scarce, men should have more right to a job than women".

Data Appendix, Table A1: descriptive statistics

	Spain				Greece				Italy			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Personal Characteristics												
Age (15-24)	0.11	0.13	0.28	0.33	0.08	0.11	0.32	0.39	0.08	0.10	0.40	0.42
Age (25-34)	0.28	0.33	0.29	0.37	0.26	0.28	0.34	0.32	0.28	0.32	0.38	0.39
Age (35-44)	0.28	0.28	0.18	0.18	0.27	0.30	0.12	0.18	0.28	0.29	0.10	0.13
Age (45-54)	0.22	0.18	0.14	0.09	0.25	0.22	0.13	0.09	0.25	0.23	0.07	0.04
Age (50-64)	0.11	0.08	0.12	0.03	0.14	0.10	0.08	0.02	0.11	0.07	0.05	0.01
High Education	0.23	0.33	0.12	0.20	0.21	0.27	0.14	0.22	0.10	0.12	0.05	0.08
Medium Education	0.19	0.21	0.17	0.23	0.31	0.29	0.41	0.42	0.38	0.48	0.35	0.48
Low Education	0.58	0.46	0.71	0.57	0.48	0.44	0.45	0.36	0.52	0.40	0.61	0.44
Married	0.68	0.55	0.37	0.33	0.73	0.69	0.29	0.34	0.70	0.65	0.20	0.22
Single	0.29	0.33	0.49	0.43	0.25	0.21	0.52	0.40	0.27	0.27	0.65	0.58
Other Marital Status	0.03	0.12	0.15	0.25	0.02	0.10	0.19	0.26	0.03	0.08	0.14	0.21
Kids (0-12)	0.26	0.18	0.09	0.10	0.27	0.20	0.04	0.07	0.26	0.21	0.06	0.07
Kids (13-15)	0.08	0.06	0.04	0.03	0.09	0.07	0.02	0.04	0.08	0.07	0.03	0.03
No Kid	0.66	0.76	0.86	0.87	0.64	0.73	0.94	0.89	0.65	0.72	0.91	0.90
Job Characteristics												
Full-Time	0.97	0.86			0.97	0.89			0.97	0.86		
Part-Time	0.03	0.14			0.03	0.11			0.03	0.14		
Permanent Contract	0.62	0.59			0.84	0.75			0.85	0.84		
Temporary Contract	0.29	0.31			0.08	0.09			0.07	0.09		
Other Contract	0.09	0.11			0.09	0.16			0.07	0.07		
Private Sector	0.83	0.75			0.79	0.76			0.75	0.66		
Public Sector	0.17	0.25			0.21	0.24			0.25	0.34		
Job Tenure	6.65	6.64			7.71	7.43			7.49	7.49		
Work History												
Worked Before			0.85	0.73			0.73	0.62			0.42	0.35
Not Worked Before			0.15	0.27			0.27	0.38			0.58	0.65
Years Since Last Job			4.07	4.43			3.90	4.66			5.09	4.99

	France				Belgium				Netherlands			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Personal Characteristics												
Age (15-24)	0.07	0.07	0.24	0.22	0.04	0.05	0.13	0.13	0.06	0.10	0.08	0.04
Age (25-34)	0.28	0.27	0.29	0.34	0.27	0.34	0.21	0.30	0.25	0.34	0.17	0.24
Age (35-44)	0.30	0.32	0.19	0.21	0.36	0.35	0.24	0.30	0.35	0.31	0.27	0.41
Age (45-54)	0.28	0.27	0.16	0.15	0.26	0.21	0.26	0.17	0.26	0.21	0.32	0.24
Age (50-64)	0.08	0.07	0.12	0.09	0.07	0.04	0.17	0.09	0.07	0.05	0.16	0.06
High Education	0.24	0.30	0.16	0.18	0.39	0.50	0.20	0.12	0.17	0.18	0.10	0.10
Medium Education	0.41	0.36	0.34	0.35	0.36	0.32	0.32	0.40	0.40	0.37	0.37	0.43
Low Education	0.35	0.33	0.50	0.47	0.25	0.19	0.48	0.48	0.43	0.45	0.54	0.48
Married	0.64	0.58	0.20	0.25	0.70	0.62	0.22	0.29	0.69	0.53	0.26	0.49
Single	0.27	0.25	0.30	0.23	0.19	0.18	0.17	0.12	0.24	0.31	0.17	0.08
Other Marital Status	0.09	0.17	0.50	0.52	0.11	0.20	0.62	0.59	0.07	0.16	0.57	0.43
Kids (0-12)	0.31	0.27	0.07	0.11	0.28	0.27	0.05	0.13	0.29	0.19	0.04	0.19
Kids (13-15)	0.08	0.08	0.02	0.02	0.06	0.07	0.02	0.02	0.10	0.08	0.02	0.06
No Kid	0.61	0.66	0.91	0.86	0.66	0.66	0.94	0.84	0.61	0.73	0.95	0.75
Job Characteristics												
Full-Time	0.97	0.82			0.98	0.76			0.96	0.56		
Part-Time	0.03	0.18			0.02	0.24			0.04	0.44		
Permanent Contract	0.88	0.84			0.92	0.86			0.92	0.86		
Temporary Contract	0.09	0.10			0.06	0.11			0.03	0.05		
Other Contract	0.03	0.05			0.02	0.02			0.06	0.09		
Private Sector	0.74	0.61			0.71	0.61			0.78	0.66		
Public Sector	0.26	0.39			0.29	0.39			0.22	0.34		
Job Tenure	7.21	7.20			7.38	7.45			7.47	6.82		
Work History												
Worked Before			0.62	0.62			0.89	0.86			0.91	0.91
Not Worked Before			0.38	0.38			0.11	0.14			0.09	0.09
Years Since Last Job			3.79	4.16			5.56	6.35			6.18	8.05

	Luxembourg				Germany				Denmark			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Personal Characteristics												
Age (15-24)	0.09	0.16	0.31	0.32	0.10	0.13	0.13	0.11	0.10	0.10	0.14	0.12
Age (25-34)	0.35	0.40	0.32	0.27	0.28	0.30	0.23	0.23	0.26	0.26	0.30	0.37
Age (35-44)	0.27	0.23	0.22	0.22	0.28	0.28	0.18	0.24	0.29	0.30	0.23	0.21
Age (45-54)	0.22	0.17	0.11	0.16	0.22	0.21	0.18	0.22	0.25	0.26	0.16	0.18
Age (50-64)	0.07	0.05	0.04	0.03	0.12	0.08	0.28	0.19	0.11	0.09	0.17	0.12
High Education	0.21	0.17	0.07	0.10	0.27	0.19	0.15	0.10	0.33	0.38	0.23	0.18
Medium Education	0.40	0.38	0.26	0.25	0.53	0.57	0.50	0.60	0.46	0.43	0.42	0.40
Low Education	0.39	0.45	0.66	0.64	0.20	0.24	0.35	0.31	0.21	0.19	0.36	0.42
Married	0.58	0.40	0.09	0.08	0.67	0.59	0.33	0.33	0.55	0.55	0.15	0.21
Single	0.35	0.43	0.19	0.08	0.25	0.25	0.17	0.09	0.35	0.27	0.21	0.17
Other Marital Status	0.07	0.17	0.72	0.84	0.08	0.17	0.50	0.58	0.11	0.18	0.64	0.63
Kids (0-12)	0.23	0.15	0.02	0.02	0.25	0.18	0.05	0.07	0.27	0.28	0.04	0.10
Kids (13-15)	0.05	0.04	0.01	0.00	0.07	0.08	0.01	0.02	0.05	0.06	0.01	0.02
No Kid	0.72	0.81	0.97	0.98	0.68	0.74	0.93	0.91	0.68	0.66	0.95	0.88
Job Characteristics												
Full-Time	1.00	0.94			0.99	0.81			0.97	0.83		
Part-Time	0.00	0.06			0.01	0.19			0.03	0.17		
Permanent Contract	0.95	0.92			0.92	0.90			0.88	0.88		
Temporary Contract	0.05	0.07			0.07	0.08			0.05	0.07		
Other Contract	0.00	0.01			0.02	0.01			0.07	0.05		
Private Sector	0.70	0.71			0.78	0.64			0.74	0.46		
Public Sector	0.30	0.29			0.22	0.36			0.26	0.54		
Job Tenure	6.42	6.20			5.84	5.88			6.54	6.53		
Work History												
Worked Before			0.80	0.91			0.98	0.97			0.95	0.94
Not Worked Before			0.20	0.09			0.02	0.03			0.05	0.06
Years Since Last Job			3.20	2.45			4.76	4.31			3.59	3.81

	Portugal				Finland				Sweden			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Personal Characteristics												
Age (15-24)	0.17	0.14	0.33	0.31	0.07	0.06	0.19	0.13	0.07	0.08	0.26	0.23
Age (25-34)	0.25	0.26	0.19	0.25	0.22	0.19	0.21	0.20	0.24	0.23	0.25	0.31
Age (35-44)	0.24	0.26	0.17	0.19	0.30	0.31	0.19	0.23	0.25	0.26	0.20	0.18
Age (45-54)	0.21	0.22	0.13	0.15	0.31	0.33	0.22	0.25	0.28	0.28	0.17	0.16
Age (50-64)	0.13	0.12	0.17	0.10	0.10	0.10	0.19	0.18	0.16	0.15	0.12	0.11
High Education	0.05	0.10	0.02	0.02	0.30	0.42	0.12	0.23	0.29	0.34	0.16	0.15
Medium Education	0.10	0.14	0.11	0.12	0.46	0.36	0.47	0.39	0.50	0.49	0.58	0.56
Low Education	0.84	0.76	0.87	0.86	0.24	0.21	0.41	0.38	0.21	0.17	0.26	0.29
Married	0.69	0.67	0.28	0.37	0.64	0.67	0.25	0.32	0.46	0.48	0.14	0.17
Single	0.28	0.21	0.36	0.21	0.27	0.19	0.31	0.16	0.40	0.32	0.39	0.25
Other Marital Status	0.04	0.11	0.36	0.42	0.09	0.14	0.44	0.52	0.14	0.21	0.47	0.58
Kids (0-12)	0.29	0.26	0.04	0.09	0.36	0.35	0.23	0.29	0.34	0.33	0.24	0.36
Kids (13-15)	0.09	0.08	0.02	0.03	0.10	0.11	0.09	0.08	0.15	0.17	0.10	0.11
No Kid	0.62	0.66	0.94	0.88	0.54	0.55	0.68	0.62	0.51	0.50	0.66	0.53
Job Characteristics												
Full-Time	0.98	0.91			0.96	0.91			0.95	0.81		
Part-Time	0.02	0.09			0.04	0.09			0.05	0.19		
Permanent Contract	0.87	0.83			0.89	0.83			0.87	0.82		
Temporary Contract	0.10	0.14			0.10	0.16			0.08	0.10		
Other Contract	0.03	0.03			0.01	0.01			0.05	0.08		
Private Sector	0.83	0.75			0.77	0.54			0.77	0.46		
Public Sector	0.17	0.25			0.23	0.46			0.23	0.54		
Job Tenure	7.58	7.52										
Work History												
Worked Before			0.83	0.79			0.95	0.97				
Not Worked Before			0.17	0.21			0.05	0.03				
Years Since Last Job			4.13	4.74								

	Austria				Ireland				UK			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Personal Characteristics												
Age (15-24)	0.17	0.19	0.19	0.24	0.16	0.21	0.24	0.53	0.13	0.15	0.27	0.32
Age (25-34)	0.26	0.27	0.23	0.23	0.24	0.31	0.26	0.29	0.28	0.28	0.27	0.23
Age (35-44)	0.27	0.28	0.18	0.22	0.24	0.24	0.22	0.10	0.27	0.26	0.18	0.18
Age (45-54)	0.21	0.21	0.21	0.24	0.22	0.18	0.19	0.06	0.22	0.24	0.17	0.19
Age (50-64)	0.09	0.05	0.18	0.07	0.13	0.06	0.09	0.02	0.10	0.08	0.12	0.08
High Education	0.07	0.09	0.05	0.05	0.19	0.25	0.05	0.11	0.44	0.40	0.24	0.28
Medium Education	0.74	0.64	0.66	0.53	0.39	0.50	0.24	0.41	0.20	0.20	0.20	0.18
Low Education	0.19	0.27	0.29	0.42	0.42	0.25	0.71	0.48	0.36	0.40	0.56	0.55
Married	0.59	0.55	0.25	0.14	0.62	0.53	0.44	0.09	0.59	0.54	0.19	0.06
Single	0.35	0.32	0.21	0.13	0.36	0.38	0.44	0.40	0.30	0.26	0.23	0.09
Other Marital Status	0.06	0.13	0.54	0.73	0.02	0.09	0.13	0.52	0.11	0.20	0.59	0.85
Kids (0-12)	0.38	0.37	0.28	0.36	0.29	0.23	0.12	0.03	0.23	0.19	0.05	0.02
Kids (13-15)	0.08	0.09	0.04	0.08	0.10	0.07	0.03	0.01	0.06	0.06	0.01	0.01
No Kid	0.54	0.53	0.68	0.55	0.61	0.69	0.85	0.96	0.72	0.75	0.94	0.97
Job Characteristics												
Full-Time	0.99	0.80			0.95	0.76			0.98	0.85		
Part-Time	0.01	0.20			0.05	0.24			0.02	0.15		
Permanent Contract	0.94	0.91			0.85	0.80			0.92	0.90		
Temporary Contract	0.04	0.06			0.04	0.08			0.04	0.05		
Other Contract	0.02	0.03			0.11	0.12			0.04	0.06		
Private Sector	0.77	0.73			0.77	0.69			0.83	0.68		
Public Sector	0.23	0.27			0.23	0.31			0.17	0.32		
Job Tenure					6.47	5.96			5.89	5.75		
Work History												
Worked Before			0.96	0.94			0.86	0.74			0.87	0.84
Not Worked Before			0.04	0.06			0.14	0.26			0.13	0.16
Years Since Last Job							5.92	3.65			4.21	4.12

	USA			
	Employed		Unemployed	
	Male	Female	Male	Female
Personal Characteristics				
Age (15-24)	0.10	0.10	0.28	0.25
Age (25-34)	0.25	0.25	0.24	0.27
Age (35-44)	0.30	0.30	0.23	0.26
Age (45-54)	0.24	0.25	0.17	0.16
Age (50-64)	0.11	0.10	0.08	0.06
High Educ	0.12	0.08	0.28	0.25
Medium Educ	0.33	0.33	0.38	0.37
Medium2 Educ	0.27	0.31	0.21	0.25
Low Educ	0.29	0.28	0.13	0.14
Married	0.65	0.60	0.38	0.41
Not Married	0.35	0.40	0.62	0.59
Kids	0.19	0.22	0.20	0.24
No Kid	0.81	0.78	0.80	0.76

Note: There is no information on work history and type of job for the US data as the tables in the paper that use this information do not estimate models for the US.