Husband's Unemployment and Wife's Labor Supply – The Added

Worker Effect across Europe

**Abstract** 

This paper investigates the responsiveness of women's labor supply to their husband's job loss

- the so-called added worker effect. We contribute to the literature by taking an explicit

internationally comparative perspective and analyze the variation of the added worker effect

across welfare regimes. Using longitudinal data from the European Union Statistics on Income

and Living Conditions (EU-SILC) covering 28 European countries from 2004 to 2013, we find

evidence for the existence of an added worker effect. However, our results also reveal that the

added worker effect varies over both the business cycle and the different welfare regimes within

Europe.

JEL Classifications: J22, J64, J82

Keywords: added worker effect, labor supply, unemployment, cross-country analysis

Theoretical models of family labor supply predict that the unemployment of one spouse should increase the labor supply of the other spouse. In order to offset the expected income loss associated with the partner's job loss, inactive spouses newly enter the labor market and become so-called 'added workers' and already participating spouses increase the amount of hours worked. We investigate these theoretical predictions by focusing on the responsiveness of women's labor supply to their husband's job loss. Previous empirical literature on this topic mainly concentrates on a single country and provides mixed results. Cross-country evidence on the added worker effect, however, is scarce.

Yet, it seems obvious to assume that women's response to their husbands' job loss varies across welfare regimes. Even within the European framework, countries differ largely with respect to their institutional settings, their social policies and the structure of their labor markets, and therefore offer different incentives for women to adjust their labor supply. As Bentolila and Ichino (2008) argue, the role of family support and thus wives' reactions to their husbands' job loss should be stronger whenever the welfare state fails to mitigate the consequences of unemployment. In this regard, Reher (1998) shows a 'dividing line' between southern European societies, with their history of depending on strong family networks, and northern European societies, with their weaker family systems and greater reliance on extended welfare states. Following this argumentation, we would expect the behavioral response of wives to their husbands' unemployment to be stronger the lower the generosity of the welfare system.

In order to test this hypothesis, we take an explicit internationally comparative perspective and analyze whether the added worker effect varies across the welfare regimes in Europe. In doing so, we use longitudinal data from the European Union Statistics on Income and Living Conditions (EU-SILC) covering 28 European countries over the period 2004 to 2013. Observing households over the time of the Great Recession, which forced many families to devise strategies to cope with negative income shocks due to job loss, further provides a fresh opportunity to investigate couples' labor supply. While previous evidence on the added worker effect during recessions is based on before-after comparisons for single countries, we are able to investigate the role of the added worker effect in Europe's economic crisis by explicitly analyzing its variation with the countries' economic conditions.

Lastly, we contribute to the literature by considering a variety of behavioral responses of wives to their husbands' job loss, covering reactions at both the extensive and the intensive margin of women's labor supply. While previous literature mainly concentrates on analyzing the labor market entry of non-participating wives, the labor supply adjustments of already

participating wives are mostly ignored. Given that female labor force participation rates have increased remarkably over the last decades and that the countries within Europe vary largely with respect to the structure of their labor markets, addressing this issue in an internationally comparative perspective is of particular importance.

# **Theoretical Framework and Literature**

The theory underlying the notion of spousal labor supply as insurance against unemployment has, amongst others, been developed in Ashenfelter (1980), Heckman and MaCurdy (1980), and Lundberg (1985). According to the life-cycle model of family labor supply (e.g., Stephens 2002), the household jointly maximizes utility, which depends on the leisure of the husband and the wife and total household consumption over its lifetime. In this framework, the husband's unemployment will affect the wife's labor supply both through the cross-wage and through the income effect. While the impact of the cross-wage effect is ambiguous, depending on whether the couple's leisure times are substitutes, complements, or independent of each other, the income effect will clearly increase wife's labor supply. Importantly, the increase in wife's labor supply is not only induced by the immediate reduction in household income caused by husband's unemployment, but also brought about by a reduction in expected lifetime income due to the decline in husband's future wage offers.

As outlined by Stephens (2002), the wife's labor supply response will depend both on whether the husband's job loss is anticipated by the household and on the magnitude of the resulting income loss. If the unemployment of the husband is unanticipated by the household, the permanent earnings loss associated with husband's unemployment will permanently increase the wife's desired labor supply. If, however, the husband's unemployment is anticipated by the household, for example because certain characteristics of the husband make him very likely to become unemployed, it will not induce an added worker effect because the expected income loss will already have translated into respective adjustments in household consumption and/or labor supply. In addition, the wife's response will depend on the magnitude of the expected loss in lifetime income, being strongest in families that experience the largest permanent income reductions.

Despite the theoretical well-known effects, the existing empirical literature analyzing the added worker effect misses a clear consensus on its magnitude or even its existence. Most of the early empirical literature focuses on the labor supply of non-participating women in the US.

For this case, the added worker effect is usually found to be small or non-existing (Lundberg 1985; Maloney 1987, 1991; Spletzer 1997). Those studies that do uncover an added worker effect usually conclude that the small responses are optimal because the husband's unemployment only leads to a transitory reduction in earnings, which are considered to be small in a life-cycle framework (Heckman and MaCurdy 1980).

Furthermore, it is argued that the added worker effect is expected to be less present during times of economic prosperity (Spletzer 1997). This is due to the fact that in economically prosperous phases, the absence of liquidity constraints may enforce other opportunities of smoothing family income, i.e., couples are more able to rely on credits or savings to maintain their consumption (Sullivan 2008). Moreover, when employment rates are high, job losses as well as the associated expected income losses are likely to be transitory. It is therefore not surprising that previous literature concludes that the added worker effect tends to be more present in periods of economic downturns (Parker and Skoufias 2004; Mattingly and Smith 2010; Bryan and Longhi 2013).

Another factor lowering the magnitude of the added worker effect is the unemployment benefit system. For the US, Cullen and Gruber (2000) find that the added worker effect is partly crowded out by unemployment benefits and that the labor supply response of women whose husbands became unemployed would be 30 percent larger in the absence of these benefits. Ortigueira and Siassi (2013) come to a similar conclusion and further show that the crowding-out effect of unemployment insurance is stronger among liquidity-constrained households.

Some more considerable effects are found by studies that focus on the intensive margin of wife's labor supply. For the US, Stephens (2002) finds that women whose husbands have been displaced significantly increase their paid working time. Similar effects are found by Kohara (2010) for Japan and by Gong (2011) for Australia.

Cross-country evidence on the existence of the added worker effect, however, is still scarce. Exceptions are McGinnity (2002) comparing Britain and West Germany and Prieto-Rodriguez and Rodriguez-Gutierrez (2003) analyzing the added worker effect for 11 European countries, both focusing on the extensive margin of women's labor supply responses. While McGinnity (2002) finds evidence for the existence of an added worker effect in West Germany, no effect can be identified for Britain. An explanation for the non-presence of an added worker effect in Britain is given by the country's unemployment benefit system, which is largely based on means-tested benefits and therefore sets disincentives for women to enter the labor market after their husbands become unemployed. Prieto-Rodriguez and Rodriguez-Gutierrez (2003) reveal

that the added worker effect is only present in a few countries in the European Union, which include Italy and, to a lesser extent, Germany, the Netherlands, Portugal, and Spain.<sup>1</sup>

While the existing cross-country studies limit their analysis to wives' entries into the labor market due to their husband's unemployment, it seems obvious to assume that the type of the wives' behavioral response varies across countries. While the female labor force participation rate is relatively low in most Mediterranean countries, it is higher in most Western societies.<sup>2</sup> Therefore, it is not surprising that most of the empirical literature that identifies an added worker effect deals with countries in which the labor force attachment of women is comparatively low (Prieto-Rodriguez and Rodriguez-Gutierrez 2000; Başlevent and Onaran 2003; Bentolila and Ichino 2008; Ayhan 2017). In most Western societies, the ability of married women to newly enter the labor market and become additional workers is limited, because most women already participate in the labor market. In these countries, wives' reaction to their husbands' job loss is more likely to be observed in terms of an increase in their hours of work.

Although differences in econometric frameworks across studies are not the focus of this paper, it is also important to mention that there are further methodological aspects by which previous studies differ. While early studies of the added worker effect simply analyze the relationship between husbands' labor force status and their wives' labor supply (e.g., Lundberg 1985; Maloney 1987), recent literature specifically investigates the labor market dynamics around husbands' unemployment. In addition, studies differ with respect to the type of unemployment considered. While most of the literature does not distinguish between different types of job losses, some papers exclusively look at the labor supply responses to unexpected shocks to the household, such as unemployment induced by husband's displacement (Stephens 2002) or by an involuntary job loss (Kohara 2010). Lastly, studies differ regarding the timing of the measurement of wives' behavioral response to their husbands' job loss. While most studies investigate women's employment response directly following husbands' job loss, usually using quarterly or yearly data, Stephens (2002) considers wives' responses both before and several years after husbands' job loss. He finds that wives respond to their husbands'

<sup>1</sup> The countries for which no added worker effect is found are Belgium, Denmark, France, Great Britain, Greece, and Ireland.

<sup>&</sup>lt;sup>2</sup> In 2014, the average female labor force participation rate for the EU-28 is 66.5%. It is the lowest in Malta (52.1%), Italy (54.4%), and Greece (59.0%) and the highest in Sweden (83.4%), Norway (75.9%), and Denmark (75.0%) (Eurostat 2015).

displacements with small increases in their labor supply prior to displacement and much larger increases once the displacement occurs.

The main conclusion that can be drawn from previous literature is that the existence and the magnitude of the added worker effect highly depend on the considered circumstances. While every single study provides a valuable hint on which circumstances matter, the literature lacks a comprehensive empirical investigation of the responsiveness of wives' labor supply to their husbands' unemployment. Our aim is therefore to unify previous literature and reconcile the different results by providing a large-scale investigation of the added worker effect. Analyzing its variation across different welfare regimes and its fluctuation over the business cycle while at the same time considering a variety of behavioral responses of the wife at both the extensive and the intensive margin of labor supply should give us a better understanding of the circumstances that facilitate or hamper spousal labor supply as an insurance device against unemployment shocks.

# **Empirical Strategy and Data**

#### **Econometric Model**

To test the added worker hypothesis for the European case, we estimate different probit models of the form

$$\Delta Y_{it}^{m} = \Phi \left( X_{it}' \beta^{m} + \gamma^{m} \Delta E_{it} + \Sigma \phi_{j}^{m} C_{j} + \Sigma \theta_{t}^{m} T_{t} + M_{jt}' \alpha^{m} + \varepsilon_{it}^{m} \right), \tag{1}$$

which describe women's behavioral response in household i in year t in country j. The above models mainly differ with respect to their dependent variable as denoted by the superscript m, with m = (1, ..., 5). First, for m = 1,  $\Delta Y_{it}$  indicates a binary variable that equals unity if the wife was out of the labor force (IA) in t-1 and is in the labor force (A) in t, i.e.,  $\Delta Y_{it} = (IA_{t-1} \rightarrow A_t | IA_{t-1})$ . In a second step, we distinguish between two types of labor market activity. For m = 2, the dependent variable equals unity if the wife is unemployed (U) in t and for t = 3, it equals unity if the wife is employed (E) in t, given that she was out of the labor force in t-1. In a third step, we acknowledge the fact that the individual's self-defined economic status only captures the person's own perception of their main activity and may thus differ from the strict

<sup>&</sup>lt;sup>3</sup> As entering employment or unemployment is a mutually exclusive decision, we also estimated these labor market transitions by applying a multinomial logit model. The results are similar to those of the simple probit models and are shown in Table C1.

criteria of the ILO concept. Thus, for m=4, the dependent variable equals unity if the wife was not searching for a job in t-1 and is searching for a job in t ( $\Delta JS$ ). Lastly, for m=5,  $\Delta Y_{it}$  is set to unity if the wife was part-time employed (PT) in t-1 and is full-time employed (FT) in t.

The vector  $X_{it}$  includes a set of individual and household characteristics as described in more detail below. The vector  $C_j$  contains a full set of country dummies and the vector  $T_t$  contains a full set of year dummies.  $M_{jt}$  is a vector of macroeconomic conditions of the country, which vary over time.

The variable  $\Delta E_{it}$  is the variable of main interest, in the following referred to as the 'added worker dummy'. This variable is a binary indicator that equals unity if the wife's spouse became unemployed from t-l to t and zero if he stayed employed. Its coefficient is expected to be positive and significant in each specification if an added worker effect is present in the particular sample. The magnitude of its marginal effect can be interpreted as the increase in wife's probability of adjusting her labor supply as a response to her husband's unemployment.

It is important to mention that in identifying a causal added worker effect, it is crucial to discriminate between 'permanent' and 'transitory' factors leading to the husband's unemployment (Maloney 1991). On the one hand, the unemployment of the husband might proxy for predominantly 'transitory' factors that are unrelated to the personal characteristics of the household, such as the closure of a plant that directly results in the layoff of the husband. On the other hand, the unemployment of the husband might proxy for predominantly 'permanent' characteristics of the household. The husband's unemployment propensity might be correlated with unobserved characteristics of the household, such as the sorting mechanism that initially formed the household, which matches spouses with similar levels of human capital or similar preferences for leisure. In the latter case, we are likely to underestimate the true added worker effect, since wives of frequently unemployed husbands are likely to face low market wage rates themselves and thus to show similarly low labor supply patterns as their husbands.

<sup>4</sup> We further checked the robustness of our results by including country-year dummies instead of single country and year dummies in the regressions in order to control for country-year specific heterogeneity. The results are similar to those presented in the following and are shown in Table B1.

<sup>&</sup>lt;sup>5</sup> It is important to mention that the econometric model chosen to identify the added worker effect strongly depends on the underlying data. While the use of harmonized micro data for 28 countries allows us to analyze the variation of the added worker effect across different welfare regimes and its fluctuation over the business cycle while at the same time considering a variety of behavioral responses of the wife, it comes at the cost of not having as detailed information on the type and the timing of the job loss as needed to employ (and compare) the different identification strategies used in the literature. With respect to the methodological dimension, we are therefore not able to fully reconcile previous findings of the added worker effect.

In order to identify a causal effect of husband's unemployment on wife's labor supply, it is therefore important to disentangle permanent and transitory factors leading to the husband's unemployment. While we aim to accomplish this goal by controlling for a variety of individual and household characteristics to be correlated with husbands' unemployment probability and conduct a series of sensitivity analyses to verify the robustness of our results, we cannot entirely rule out that unobserved heterogeneity still biases our estimation results. We keep that in mind when interpreting our estimation results.

In addition to our baseline regressions, we further explore the heterogeneity of the added worker effect. First, we aim at identifying whether the magnitude of the added worker effect varies with the macroeconomic conditions of a country. In doing so, we add an interaction of the added worker dummy and the macroeconomic indicators ( $\Delta E_{it} \times M_{jt}$ ) to the model. Second, we separately estimate Equation (1) for several subsamples of countries to test whether the added worker effect differs across the welfare regimes in Europe. In doing so, we group countries according to a modified Esping-Andersen welfare regime typology (Esping-Andersen 1990).

In order to ensure representativeness, we use the longitudinal weights delivered with the EU-SILC data in all regressions. These weights do not only correct for different selection probabilities of individuals within each country as well as panel attrition, but also ensure that each country is represented in proportion to its actual population size.

## Data

The data used in this study is taken from the European Union Statistics on Income and Living Conditions (EU-SILC) covering the periods 2004 to 2013. The EU-SILC data includes all European Union member states as well as Norway and Iceland. Due to insufficient data quality, Iceland and Malta had to be excluded from the analysis, which leaves us with a sample of 28 countries. Since we are interested in wives' labor supply adjustments as a reaction to their husbands' unemployment, we use the longitudinal version of the EU-SILC data. The longitudinal version is a 4-year rotating panel, which allows us to follow households and individuals for a maximum of 4 years.

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<sup>&</sup>lt;sup>6</sup> One way to address the problem of unobserved heterogeneity would be to add individual (or household) fixed effects to the model. Unfortunately, this is not possible in our study, as we observe households only over a short period of time and thus lack sufficient variation in spouses' labor market status over time.

The data was collected by Eurostat for the first time in 2004. In the first wave, 13 countries were surveyed, while most of the other countries (except for Bulgaria (2006), Romania (2007), and Croatia (2010)) followed in 2005. While the majority of countries is surveyed until 2013, some countries either left the survey (Germany in 2006) or did not provide any data for 2013 yet (Croatia, Greece, Romania, and Sweden).<sup>7</sup>

In our analysis, we restrict the sample to married or cohabiting couples in which both individuals are aged between 16 and 65 and neither partner is retired or unable to work.<sup>8</sup> For the analysis of wives' labor supply responses at the extensive margin, we further restrict our sample to 'traditional couples', i.e., we condition on the husband being employed and the wife being out of the labor force in t-1. In analyzing the labor supply adjustments of wives already participating in the labor market, the sample is restricted to couples in which the woman is working part-time and the husband is employed in t-1.

Information on husband's and wife's labor market status is obtained from a variable that contains information on the self-defined current economic status of an individual, distinguishing between full-time and part-time employment, unemployment, and different types of inactivity (e.g., schooling, retirement, fulfilling domestic tasks). This variable is used to define different labor market transitions of the wife. First, we ignore the type of labor market activity and define a variable that equals one if the wife enters the labor market (i.e., if she either becomes employed or unemployed) and zero otherwise. In a second step, we explicitly distinguish between the two types of labor market activity in order to discriminate between mechanisms occurring on the supply and the demand side of the labor market. In doing so, we create two variables that take value one if the wife enters into employment and unemployment, respectively, and zero otherwise. In a third step, we acknowledge the fact that the individual's self-defined economic status only captures the person's own perception of their main activity at present. It therefore differs from the strict criteria of the ILO concept, which defines the

<sup>&</sup>lt;sup>7</sup> For an overview of the countries included in each wave of the EU-SILC data, see Table A1. In order to make sure that our results are not driven by the unbalanced nature of the country sample, we have checked the robustness of our results by estimating our basic model based on a quasi-balanced sample of countries. The respective results, both for our overall sample and for the single country-group samples, are largely robust to using this alternative sample and shown in Tables B2 and B3.

<sup>&</sup>lt;sup>8</sup> In order to check the robustness of our results, we further conducted our analysis for a restricted sample of individuals aged between 25 and 59 years in order to avoid variation in women's labor supply due to differences in education leaving ages or statutory retirement ages across countries. The results are similar to those for the larger sample and are shown in Table B4.

unemployed as those who are without work, currently available for work, and seeking work. For instance, some people who consider themselves unemployed may not take active steps to find work and being immediately available. On the other hand, some people may actively search for a job, but consider themselves as not in the labor force, as e.g. students, who did not yet enter the labor market. Therefore, we further use information on the individual's job-search behavior by making use of a question that asks respondents whether they have been actively looking for a job within the last 4 weeks. The respective variable takes value one if the wife has not been searching for a job in t-I but is doing so in t, and value zero if she is not searching for a job in both periods. Lastly, we use information on the individual's self-defined current economic status to define a variable equal to unity if the wife has been working part-time in the period t-I and is working full-time in the period t. This variable is equal to zero if the wife continuously remains in part-time employment.

Instead of using information on the current employment status, husband's labor market transitions are identified by using retrospective information on the husband's employment history in the last 12 months. In doing so, a husband is considered to be unemployed if he had at least one unemployment spell within the last 12 months. This means that a husband might be considered as being unemployed even if he is currently employed. The reasoning behind using this criterion to define husband's unemployment is that we assume that even small or transitory reductions in household income might change the optimal behavior of the household and thus result in individual labor supply responses. <sup>10,11</sup>

In our regressions, we control for a variety of individual and household characteristics.<sup>12</sup> At the household level, we control for whether the couple is married, the number of children, and whether the youngest child is aged 0 to 3 years and 4 to 6 years, respectively. In order to capture

<sup>9</sup> In our sample, 38 percent of the women who consider themselves unemployed state that they are not actively searching for a job, while the proportion of those who consider themselves inactive but do search for a job is much smaller (5 percent).

<sup>&</sup>lt;sup>10</sup> We further checked the robustness of our results by considering the husband to be unemployed only if he had at least three months of unemployment within the last 12 months. The results are robust to changing the definition of husband's unemployment and are shown in Table B5.

<sup>&</sup>lt;sup>11</sup> For a descriptive comparison of the transition probabilities of those women whose husbands became unemployed within the last year and those women whose husbands stayed employed, see Table A2.

<sup>&</sup>lt;sup>12</sup> The descriptive statistics of all variables included in our analysis for the three different samples considered are shown in Table A3.

the couple's financial background, we include the logarithm of the household's equivalized disposable income as a regressor. <sup>13</sup> Moreover, we include a binary variable indicating whether the household currently has to repay some non-housing related debts and control for the dwelling type the couple inhabits, i.e., we distinguish between couples living in a detached house, a semi-detached house and an apartment or a flat.

At the individual level, we include both spouses' age and its square and control for their highest level of education, distinguishing between low-skilled (ISCED 0-2), medium-skilled (ISCED 3-4), and high-skilled (ISCED 5) individuals. Furthermore, we control for the husband's occupational status in t-t1 in all models and for the wife's occupational status in t-t1 when considering wives who actively participate in the labor market, i.e., when analyzing women's transitions from part-time to full-time employment. In doing so, we differentiate between white collar high-skilled (ISCO 1-3), white collar low-skilled (ISCO 4-5), blue collar high-skilled (ISCO 6-7), and blue collar low-skilled (ISCO 8-9) individuals.

As outlined in the econometric method section, it is important to discriminate between 'permanent' and 'transitory' factors leading to the husband's unemployment. A standard way to accomplish this goal is to control for the husband's (and the wife's) labor market experience. Although the EU-SILC data contains information on the individual's years in employment, in some countries this information is not surveyed for all household members, but only answered by one person, the 'selected respondent'. This is true in all Nordic countries, as well as Ireland, the Netherlands, and Slovenia. As a result, the EU-SILC data does not allow to control for both partners' labor market history, and even if only the husband's years of employment is included, the number of observations for the above named countries is significantly reduced. We therefore decided to exclude this variable from our basic regression, but conduct a sensitivity analysis in which the husband's labor market experience, as measured by his share of years in employment in all years since entering the labor market, is additionally controlled for. In these regressions,

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<sup>&</sup>lt;sup>13</sup> The equivalized household income is calculated by dividing household income by the equivalized household size, which itself is defined by assigning the first household member a weight of 1, any other adult household member a weight of 0.5, and any child under the age of 16 a value of 0.3. In order to avoid the problem of reverse causality, we control for household income in the previous year instead of household income in the current year.

<sup>&</sup>lt;sup>14</sup> Individuals working for the armed forces (ISCO 10) are excluded from the analysis.

we further control for the husband's previous job type, i.e., whether the job was permanent or temporary, information on which is also only available for selected respondents.<sup>15</sup>

In addition to analyzing the existence and the magnitude of the added worker effect in general, we aim at investigating its variation with the countries' economic conditions. In contrast to previous literature, we do not only compare its magnitude in times of economic upand downswings, but apply a more flexible approach in interacting the added worker dummy with time-variant macroeconomic indicators, namely the country's GDP growth rate, its unemployment rate, and its female labor force participation rate. Both GDP growth and unemployment rates capture the country's state of the economy at present and are as such strongly correlated. Nevertheless, it is plausible to consider both factors in a single regression. While the GDP growth rate proxies the country's economic situation in general, the unemployment rate explicitly captures the current situation of the labor market. As the Great Recession has shown, not every downturn of the economy (directly) translates to increasing unemployment rates. If the economy struggles, firms may have other ways to cut costs, such as cutting back on investments or resorting to short-time work. 16 It is therefore important to distinguish between the current situation of the economy in general and the conditions of the labor market in particular, and to separately analyze their impact on the existence and the magnitude of the added worker effect.

As outlined above, we additionally estimate our model separately for specific subsamples of countries to test whether the added worker effect differs across the welfare regimes in Europe. The subsamples are chosen according to a modified Esping-Andersen welfare regime typology (Esping-Andersen 1990), which was suggested by Bonoli (1997). Bonoli's typology is based on a two-dimensional approach that classifies countries according to the 'quantity' and the 'quality' of welfare provision.<sup>17</sup>

According to Bonoli's classification, we distinguish between four types of welfare states: (i) high quantity/high quality countries, i.e., Denmark, Finland, Norway and Sweden (referred to

<sup>&</sup>lt;sup>15</sup> Please note that the weights have been adjusted to account for this new data structure, so that the remaining observations are still representative for the population of each country.

<sup>&</sup>lt;sup>16</sup> In fact, it is argued that short-term work has strongly contributed to the surprisingly mild response of the German labor market to the 2008-09 economic crisis, which has hardly translated in decreasing employment rates (Burda and Hunt 2011).

<sup>&</sup>lt;sup>17</sup> 'Quantity' and 'quality' of welfare provisions are measured by social expenditure as a proportion of GDP and by contribution-financing as a proportion of social expenditure, respectively.

as Nordic countries), (ii) high quantity/low quality countries, i.e., Austria, Belgium, Germany, France, Luxembourg, and the Netherlands (referred to as Continental countries), (iii) low quantity/high quality countries, i.e., Ireland and the United Kingdom (referred to as Anglo-Saxon countries), and (iv) low quantity/low quality countries, i.e., Greece, Italy, Portugal, and Spain (referred to as Mediterranean countries). Since the countries of Central and Eastern Europe are not covered by Bonoli's typology, we add a fifth category that includes these countries, i.e., Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. 18

# **Results**

## **Basic Results for the Pooled Sample**

The results of the estimation of our basic model (Equation (1)) are shown in Table 1. With respect to our control variables, the results are overall as expected from economic theory. Married women and women with a higher number of children are less likely to increase their labor supply, irrespective of which labor market transition is considered. Women whose youngest child is younger than three years are less likely to enter the labor market, to start searching for a job and to increase their working hours. Women whose youngest child enters preschool age (4 to 6 years), on the other hand, are more likely to enter the labor market, while the presence of preschool children does not affect women's job-search and part-time to full-time transitions.

## [[Table 1 near here]]

The household's disposable income has a diverse effect on women's labor supply: While household income is positively correlated with women's employment transitions, it is negatively correlated with their unemployment and job-search transitions. This result is likely to be driven by unobserved heterogeneity, in a sense that there exist unobserved characteristics, such as the couples' preferences for leisure or their productivity in the labor market and in household production, that are correlated with both household income and wife's attachment to

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<sup>&</sup>lt;sup>18</sup> In its original version, Austria has also not been covered by Bonoli's classification. We decided to categorize this country to the Continental countries, according to both its values on the above named indicators and its geographical position.

the labor market. A similar diverse effect is also found for the dwelling type the couple inhabits. In households that live in an apartment/flat, wives are less likely to enter employment but more likely to become unemployed and to start looking for a job than couples living in a detached house. In households that have to repay non-housing related debts, women are significantly more likely to enter the labor market or to start searching for a job, while the repayment of debts is uncorrelated with wives' changes from part-time to full-time work. This result is in line with the theoretical argument that labor supply adjustments are more common among households that are financially constrained.

Women's probability of entering the labor market is further decreasing with their age and increasing with their level of education. Moreover, women working in low-skilled blue collar or white collar jobs are less likely, and women working in high-skilled blue collar positions are more likely to change from part-time to full-time employment than high-skilled white collar workers. This result might be explained by the fact that as compared to high-skilled jobs, low-skilled jobs offer less flexibility in terms of enabling women to increase their working hours in the short term. The age and the education of their husband are only correlated with women's transitions into employment, while they are uncorrelated with their unemployment or job-search transitions. Overall, women are less likely to make labor market transitions the higher their husband's occupational status, suggesting that women are more likely to stay out of the labor market the higher their husband's earnings potential.

The country's GDP growth rate has a diverse effect on women's labor supply transitions. As the economy grows, women are more likely to become employed and change from part-time to full-time employment, while their unemployment and job-search transitions are uncorrelated with the GDP growth rate. This suggests that the country's economic condition, as measured by its GDP growth rate, does not affect the individual decision to participate in the labor market itself, but rather the success in finding a job and entering in employment given that the labor supply decision has already been made. As the unemployment rate increases, however, women are more likely to enter the labor market and to start searching for a job. This result contradicts the hypothesis of the 'discouraged worker effect', which states that individuals who would otherwise have been looking for work tend to remain out of the labor market as the unemployment rate increases and their chances of getting a job fall. The country's female labor force participation rate is negatively correlated with all transition probabilities considered except for the part-time to full-time transitions, i.e., the more women already participate in the labor market the less women enter into it.

Our result of main interest is the estimated effect of the added worker dummy, which indicates whether the husband became unemployed between t-l and t. In order to compare the magnitude of women's behavioral response across our different outcomes, we do not only present the estimated marginal effect of the added worker dummy, but further calculate the percentage change in women's probability of adjusting their labor supply due to their husbands' unemployment.<sup>19</sup>

The results suggest that women whose husbands lost their job at any time during the last 12 months have a 3.6 percentage point (20 percent) higher probability of entering the labor market than those with a continuously employed husband. However, this effect is only driven by wives' changes into unemployment. Women with an unemployed husband are 3 percentage points more likely to enter into unemployment and 4.8 percentage points more likely to start searching for a job, which corresponds to relative changes in transition probabilities of 73 and 71 percent. Women's probability of becoming employed, however, is not significantly affected by the husband's employment status. This result is consistent with the findings of Lundberg (1985), who shows that married women in the US are more likely to enter the labor market when their husband is unemployed, but even less likely to become employed. This suggests that husband's unemployment indeed affects the wife's willingness to work in the labor market. However, as stressed by Maloney (1991), some wives may have the will to enter the labor market, but may not be able to find a job in the short term and this way offset the associated loss in household income.

We further find a strong behavioral response at the intensive margin of women's labor supply. Women whose husband became unemployed have a 6 percentage points (36 percent) higher probability of changing from part-time to full-time employment than women with a continuously employed husband. That we find no evidence for an added worker effect in terms of women's employment transitions, but a strong effect in terms of their part-time to full-time transitions may be explained by the fact that part-time work provides greater scope for labor supply adjustments, as it is harder for women to increase their labor market activities by entering the labor market than it is by increasing working hours when already working. This result is consistent with the finding of Gong (2011), who finds evidence for the existence of an

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<sup>&</sup>lt;sup>19</sup> The respective values are calculated by deriving predictions for Y at both categories of the added worker dummy (i.e.,  $\hat{Y}_{AWD=0}$  and  $\hat{Y}_{AWD=1}$ ), such that  $\Delta\% = (\hat{Y}_{AWD=1} - \hat{Y}_{AWD=0})/\hat{Y}_{AWD=0}$ .

added worker effect for married women in Australia, but also shows that this effect is mainly driven by part-time to full-time transitions of already participating wives.

Overall, the results for our pooled sample covering all European countries reveal the existence of an added worker effect at both the extensive and the intensive margin of wives' labor supply. This suggest that in Europe, marriage still functions as an intra-household risk-sharing mechanism to smooth inter-temporal income shocks (Attanasio, Low, and Sánchez-Marcos 2005; Ortigueira and Siassi 2013).<sup>20</sup>

A remaining concern of our analysis, however, is the problem of unobserved heterogeneity. In particular, there is a doubt whether the husband's job loss is exogenous to wife's labor supply. First, the husband's unemployment might be anticipated by the household, either because it is voluntarily chosen or because it is of a more frequent nature and thus does not represent an unexpected shock to the household. Such anticipated unemployment would not induce an added worker effect, because it would already have translated into household adjustments in either consumption or labor supply. Furthermore, as pointed out by Maloney (1991), the frequent nature of the husband's unemployment might be correlated with the characteristics of the wife. Given assortative matching in the marriage market, wives of frequently unemployed husbands are likely to face low market wage rates themselves and thus to show similarly low labor supply patterns as their husbands.

One way to overcome these problems is to search for exogenous variation in husband's unemployment, e.g., by focusing on unemployment caused by plant closures, which are assumed to be exogenous to the characteristics of the husband and the household, respectively. While this is not possible in our study, we control for individual characteristics that are highly correlated with the husband's risk of becoming unemployed in order to proxy for the unobservable factors being correlated with the recurring nature of the husband's unemployment. Specifically, we add controls for the husband's labor market experience, as measured by his share of years in employment, and his previous job type, i.e., whether the job was permanent or temporary. The respective estimation results are shown in Table B6. The results reveal that the more stable the husband's employment, as measured by his share of years

(2004).

<sup>&</sup>lt;sup>20</sup> Interestingly, separate regressions by couples' marital status (see Tables B7 and B8) reveal that the added worker effect is much stronger for married women, and hardly existent for cohabiting women (except for women's transitions from part-time to full-time employment). This results supports the argument that cohabiting couples tend to engage less in mutual risk sharing than married couples, which has been theoretically shown by Nordblom

in employment, the less likely his wife enters the labor market and changes from part-time to full-time employment. Moreover, wives of husbands who had a temporary job in the previous year are significantly more likely to enter employment or increase their working hours than those whose husbands had a permanent position. The estimated marginal effects of the added worker dummy, however, remain significant and only slightly decrease in magnitude, suggesting that unobserved factors that are correlated with the husband's unemployment probability do not impose a major problem for our analysis.<sup>21</sup>

Second, the husband's unemployment might not be involuntary, but voluntarily chosen by the husband. In his decision to quit his job, the husband might therefore have already taken his wife's labor supply decision into account. In this case, we would overestimate the true added worker effect due to reverse causality and joint decision-making within the household, respectively. On the other hand, one might argue that voluntary job losses are long known by the household, such that the observed added worker effect is an underestimate of the true effect, since some women might already have adjusted their labor supply to the husband's expected job loss. Although the data do not allow us to distinguish between voluntary and involuntary job losses, we try to test whether reverse causality caused by voluntary job losses imposes a problem for our analysis. We do so by assuming that voluntary job losses should, on average, last shorter than involuntary job losses, because those quitting their jobs have more time to search for a job or might already have found a new job before giving notice. If we therefore condition on at least three instead of one month of husband's unemployment in defining our added worker variable, thereby reducing the share of voluntary job losses, we would expect the estimated added worker effect to decrease if reversed causality is indeed a problem in our analysis. In fact, we find the opposite: When defining husband's unemployment as the husband having had at least three months of unemployment within the last year, the estimated added worker effect increases for all outcomes (see Table B5), suggesting that reverse causality is of minor relevance in our analysis.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> In order to assess whether the added worker effect is robust to the inclusion of the additional control variables, we also estimate the basic specification reported in Table 1 for the reduced sample as considered in Table B6. The results are robust toward the exclusion of these observations and shown in Table C2.

<sup>&</sup>lt;sup>22</sup> The fact that the added worker effect increases when only longer periods of husbands' unemployment are considered could also indicate that some women are only induced to adjust their labor supply when their husbands' unemployment lasts longer and the associated income loss is expected to be higher.

Lastly, it is important to note that although we cannot rule out that unobserved heterogeneity might lead us to under- or overestimate the true added worker effect in general, there is no reason to believe that this sort of unobserved heterogeneity varies over the business cycle or differently affects the estimation results in the respective country groups. Hence, our analysis of the variation of the added worker effect – both over time and across countries – which is the main focus of this paper, should not be affected by unobserved heterogeneity.

#### Variation over the Business Cycle

There are many arguments why the added worker effect may depend on the economic context. Previous literature has concentrated on comparing the added worker effect in times of economic up- and downturns, arguing that wives' responsiveness to their husband's job loss should be higher during recessions due to both the reduced ability to borrow against income losses and the more permanent nature of unemployment shocks during recessions. However, it is also possible that the added worker effect decreases during times of economic downturn. Whenever unemployment rates are high, the chance of getting a job and thus the expected wage of those without jobs fall. People who would otherwise have been looking for work might therefore become discouraged in a recession and tend to remain out of the labor market.<sup>23</sup> According to this, we would expect the labor supply response of wives to their husband's job loss to be smaller if unemployment is high. Moreover, there is more than the country's economic situation in general that might affect the presence of the added worker effect. If the share of women already participating in the labor market is high, the potential of inactive wives to newly enter the labor market is low, suggesting that the size of the added worker effect in its traditional sense should be small whenever female labor force participation rates are high.

To see whether the magnitude of the added worker effect varies with the countries' macroeconomic conditions, interactions of the added worker dummy and (i) the GDP growth rate, (ii) the unemployment rate, and (iii) the female labor force participation rate are further added to the model.<sup>24</sup> The average marginal effects of the added worker dummy at each point

<sup>23</sup> The reduction of the labor force associated with discouraged workers in a recession is called the 'discouraged worker effect', and is as such a force working against the added worker effect.

<sup>&</sup>lt;sup>24</sup> In doing so, we do not include a quadruple interaction, but estimate the model separately for each set of interactions. The results of the models including these interaction effects are similar to our basic results in both magnitude and significance and are shown in Tables C3 to C5.

of the countries' GDP growth rate are shown in Figure 1. Overall, we find no clear relationship between the added worker effect and the country's GDP growth rate. If anything, women's probability of starting to search for a job slightly decreases and their probability of changing from part-time to full-time employment slightly increases as the economy grows. Although the latter result contradicts previous literature, which finds the added worker effect to be more present in times of economic downturns, the finding is quite intuitive. As the economy shrinks, firms might first cut down the working hours of those already employed, before having to rely on personnel layoffs to reduce their overall costs. As the economy recovers and GDP grows, women might therefore find it easier to increase their working hours and this way expand their labor supply.

#### [[Figure 1 near here]]

For the interactions of the added worker dummy with the country's unemployment rate (Figure 2), however, a different pattern emerges: As the unemployment rate rises, women are more likely to increase their labor supply as a reaction to their husband's unemployment. Except for women's part-time to full-time transitions, which do hardly vary over the unemployment rate, this finding holds for all labor supply responses considered, but is most pronounced for women's unemployment and job-search transitions. While these results contradict the 'discouraged worker hypothesis', they are consistent with the findings of Parker and Skoufias (2004), Mattingly and Smith (2010), and Bryan and Longhi (2013), who find that the added worker effect is more present in periods of economic downturns. Bryan and Longhi (2013), in particular, show that women in the UK substantially increased their job-search activity following a partner's job loss during the 2008-2011 recession, while the increase in search during boom was smaller and did not appear to translate into more success in finding work. These findings support the hypothesis that in times of high unemployment, husband's job losses are less likely to be transitory and therefore more likely to result in a behavioral response of the wife.

## [[Figure 2 near here]]

The respective interaction effects for the country's female labor force participation rate are shown in Figure 3. Overall, the added worker effect appears to decrease with the country's female labor force participation rate, i.e., the more women participate in the labor market, the

less likely it is that a wife enters the labor market due to her husband's unemployment. This relationship is particularly pronounced for women's employment transitions and their job-search transitions, while women's part-time to full-time transitions do hardly vary over the distribution of the female labor force participation rate. The result that women's labor supply adjustments at the extensive margin are more strongly related to the country's female labor force participation rate than their adjustments at the intensive margin is quite intuitive, as the ability of women to newly enter the labor market is the lower the higher the share of women already participating in the labor market, while women's ability to increase their working hours should hardly be affected by the female labor force participation rate.

# [[Figure 3 near here]]

# **Variation across Country Groups**

In the last part of our analysis, we separately estimate our basic regression for specific subsamples of countries to test whether the added worker effect differs across the welfare regimes in Europe. As outlined in the data section, we distinguish between five welfare regimes, namely (i) the Nordic countries, (ii) Continental Europe, (iii) the Anglo-Saxon countries, (iv) the Mediterranean countries, and (v) Central and Eastern Europe. The estimated marginal effects of the added worker dummy obtained from these sub-sample regressions are shown in Table 2.<sup>25</sup> The results reveal large differences in both the existence and the magnitude of the added worker effect across Europe.

## [[Table 2 near here]]

In the Nordic and in the Continental European countries, we only find weak evidence for the existence of an added worker effect. In the Nordic countries, non-participating women are more likely to enter the labor market when their husband becomes unemployed, an effect that is mainly driven by wives' changes from inactivity to unemployment (significant at a 10-percent level only). For women's employment transitions, their job-search transitions, as well as their part-time to full-time transitions, there is no significant effect of their partners' job loss. This

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<sup>&</sup>lt;sup>25</sup> Full estimation results are shown in Tables B9 to B13.

result is consistent with the findings of Hardoy and Schøne (2014), who investigate wives' behavioral responses to their husband's job displacement in Norway. The authors find hardly any added worker effect at the intensive margin, but show that three years after the husband's displacement, previously non-working wives of displaced husbands have labor market earnings that exceed those of wives of non-displaced husbands by approximately 5 percent.

In Continental Europe, in contrast, women of newly unemployed men are more likely to change from part-time to full-time employment, while we do not find any behavioral response at the extensive margin of women's labor supply in these countries. The difference in the type of behavioral response between the two country groups might be explained by differences in the structure of the workforce. While both the Nordic and the Continental European countries are characterized by comparatively high female labor force participation rates, the share of parttime employment in all employment is particularly high in the Continental European countries and as such, part-time work may provide a greater scope for labor supply adjustments in these countries. <sup>26</sup> As shown by Blau and Kahn (2013), such cross-country differences in female labor force participation rates and part-time employment rates can partly be explained by differences in family-friendly policies across countries. Parental leave and benefit schemes, the access to publicly provided childcare services as well as regulations with respect to the right for part-time work differ largely across the European countries, which may explain the high variation in female labor force participation and part-time employment rates and thus the differential behavioral response of women to their husband's unemployment across the different welfare regimes.<sup>27</sup>

Moreover, many of the Continental European countries (i.e., Germany, France, Luxembourg and, partially, Belgium) are characterized by tax systems of income splitting, which might

<sup>26</sup> The share of part-time employed women is particularly high in the Netherlands (76.7%), followed by Germany (46.3%), Austria (46.3%), and Belgium (41.2%) (2014 values, Eurostat 2015).

<sup>&</sup>lt;sup>27</sup> While the public provision of childcare services, as extensively provided in the Nordic countries, should clearly increase women's labor force participation, the potential effect of parental leave entitlements is ambiguous. Whereas the entitlement to parental leave should raise the job prospects of women who left the labor market after childbirth and should thus increase female labor force participation rates, long durations of paid leave may also provide disincentives for women to return to the labor market and this way reduce female labor force participation rates. Giving workers the right to demand a change to part-time work, as is widely done in the Continental European countries (OECD 2010) should increase the share of part-time employment in all employment (Blau and Kahn 2013).

create disincentives for women to enter the labor market.<sup>28</sup> If the difference between the husband's and the wife's (potential) earnings is high and the unemployment duration of the husband expected to be low, then the couple might not be better off if the wife enters the labor market, as her gained earnings might be completely offset by the reduced amount of tax savings.

In general, the limited responsiveness of wives to their husband's job loss in the Nordic and the Continental European countries might be explained by the fact that these countries are characterized by guaranteeing a high level of social protection. Among the European countries, the Nordic and the Continental countries rank highest with respect to both the length and the amount of unemployment benefits, and it might be the generosity of the welfare state that partly crowds out the family as an insurance device. <sup>29</sup> The hypothesis that the state plays an important role in smoothing out income fluctuations caused by external shocks is also supported by Hardoy and Schøne (2014), who show that the initial negative wage effect of husband's displacement is reduced by approximately 65 percent after adjusting for welfare benefits and lower tax payments. This suggests that in a generous welfare state, households are well insured against negative shocks in the labor market.

In the Anglo-Saxon countries, we also find hardly any evidence for the existence of an added worker effect. Indeed, we even find a negative added worker effect. Women in these countries are significantly less likely to become employed when their husband becomes unemployed. While this result might be driven by unobserved heterogeneity, in a sense that spouses with low labor market prospects or similar preferences for leisure select together, it might also reflect the disincentive effect of the unemployment benefit system on wives' labor force participation. A disincentive effect of a husband's unemployment-related benefits on their wife' labor supply arises if the man's benefits are linked to the wife's earnings, either because benefits are meanstested on the basis of family income or because any part of the benefit is withdrawn when the woman is working or earning. The size of the adverse effect on wife's labor force participation

<sup>&</sup>lt;sup>28</sup> Income splitting is the legal concept of fusing a married couple into a single economic entity for purposes of tax filing status. In a jurisdiction with progressive taxation and different tax filing statuses for married and for single filers, income splitting penalizes dual earners and benefits single breadwinning couples.

<sup>&</sup>lt;sup>29</sup> Over the time period considered, the maximum unemployment benefit duration is on average 32.4 months in the Continental countries and 28.5 months in the Nordic countries and thus much higher than in the Mediterranean (17.3) or the Central and Eastern European countries (9.0) (OECD (2016a). Accordingly, the average net replacement rate in the Continental and the Nordic countries amounts to 46.7 and 48.8 percent, respectively, as compared to 34.2 percent in the Mediterranean countries, 29.4 percent in the Anglo-Saxon countries and 22.4 percent in Central and Eastern Europe (OECD (2016b).

thereby depends on both the rate of withdrawal and its amount (Dex, Gustafsson, Smith, and Callan 1995). As such, it is arguably strongest in the Anglo-Saxon countries, as these countries are in fact the only countries in which the benefits received through both unemployment insurance and unemployment assistance contain elements that involve some kind of meanstesting, and the rate of withdrawal of benefit is particularly high. Usually, unemployment insurance represents an individual non-means-tested benefit, the size of which (given eligibility) solely depends upon previous contributions. In Ireland, however, a substantial part of the benefit, the so-called dependent's allowance, is only paid to individuals with a non-employed partner, and it is withdrawn if the partner earns more than a certain permitted amount. In addition, in both the UK and Ireland, unemployment allowance, which is paid to individuals that are not (longer) eligible for unemployment insurance, is withdrawn at a rate of almost 100% if the partner receives some sort of income, thus creating a strong disincentive to the labor force participation of wives of unemployed men.<sup>30</sup>

Such a disincentive effect is consistent with the findings of Kell and Wright (1990), who find large negative effects of means-testing on the labor force participation of wives married to unemployed husbands in the UK. In their cross-country comparison of the labor force participation of married women in the UK, Ireland, the US, Sweden, and Denmark, Dex *et al.* (1995) come to a similar conclusion. They find that in unemployment benefit regimes that take a wife's earnings into account in allocating benefit, there is a significant negative effect on those wives' labor force participation.

In the Mediterranean countries, in contrast, we find a strong and significant added worker effect. In these countries, women whose husbands became unemployed within the last 12 months are significantly more likely to become employed (10-percent level), to enter unemployment, to start searching for a job, and to change from part-time to full-time employment than women with a continuously employed husband. In fact, the Mediterranean countries are the only countries in which an added worker effect at both the extensive and the intensive margin of women's labor supply is observed. Moreover, the effects are quite large, ranging from a 37 percent increase in women's probability of entering full-time employment to an 83 percent increase in their job-search probability.

<sup>&</sup>lt;sup>30</sup> This is especially important because in both countries, individuals who are only entitled to a reduced rate of unemployment benefits may be better off on unemployment allowance, which means that low-income households are more likely to be subject to means-testing.

The finding of a strong relationship between husband's and wife's labor supply in the Southern European countries supports previous literature on this topic (Prieto-Rodriguez and Rodriguez-Gutierrez 2000). The Mediterranean welfare states are characterized by offering a low level of social protection and by a strong reliance on the family. In his analysis of family ties across societies, Reher (1998) shows a 'dividing line' between southern European societies, with their history of depending on strong and extended families to care for the elderly and the poor, versus northern European and North American societies, with their weaker family systems and greater reliance on public and private organizations to provide social assistance. The low level of social protection in the Mediterranean countries is not only reflected in the short duration and low level of unemployment benefit provision, which creates a strong incentive for women of newly unemployed husbands to increase their labor supply, but is also evident from the limited entitlement to paid parental leave after childbirth. In the Mediterranean countries, parental leave is usually granted for a short duration and either unpaid (as in Greece and Spain) or characterized by low benefits (as in Italy and Portugal) (Gauthier 2011), which strongly incentivizes inactive mothers' of young children to enter the labor market in case of their husbands' job loss. The strong added worker effect in the Mediterranean countries might therefore be explained by low social protection and a strong reliance on the family in these countries.

In the countries belonging to Central and Eastern Europe, we also find some evidence for the existence of an added worker effect. In contrast to the Nordic and the Continental European countries, however, women's responsiveness to their husband's job loss is only reflected in their increased likelihood of entering unemployment and starting to search for a job. Women's probabilities of entering employment or changing from part-time to full-time employment, on the other hand, are not affected by husband's unemployment. This suggests that women in Central and Eastern Europe are willing to increase their labor supply due to their husband's job loss, but may be limited from the demand side of the labor market, in a sense that they are not able to find a job or increase their working hours in the short term in order to offset the associated loss in household income.

Though we cannot claim that the estimated added worker effects as shown in Table 2 represent causal effects, we argue that the difference in the size and the direction of the added worker effect between the country groups is solely due to differences in the countries' institutional and macroeconomic conditions and can thus be interpreted accordingly. While assortative mating or reverse causality might lead us to over- or underestimate the added worker

effect in general, there is no reason to believe that this sort of unobserved heterogeneity affects the country groups differently and is thus able to explain the difference in the added worker effect across welfare regimes.

A last concern, though, is that our results are driven by transitory shocks to the household, which affect the employment probability of husbands and wives alike. As outlined by Maloney (1991), a closure of a local plant, for instance, might directly result in the layoff of the husband, and indirectly lower the market wage rate or employment opportunities of the wife, thereby masking the existence of her behavioral response. In contrast to unobserved heterogeneity in general, such local transitory shocks are likely to vary over the country groups and are thus able to explain the observed difference in the added worker effect across welfare regimes.

In order to rule out that local (unemployment) shocks are the main driver of our results, we conduct two robustness checks. First, we re-estimate our country-group regressions by adding country-year fixed effects instead of single country and year fixed effects to our model in order to allow for country-specific shocks to the labor market. The respective estimation results are shown in Table B14. Overall, the estimated added worker effects remain stable in both significance and magnitude, suggesting that the difference in wives' behavioral responses across countries is not simply a result of country-specific unemployment shocks.

Although country-year fixed effects sop up all of the variance in women's labor market transitions that is due to time-variant differences between the countries, they might not fully capture shocks to the households' local labor market. In a second step, we therefore add region-year instead of country-year fixed effects to our regressions. Information on the households' place of residence within their country is available on the NUTS-2 or NUTS-1 level, which subdivide countries into smaller administrative units in the size of regions or provinces.<sup>31</sup> As can be seen from Table B15, adding region-year fixed effects does not alter our results substantially. In fact, the estimated added worker effects remain stable in both significance and magnitude.<sup>32</sup> These results make us confident that the cross-country variation in the added

<sup>&</sup>lt;sup>31</sup> While there exist some minimum and maximum population thresholds for the average size of the NUTS regions, the actual size of the regions might vary both across and within countries. Overall, there are 176 European regions in our sample.

<sup>&</sup>lt;sup>32</sup> An exception is the former negative added worker effect for women's transitions from inactivity to employment in the Anglo-Saxon countries, which becomes insignificant in Table B15. However, this is not the result of the inclusion of region-year fixed effects, but of the reduced sample size. By adding region-year fixed effects to the model, we lose some observations due to a lack of variation in women's labor force transitions within specific regions at a given point in time. For the resulting smaller sample, we therefore re-estimate our model

worker effect documented in this paper is not only an artifact of region-specific transitory shocks to the households, but indeed reflects differences in the macroeconomic and institutional conditions between the welfare regimes.

# **Conclusion**

In this paper, we analyze the responsiveness of women's labor supply to their husband's loss of employment – the so-called added worker effect. While previous empirical literature on this topic mainly concentrates on a single country, we take an explicit internationally comparative perspective and analyze whether the added worker effect varies across the countries in Europe. In doing so, we follow the argumentation of Bentolila and Ichino (2008), who point out that the role of family support should be stronger whenever the welfare state fails to mitigate the consequences of unemployment.

In our analysis, we use longitudinal data from the European Union Statistics on Income and Living Conditions (EU-SILC) covering the period 2004 to 2013. As we observe households over the time of the Great Recession, we are further able to investigate the role of the added worker effect in Europe's economic crisis by analyzing its variation with the countries' economic conditions. Lastly, we contribute to the literature by considering a variety of behavioral responses of wives to their husband's unemployment, covering reactions at both the extensive and the intensive margin of labor supply, which is of particular interest and importance in any international comparative framework.

For our pooled sample consisting of 28 European countries, we find evidence for the existence of an added worker effect. Women whose husbands become unemployed show a significantly higher probability of entering the labor market than women whose husbands remain employed. This effect is mainly driven by wives' changes from inactivity to unemployment and increases in their job-search efforts, whereas wives' probability of becoming employed seems to be independent of the husbands' job loss. However, we find that wives are more likely to increase their working hours in reaction to their husbands' unemployment. These results suggest that in Europe, marriage (or cohabitation) still functions

without region-year fixed effects in order to allow for a straightforward comparison of estimation results (see Table C7).

as an intra-household risk-sharing mechanism to smooth inter-temporal income shocks (Attanasio, Low, and Sánchez-Marcos 2005; Ortigueira and Siassi 2013).

Our results further reveal that the magnitude of the added worker effect varies with the countries' economic conditions. While wives' likelihood of increasing their labor supply as a response to their husband's job loss increases with the country's unemployment rate, there is no clear relationship between wife's responsiveness and the country's GDP growth rate. This suggests that it is rather the current conditions of the labor market than the country's economic situation in general that affects couples' labor supply behavior. In addition, we are able to show that women's probability of entering the labor market in response to their husband's unemployment decreases with the country's female labor force participation rate. As female labor force participation rates have increased remarkably over the last decades in most developed countries, this result might provide one explanation why more recent studies find hardly any evidence for the existence of an added worker effect in its traditional sense (Prieto-Rodriguez and Rodriguez-Gutierrez 2003; Gong 2011).

Furthermore, we show that the existence and the magnitude of the added worker effect largely varies over the different welfare regimes within Europe. Overall, the added worker effect is strongest among couples living in the Mediterranean countries, while it is less present in the Continental European and the Nordic countries. Although we are the first to provide comprehensive evidence on the added worker effect across Europe, our results are in accordance with previous literature, which tends to find no or small added worker effects in high-welfare countries, such as Norway (Hardoy and Schøne 2014), but stronger effects for low-welfare countries, such as Italy (Prieto-Rodriguez and Rodriguez-Gutierrez 2003), Spain (Prieto-Rodriguez and Rodriguez-Gutierrez 2000), and the US (Stephens 2002). Hence, our results support the view that the role of the family as an insurance device against unemployment might be crowded out by the generosity of the welfare state. In addition, our finding of a 'negative' added worker effect in the Anglo-Saxon countries, which are characterized by unemployment benefit systems that create a large disincentive for the labor force participation of wives of unemployed men, lends to the important role of the unemployment insurance system in compensating for income losses caused by involuntary job losses, but at the same time maintaining incentives for intra-household labor supply adjustments.

Lastly, we find large differences in the type of behavioral response to husbands' job loss across countries. While women in the Nordic countries are more likely to increase their labor supply at the extensive margin, women in Continental Europe are more likely to do so at the

intensive margin. Furthermore, we find that women in the Central and Eastern European countries are highly limited from the demand side of the labor market, in that they respond to their husband's unemployment in terms of increased job-search activity, but that these attempts do not translate into more success in finding work. These results stress the importance of considering different behavioral responses of wives to their husband's job loss, including measures of both the extensive and the intensive margin of labor supply, in providing a meaningful comparison of the added worker effect across countries.

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**Tables** 

Table 1. Pooled Regression of Women's Labor Market Transitions

Table 1. Pooled I	$IA_{t-1} -> A_t$	IA <sub>t-1</sub> -> UE <sub>t</sub>	$IA_{t-1} -> E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics	IA(-1 -> A(	IA(-1 -> CE(	IA(-1 -> E(	A 9.5	11(-1->11(
Married	-0.031***	-0.012***	-0.021***	-0.020***	-0.028***
Married	(0.007)	(0.004)	(0.007)	(0.006)	(0.007)
No. of children	-0.024***	-0.007***	-0.016***	-0.009***	-0.019***
No. of cilidren	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)
Child age 0 to 3	-0.014**	-0.005	-0.009	-0.024***	-0.017**
Cliffd age 0 to 3	(0.007)	(0.003)	(0.006)	(0.004)	(0.008)
Child age 4 to 6	0.037***	0.010***	0.027***	0.004)	-0.010
Cliffd age 4 to 0	(0.007)	(0.004)	(0.006)	(0.004)	(0.007)
Log. equiv. disposable income (in thsd.)	0.011***	-0.005***	0.017***	-0.007***	0.001
Log. equiv. disposable income (in tilsu.)	(0.004)	(0.002)	(0.004)	(0.002)	(0.005)
Repayment of debts	0.031***	0.002/	0.021***	0.020***	0.007
Repayment of deots	(0.005)	(0.002)	(0.004)	(0.003)	(0.005)
Dwelling type (ref.: detached house)	(0.003)	(0.002)	(0.004)	(0.003)	(0.003)
Semi-detached house	-0.010*	0.002	-0.010*	0.005	0.004
Serii detaened nouse	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
Apartment or flat	-0.010*	0.006***	-0.016***	0.013***	0.014**
ripartition of flat	(0.005)	(0.002)	(0.004)	(0.003)	(0.006)
Wife's characteristics	(0.003)	(0.002)	(0.001)	(0.003)	(0.000)
Age	-0.004***	-0.001***	-0.003***	-0.003***	0.000
7150	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Low skilled	-0.036***	-0.005**	-0.031***	-0.009***	-0.001
20 W BRITTEE	(0.005)	(0.003)	(0.004)	(0.003)	(0.006)
High skilled	0.079***	0.003	0.073***	0.026***	0.026***
This is said	(0.007)	(0.003)	(0.007)	(0.006)	(0.006)
Occupation (ref.: white collar high)	(0.007)	(0.002)	(0.007)	(0.000)	(0.000)
White collar low	_	_	_	_	-0.041***
W 11100 CO11412 10 W					(0.006)
Blue collar high	_	_	_	_	0.054***
					(0.011)
Blue collar low	_	_	_	_	-0.036***
					(0.008)
Husband's characteristics					(0.000)
Age	-0.003***	-0.001*	-0.002***	0.000	-0.005***
6	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Education (ref.: medium skilled)	(,	(/	(/	(/	(,
Low skilled	-0.016***	-0.004	-0.014***	-0.004	-0.008
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)
High skilled	-0.014**	0.001	-0.014***	-0.006	0.000
	(0.006)	(0.003)	(0.006)	(0.004)	(0.006)
Occupation (ref.: white collar high)	` '	` '	` '	` ,	` '
White collar low	0.001	0.004	-0.001	0.008	0.027***
	(0.007)	(0.004)	(0.006)	(0.005)	(0.007)
Blue collar high	0.010*	0.005*	0.006	0.009**	-0.020***
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
Blue collar low	0.000	0.005	-0.003	0.012***	0.012*
	(0.006)	(0.003)	(0.006)	(0.004)	(0.007)

(0.004) (0.007)
To be continued on next page.

Table 1. Pooled Regression of Women's Labor Market Transitions (continued)

Country characteristics	regression of work	711 5 <b>24</b> 0 01 1,14	1100 1100	(**************************************	
GDP growth rate	0.003***	0.000	0.003***	0.000	0.005***
C	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Unemployment rate	0.004***	0.000	-0.001	0.002**	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Female LFP rate	-0.010***	-0.007***	-0.005**	-0.006***	-0.004
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)
Added worker dummy	0.036***	0.030***	-0.001	0.048***	0.060***
	(0.009)	(0.005)	(0.008)	(0.007)	(0.014)
$\Delta$ % due to AWE	19.69%	72.50%	-	70.46%	35.54%
Pseudo-R <sup>2</sup>	0.101	0.098	0.112	0.089	0.095
Observations	87,416	87,416	87,416	76,133	73,891

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1}$  ->  $A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1}$  ->  $III_t$  refers to women's transitions from inactivity to employment;  $III_t$  and  $III_t$  refers to women's job search transitions;  $III_t$  refers to women's transitions from part-time to full-time employment. – The added worker dummy takes value one if the husband becomes unemployed from  $III_t$  to  $III_t$  and  $III_t$  refers to the percentage change in women's probability of adjusting their labor supply due to their husbands' unemployment. Percentage changes are shown for significant added worker effects (5-percent level) only. – Both country and year fixed effects are additionally included in the regressions.

Table 2. Added Worker Effect by Country Group

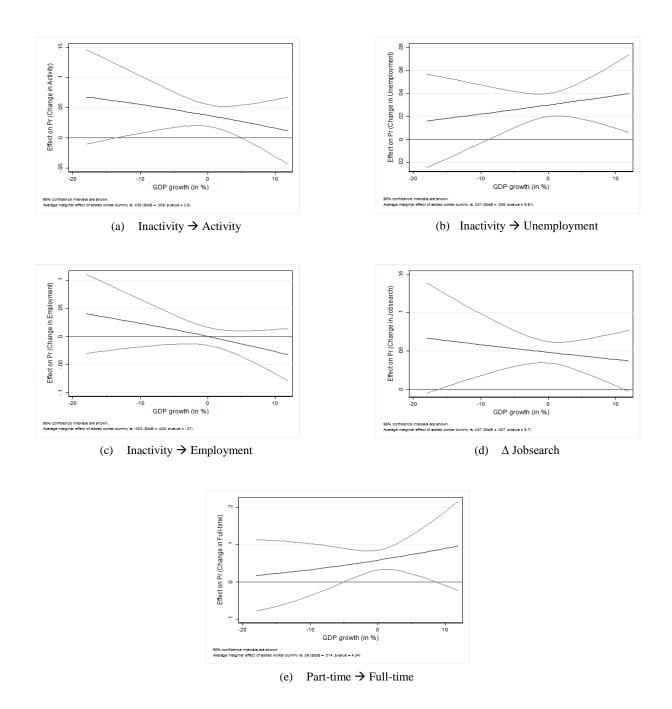
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
			Nordic Countries	;	
ME	0.089**	0.038*	0.041	-0.005	0.020
StdE	(0.042)	(0.020)	(0.042)	(0.027)	(0.038)
$\Delta\%$	25.76%	· -	-	-	-
Observations	7,339	7,339	7,339	4,641	11,228
			Continental Europ	e	
ME	-0.015	0.006	-0.024	0.015	0.058***
StdE	(0.020)	(0.007)	(0.019)	(0.013)	(0.020)
$\Delta\%$	-	-	-	-	63.05%
Observations	21,099	21,099	21,099	17,355	36,482
		A	nglo-Saxon Count	ries	
ME	-0.064	0.020	-0.089**	0.024	0.069
StdE	(0.043)	(0.018)	(0.039)	(0.029)	(0.044)
\%		-	-39.07%	-	-
Observations	4,005	4,005	4,005	3,180	5,867
		Me	editerranean Coun	tries	
ΜE	0.066***	0.044***	0.018*	0.062***	0.095***
StdE	(0.012)	(0.009)	(0.009)	(0.011)	(0.027)
\%	47.10%	76.49%	-	82.73%	37.23%
Observations	29,232	29,232	29,232	27,028	11,920
		Cent	tral and Eastern E	urope	
ME	0.038***	0.029***	0.004	0.051***	-0.028
StdE	(0.015)	(0.009)	(0.013)	(0.012)	(0.035)
$^{\sim}$	20.86%	62.45%	-	82.68%	-
Observations	25,828	25,828	25,828	23,929	8,394

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1}$  ->  $A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1}$  ->  $UE_t$  refers to women's transitions from inactivity to employment;  $\Delta JS$  refers to women's job search transitions,  $PT_{t-1}$  ->  $FT_t$  refers to women's transitions from part-time to full-time employment. – The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. –  $\Delta$ % refers to the percentage change in women's probability of adjusting their labor supply due to their husbands' unemployment. Percentage changes are shown for significant added worker effects (5-percent level) only. – Full estimation results are shown in Tables B9 to B13.

# **Figures**

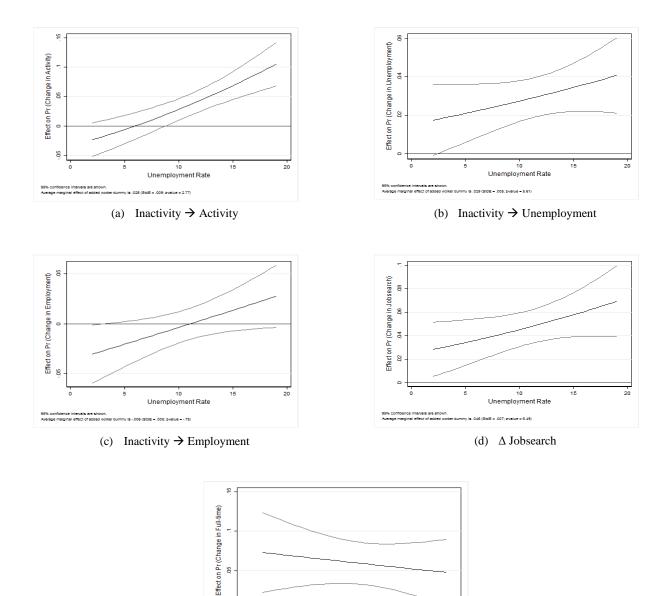
Figure 1. Marginal Added Worker Effects over the GDP Growth Rate



Source: EU-SILC, own calculations.

 $Note: The figure shows the average \ marginal \ effects \ of the \ added \ worker \ dummy \ including \ the \ interaction \ effects \ with \ the \ GDP \ growth \ rate.$ 

Figure 2. Marginal Added Worker Effects over the Unemployment Rate



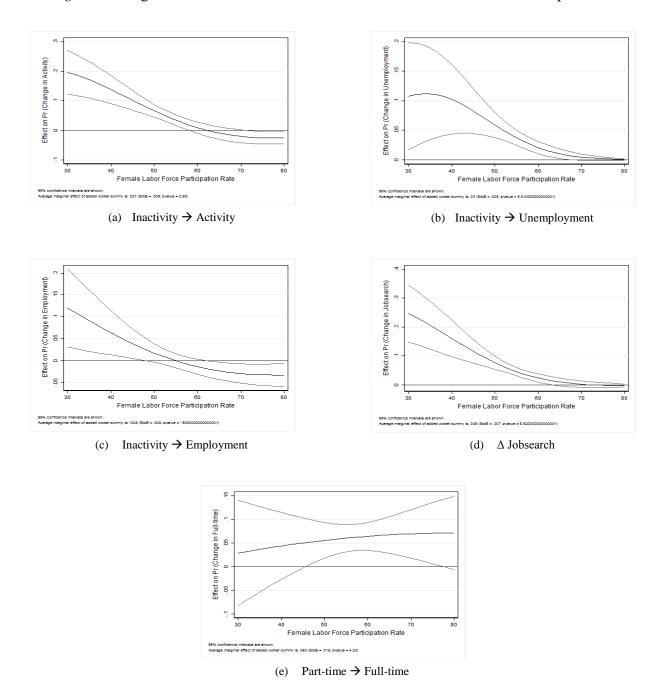
(e) Part-time → Full-time

10 Unemployment Rate

Source: EU-SILC, own calculations.

Note: The figure shows the average marginal effects of the added worker dummy including the interaction effects with the unemployment rate.

Figure 3. Marginal Added Worker Effects over the Female Labor Force Participation Rate



Note: The figure shows the average marginal effects of the added worker dummy including the interaction effects with the female labor force participation rate.

## **Online Appendix A: Descriptive Statistics**

Table A1. Overview of Countries Included in the EU-SILC Data

					2000				2012	2012
<u>-</u>	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Austria	X	X	X	X	X	X	X	X	X	X
Belgium	X	X	X	X	X	X	X	X	X	X
Bulgaria	-	-	X	X	X	X	X	X	X	X
Croatia	-	-	-	-	-	-	X	X	X	-
Cyprus	-	X	X	X	X	X	X	X	X	X
Czech Rep.	-	X	X	X	X	X	X	X	X	X
Denmark	X	X	X	X	X	X	X	X	X	X
Estonia	X	X	X	X	X	X	X	X	X	X
Finland	X	X	X	X	X	X	X	X	X	X
France	X	X	X	X	X	X	X	X	X	X
Germany	_	X	X	-	-	-	-	-	-	-
Greece	X	X	X	X	X	X	X	X	X	-
Hungary	-	X	X	X	X	X	X	X	X	X
Ireland	-	X	X	X	X	X	X	X	X	X
Italy	X	X	X	X	X	X	X	X	X	X
Latvia	-	X	X	X	X	X	X	X	X	X
Lithuania	-	X	X	X	X	X	X	X	X	X
Luxembourg	X	X	X	X	X	X	X	X	X	X
Netherlands	_	X	X	X	X	X	X	X	X	X
Norway	X	X	X	X	X	X	X	X	X	X
Poland	_	X	X	X	X	X	X	X	X	X
Portugal	X	X	X	X	X	X	X	X	X	X
Romania	_	_	_	X	X	X	X	X	X	-
Slovakia	_	X	X	X	X	X	X	X	X	X
Slovenia	-	X	X	X	X	X	X	X	X	X
Spain	X	X	X	X	X	X	X	X	X	X
Sweden	X	X	X	X	X	X	X	X	X	-
United Kingdom	-	X	X	X	X	X	X	X	X	X

Source: EU-SILC, own representation.

Notes: The table shows an overview of the countries included in each wave of the EU-SILC longitudinal data, where X denotes that a country is included in the respective wave and - denotes that a country is not included in the respective wave.

Table A2. Women's Transition Probabilities

Wife's change		Husband's ch	ange
	$E_{t-1} \rightarrow E_t$	$E_{t-1} \rightarrow UE_t$	Difference
$IA_{t-1} \rightarrow A_t$	0.185	0.216	0.031***
	(0.388)	(0.411)	
$IA_{t-1} \rightarrow UE_t$	0.041	0.094	0.053***
	(0.198)	(0.292)	
$IA_{t-1} \rightarrow E_t$	0.144	0.121	-0.023***
	(0.351)	(0.327)	
$\Delta$ JS	0.067	0.137	0.07***
	(0.250)	(0.344)	
$PT_{t-1} \rightarrow FT_t$	0.167	0.277	0.11***
	(0.373)	(0.477)	

Notes: The results shown represent means and standard deviations of the probability of making a labor market transition for women with a husband that stays employed from t-1 to t ( $E_{t-1} \rightarrow E_t$ ) and women whose husband becomes unemployed from t-1 to t ( $E_{t-1} \rightarrow UE_t$ ). — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} \rightarrow A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} \rightarrow UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} \rightarrow E_t$  refers to women's transitions from inactivity to employment;  $\Delta JS$  refers to women's job search transitions;  $PT_{t-1} \rightarrow FT_t$  refers to women's transitions from part-time to full-time employment.

Table A3. Descriptive Statistics

		A3. Descript	(II)		(III	D.
_	Mean (I)	StD	Mean	StD	Mean	StD
Household characteristics	ivican	SiD	Ivican	310	Wican	зір
Married	0.843	0.364	0.862	0.345	0.776	0.417
No. of children	1.005	1.094	0.966	1.097	0.955	0.982
Child age 0 to 3	0.161	0.367	0.158	0.365	0.107	0.310
Child age 4 to 6	0.158	0.365	0.136	0.350	0.141	0.348
Equiv. disposable income (in thsd.)	15.038	17.274	14.620	17.225	21.877	17.126
Repayment of debts	0.328	0.469	0.316	0.465	0.405	0.491
Detached house	0.328	0.482	0.366	0.482	0.399	0.490
Semi-detached house	0.260	0.439	0.248	0.432	0.374	0.484
Apartment or flat	0.200	0.484	0.385	0.432	0.228	0.419
reputation of the	0.575	0.404	0.303	0.407	0.220	0.415
Wife's characteristics						
Age	44.265	10.386	44.847	10.392	44.368	8.952
Low skilled	0.374	0.484	0.402	0.490	0.183	0.386
Medium skilled	0.459	0.498	0.455	0.498	0.496	0.500
High skilled	0.168	0.374	0.142	0.349	0.321	0.467
White collar high	-	-	-	-	0.376	0.484
White collar low	-	-	-	-	0.404	0.491
Blue collar high	-	-	-	-	0.065	0.246
Blue collar low	-	-	-	-	0.155	0.362
Husband's characteristics						
Age	46.904	9.901	47.491	9.845	46.025	8.914
Low skilled	0.322	0.467	0.344	0.475	0.184	0.387
Medium skilled	0.462	0.499	0.457	0.498	0.483	0.500
High skilled	0.216	0.411	0.199	0.399	0.333	0.471
White collar high	0.348	0.476	0.331	0.470	0.471	0.499
White collar low	0.127	0.333	0.128	0.334	0.149	0.356
Blue collar high	0.295	0.456	0.303	0.459	0.216	0.412
Blue collar low	0.230	0.421	0.239	0.426	0.164	0.370
Country characteristics	1.005	2.122	0.020	2.160	0.000	2 (20
GDP growth rate	1.005	3.132	0.938	3.160	0.898	2.638
Unemployment rate	9.543	4.063	9.789	4.173	8.405	3.641
Female LFP rate	55.857	7.848	55.153	7.558	60.740	7.532
Added worker dummy	0.051	0.220	0.054	0.226	0.028	0.165
Observations	87,41	16	76,13	33	73,8	91

Source: EU-SILC, own calculations.

Notes: The results shown represent means and standard deviations of the explanatory variables included in the regressions. — Column (I) shows the descriptive statistics of the sample underlying the analysis of women's transitions from inactivity to activity, column (II) those underlying the analysis of women's changes in job-search behavior, and column (III) those underlying the analysis of women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed.

## Online Appendix B: Additional Results

	TA > A	TA SITE	IA > E	A TC	DT SET
Household characteristics	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT$
	0.022***	0.012***	0.001***	0.020***	0.020***
Married	-0.032***	-0.013***	-0.021***	-0.020***	-0.028***
	(0.008)	(0.004)	(0.007)	(0.006)	(0.007)
No. of children	-0.023***	-0.007***	-0.016***	-0.009***	-0.019***
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)
Child age 0 to 3	-0.016**	-0.006*	-0.011*	-0.024***	-0.018**
	(0.007)	(0.003)	(0.006)	(0.004)	(0.008)
Child age 4 to 6	0.036***	0.010***	0.026***	0.004	-0.010
	(0.007)	(0.003)	(0.006)	(0.004)	(0.007)
og. equiv. disposable income (in thsd.)	0.013***	-0.004*	0.018***	-0.005**	0.006
	(0.004)	(0.002)	(0.004)	(0.002)	(0.005)
Repayment of debts	0.029***	0.009***	0.020***	0.019***	0.006
1 7	(0.005)	(0.002)	(0.004)	(0.003)	(0.005)
Owelling type (ref.: detached house)	(51555)	(0.00=)	(0.00.)	(0.000)	(01000)
Semi-detached house	-0.011*	0.002	-0.011**	0.005	0.005
cim detached house	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
apartment or flat	-0.010**	0.006**	-0.016***	0.013***	0.014**
spartinent of flat	(0.005)	(0.002)	(0.004)	(0.003)	(0.006)
V:6-1b	(0.003)	(0.002)	(0.004)	(0.003)	(0.000)
Wife's characteristics	0.004***	0.001***	0.002***	0.002***	0.001
Age	-0.004***	-0.001***	-0.003***	-0.003***	-0.001
	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Education (ref.: medium skilled)					
Low skilled	-0.035***	-0.005*	-0.030***	-0.008**	-0.001
	(0.005)	(0.003)	(0.004)	(0.003)	(0.006)
High skilled	0.078***	0.002	0.071***	0.025***	0.025***
	(0.007)	(0.003)	(0.007)	(0.006)	(0.006)
Occupation (ref.: white collar high)					
White collar low	_	-	_	_	-0.041***
					(0.006)
Blue collar high	_	_	_	_	0.056***
ond cond mgn					(0.011)
Blue collar low					-0.035***
Side Collar low	-	-	-	-	(0.008)
Tkdlk					(0.008)
Husband's characteristics	0.002***	0.000*	0.000***	0.000	0.005***
Age	-0.003***	-0.000*	-0.002***	0.000	-0.005***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Education (ref.: medium skilled)					
Low skilled	-0.016***	-0.003	-0.014***	-0.003	-0.008
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)
High skilled	-0.014**	0.001	-0.014**	-0.006	-0.001
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
Occupation (ref.: white collar high)					
White collar low	0.002	0.004	-0.001	0.008*	0.028***
	(0.007)	(0.003)	(0.006)	(0.005)	(0.007)
Blue collar high	0.010*	0.005*	0.006	0.009**	-0.019***
ond condinging	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
Blue collar low	0.000)	0.005*	-0.004	0.012***	0.013*
Jue Conai iow					
	(0.006)	(0.003)	(0.006)	(0.004)	(0.007)
	0.024	0.000	0.000	0.046***	0.050444
Added worker dummy	0.034***	0.029***	-0.002	0.046***	0.060***
	(0.009)	(0.005)	(0.008)	(0.007)	(0.014)
Pseudo-R <sup>2</sup>	0.110	0.110	0.121	0.100	0.103
Observations	87,416	87,416	87,416	76,052	73,890

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1}$  ->  $A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's transitions from inactivity to employment;  $\Delta JS$  refers to women's job search transitions;  $PT_{t-1} \rightarrow FT_t$  refers to women's transitions from part-time to full-year fixed effects are additionally included in the regressions.

Table B2. Pooled Regression Based on Balanced Sample (2005-2012)

Table B2. Pooled	$IA_{t-1} -> A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics	1A <sub>t-1</sub> -> A <sub>t</sub>	IA <sub>t-1</sub> -> UL <sub>t</sub>	IA <sub>t-1</sub> -> E <sub>t</sub>	Δ 3 3	F 1 <sub>t-1</sub> -> F 1 <sub>t</sub>
Married Married	-0.024***	-0.012**	-0.015**	-0.022***	-0.032***
Warned	(0.008)	(0.005)	(0.007)	(0.006)	(0.008)
No. of children	-0.025***	-0.008***	-0.017***	-0.010***	-0.019***
No. of children					
Child age 0 to 3	(0.003) -0.009	(0.002)	(0.003)	(0.002) -0.025***	(0.003) -0.023***
Child age 0 to 3		-0.006	-0.005		
CI II	(0.008)	(0.004)	(0.007)	(0.005)	(0.009)
Child age 4 to 6	0.043***	0.011***	0.032***	0.006	-0.008
	(0.008)	(0.004)	(0.007)	(0.005)	(0.008)
Log. equiv. disposable income (in thsd.)	0.016***	-0.005**	0.021***	-0.005**	0.001
	(0.004)	(0.002)	(0.004)	(0.003)	(0.005)
Repayment of debts	0.030***	0.009***	0.020***	0.021***	0.003
	(0.005)	(0.003)	(0.004)	(0.004)	(0.005)
Dwelling type (ref.: detached house)					
Semi-detached house	-0.003	0.004	-0.005	0.005	0.005
	(0.006)	(0.003)	(0.006)	(0.004)	(0.006)
Apartment or flat	-0.008	0.008***	-0.015***	0.012***	0.015**
r	(0.005)	(0.003)	(0.004)	(0.004)	(0.007)
Wife's characteristics	(*****)	(0.000)	(0.00.)	(*****)	(0.00.)
Age	-0.004***	-0.001***	-0.003***	-0.003***	-0.001
ige	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
, ,	0.024***	0.006**	0.020***	0.007*	0.002
Low skilled	-0.034***	-0.006**	-0.028***	-0.007*	-0.003
W 1 191 1	(0.005)	(0.003)	(0.004)	(0.004)	(0.007)
High skilled	0.080***	0.001	0.075***	0.030***	0.027***
	(0.008)	(0.004)	(0.007)	(0.006)	(0.007)
Occupation (ref.: white collar high)					
White collar low	-	-	-	-	-0.044***
					(0.006)
Blue collar high	-	-	-	-	0.038***
					(0.012)
Blue collar low	-	-	-	-	-0.036***
					(0.009)
Husband's characteristics					, ,
Age	-0.003***	-0.001**	-0.002***	0.000	-0.005***
-6-	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Low skilled	-0.017***	-0.003	-0.016***	-0.004	-0.006
Low skined	(0.006)	(0.003)	(0.005)	(0.004)	(0.007)
Tiple abilled	-0.009	0.003)	-0.011*	-0.006	0.007
High skilled					
	(0.007)	(0.004)	(0.006)	(0.005)	(0.007)
Occupation (ref.: white collar high)	0.007	0.005	0.004	0.000*	0.0204444
White collar low	0.007	0.005	0.004	0.009*	0.028***
	(0.007)	(0.004)	(0.006)	(0.005)	(0.008)
Blue collar high	0.012*	0.005	0.008	0.012***	-0.019***
	(0.006)	(0.003)	(0.005)	(0.004)	(0.007)
Blue collar low	0.004	0.008**	-0.003	0.015***	0.015*
	(0.007)	(0.003)	(0.006)	(0.005)	(0.008)
Country characteristics					
GDP growth rate	0.002*	0.000	0.002*	-0.001	0.005***
÷	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Unemployment rate	0.006***	0.001	0.001	0.001	0.003
T . A	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)
Female LFP rate	-0.006*	-0.007***	-0.002	-0.007***	0.002)
LONGO DE LE TUIC		(0.002)	(0.003)	(0.002)	(0.003)
		(0.002)	(0.003)	(0.002)	(0.003)
	(0.003)	· · · · ·			
	, ,	0.030***	0.002	0.050***	0.052***
Added worker dummy	0.037***	0.028***	0.002	0.050***	0.052***
Added worker dummy	0.037*** (0.010)	(0.005)	(0.008)	(0.008)	(0.015)
	0.037***				

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to employment;  $\Delta IS$  refers to women's job search transitions,  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions. — The underlying sample has been restricted by (i) excluding Germany and Croatia from our data, which are only included in the panel for two and three years, respectively, (ii) excluding all observations for the year 2013, in which three of the remaining countries did not deliver any data (yet). The result is a quasi-balanced sample of countries for the time period 2005 to 2012, with the exceptions of Bulgaria and Romania, which as a result of the EU enlargement entered the survey only in 2006 and 2007, respectively.

Table B3. Added Worker Effect by Country Group Based on Balanced Sample (2005-2012)

	$IA_{t-1} -> A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
			Nordic Countries		
ME	0.087*	0.027	0.049	-0.005	-0.005
StdE	(0.046)	(0.021)	(0.046)	(0.029)	(0.041)
$\Delta\%$	-	· -	<u>-</u>	-	-
Observations	5,560	5,560	5,560	3,664	9,198
			Continental Europ	e	
ME	0.005	0.006	-0.002	0.018	0.041**
StdE	(0.021)	(0.007)	(0.020)	(0.016)	(0.018)
$\Delta\%$		-	-	-	43.28%
Observations	16,613	16,613	16,613	13,723	29,384
		A	nglo-Saxon Counti	ries	
ME	-0.063	0.019	-0.089**	0.013	0.069
StdE	(0.046)	(0.019)	(0.041)	(0.027)	(0.046)
$\Delta\%$	-	-	-39.07%	-	-
Observations	3,171	3,171	3,171	2,505	4,685
		Me	editerranean Coun	tries	
ME	0.060***	0.041***	0.016	0.065***	0.102***
StdE	(0.013)	(0.010)	(0.010)	(0.012)	(0.030)
$\Delta\%$	41.20%	64.31%	-	83.40%	38.89%
Observations	24,622	24,622	24,622	22,827	9,461
		Cen	tral and Eastern E	urope	
ME	0.037**	0.027***	0.006	0.051***	-0.035
StdE	(0.015)	(0.009)	(0.013)	(0.012)	(0.036)
$\Delta\%$	20.81%	60.66%		84.31%	
Observations	24,298	24,298	24,298	22,472	7,390

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics (as shown in Table 1). — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's transitions from inactivity to employment;  $\Delta IS$  refers to women's job search transitions;  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. —  $\Delta IS$  refers to the percentage change in women's probability of adjusting their labor supply due to their husbands' unemployment. Percentage changes are shown for significant added worker effects (5-percent level) only. — The underlying sample has been restricted by (i) excluding Germany and Croatia from our data, which are only included in the panel for two and three years, respectively, (ii) excluding all observations for the year 2004, in which only 13 countries participated in the EU-SILC survey, and (iii) excluding all observations for the year 2013, in which three of the remaining countries did not deliver any data (yet). The result is a quasi-balanced sample of countries for the time period 2005 to 2012, with the exceptions of Bulgaria and Romania, which as a result of the EU enlargement entered the survey only in 2006 and 2007, respectively.

Table B4. Pooled Regression Based on Restricted Age Sample (24 to 59 Years)

Table B4. Pooled Re	_	•			
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics	0.001	0.04.4555	0.0404444	0.004.6.6.6	0.005.000
Married	-0.031***	-0.014***	-0.019***	-0.024***	-0.027***
N C 1 11	(0.008)	(0.005)	(0.007)	(0.007)	(0.007)
No. of children	-0.027***	-0.007***	-0.019***	-0.010***	-0.017***
21.11	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)
Child age 0 to 3	-0.013	-0.006	-0.008	-0.029***	-0.018**
01.11	(0.008)	(0.004)	(0.007)	(0.005)	(0.008)
Child age 4 to 6	0.041***	0.012***	0.029***	0.005	-0.010
	(0.008)	(0.004)	(0.007)	(0.005)	(0.007)
Log. equiv. disposable income (in thsd.)	0.014***	-0.004**	0.019***	-0.005*	0.003
	(0.004)	(0.002)	(0.004)	(0.003)	(0.005)
Repayment of debts	0.034***	0.010***	0.023***	0.022***	0.006
	(0.005)	(0.003)	(0.005)	(0.004)	(0.005)
Dwelling type (ref.: detached house)					
Semi-detached house	-0.010	0.004	-0.013**	0.007	0.006
	(0.007)	(0.003)	(0.006)	(0.005)	(0.006)
Apartment or flat	-0.011**	0.008***	-0.019***	0.015***	0.019***
	(0.006)	(0.003)	(0.005)	(0.004)	(0.007)
Wife's characteristics					
Age	-0.004***	-0.001**	-0.003***	-0.003***	0.000
	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
Education (ref.: medium skilled)					
Low skilled	-0.042***	-0.006**	-0.037***	-0.010***	-0.003
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)
High skilled	0.088***	0.004	0.080***	0.028***	0.026***
6	(0.008)	(0.004)	(0.008)	(0.006)	(0.007)
Occupation (ref.: white collar high)	()	(/	(/	(/	(/
White collar low	_	_	_	_	-0.039***
The condition					(0.006)
Blue collar high	_	_	_	_	0.061***
Blue contai ingn					(0.012)
Blue collar low					-0.033***
Blue Collai low	-	-	-	-	(0.008)
Husband's characteristics					(0.008)
Age	-0.003***	-0.001***	-0.002***	-0.001**	-0.005***
Age	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
Education (not a modium abilled)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
Education (ref.: medium skilled) Low skilled	-0.018***	0.005	-0.015***	0.005	0.000
Low skilled		-0.005		-0.005	-0.008
CT 1 1 11 1	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
High skilled	-0.012*	0.001	-0.012*	-0.008	0.003
	(0.007)	(0.004)	(0.006)	(0.005)	(0.006)
Occupation (ref.: white collar high)	0.004	0.004	0.004	0.000	0.004 dodah
White collar low	0.004	0.004	0.001	0.009	0.031***
	(0.008)	(0.004)	(0.007)	(0.006)	(0.008)
Blue collar high	0.015**	0.005	0.010*	0.011**	-0.019***
	(0.007)	(0.003)	(0.006)	(0.005)	(0.007)
Blue collar low	0.003	0.004	0.000	0.014***	0.013
	(0.007)	(0.004)	(0.006)	(0.005)	(0.008)
Country characteristics					
GDP growth rate	0.003**	0.000	0.002**	0.000	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Unemployment rate	0.004**	0.000	-0.001	0.002*	-0.001
- ·	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)
Female LFP rate	-0.011***	-0.008***	-0.006**	-0.007***	-0.004
	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)
	(=====)	(/	()	(/	()
Added worker dummy	0.042***	0.031***	0.002	0.055***	0.063***
. radea orker dummij	0.0.2		(0.009)	(0.008)	(0.015)
	((),()1())	(0.000)			
Pseudo-R <sup>2</sup>	(0.010) 0.087	(0.006) 0.091	0.101	0.072	0.093

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's possible bearch transitions;  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions.

Table B5. Pooled Regression Conditioning on Three Months of Husband's Unemployment

	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT$
Household characteristics					
Married	-0.031***	-0.013***	-0.021***	-0.020***	-0.028***
	(0.007)	(0.004)	(0.007)	(0.006)	(0.007)
o. of children	-0.024***	-0.007***	-0.016***	-0.009***	-0.019***
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)
hild age 0 to 3	-0.014**	-0.006	-0.009	-0.024***	-0.017**
	(0.007)	(0.003)	(0.006)	(0.004)	(0.008)
hild age 4 to 6	0.037***	0.010***	0.027***	0.004	-0.010
-	(0.007)	(0.004)	(0.006)	(0.004)	(0.007)
og. equiv. disposable income (in thsd.)	0.011***	-0.005***	0.017***	-0.007***	0.001
	(0.004)	(0.002)	(0.004)	(0.002)	(0.005)
epayment of debts	0.031***	0.009***	0.021***	0.020***	0.007
	(0.005)	(0.002)	(0.004)	(0.003)	(0.005)
welling type (ref.: detached house)	(0.000)	(****=)	(4144.)	(*****)	(0.000)
emi-detached house	-0.010*	0.002	-0.010*	0.005	0.004
onii dedened nouse	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
partment or flat	-0.010*	0.006***	-0.016***	0.013***	0.014**
partition of flat	(0.005)	(0.002)	(0.004)	(0.003)	(0.006)
Vife's characteristics	(0.003)	(0.002)	(0.00+)	(0.003)	(0.000)
	-0.004***	-0.001***	-0.003***	-0.003***	0.000
ge	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
ducation (ref.: medium skilled)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
ow skilled	-0.036***	-0.005**	-0.031***	-0.009***	0.001
ow skilled					-0.001
2 1 121 1	(0.005)	(0.003)	(0.004)	(0.003)	(0.006)
igh skilled	0.079***	0.003	0.073***	0.026***	0.026***
	(0.007)	(0.003)	(0.007)	(0.006)	(0.006)
Occupation (ref.: white collar high)					0.044
White collar low	-	-	-	-	-0.041***
					(0.006)
lue collar high	-	-	-	-	0.054***
					(0.011)
lue collar low	-	-	-	-	-0.036***
					(0.008)
lusband's characteristics					
ge	-0.003***	-0.001*	-0.002***	0.000	-0.005***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
ducation (ref.: medium skilled)					
ow skilled	-0.016***	-0.003	-0.014***	-0.004	-0.008
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)
ligh skilled	-0.014**	0.001	-0.014***	-0.006	0.000
	(0.006)	(0.003)	(0.006)	(0.004)	(0.006)
Occupation (ref.: white collar high)	(0.000)	(0.002)	(0.000)	(0.001)	(0.000)
White collar low	0.001	0.004	-0.002	0.008	0.027***
The Cond Tow	(0.007)	(0.004)	(0.006)	(0.005)	(0.007)
lue collar high	0.010*	0.005*	0.006	0.009**	-0.020***
iue conai nign					
lue celler levy	(0.006) 0.001	(0.003) 0.005	(0.005)	(0.004)	(0.006)
lue collar low			-0.003	0.012***	0.013*
	(0.006)	(0.003)	(0.006)	(0.004)	(0.007)
ountry characteristics	0.002***	0.000	0.002***	0.000	0.005***
DP growth rate	0.003***	0.000	0.003***	0.000	0.005***
•	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
nemployment rate	0.004***	0.000	-0.001	0.002**	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
emale LFP rate	-0.009***	-0.007***	-0.005**	-0.006***	-0.004
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)
dded worker dummy (3 month)	0.042***	0.033***	0.001	0.053***	0.069***
	(0.010)	(0.005)	(0.009)	(0.008)	(0.015)
seudo-R <sup>2</sup>	0.101	0.098	0.112	0.089	0.095
Observations	87,503	87,503	87,503	76,133	73,891

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} > E_t$  refers to women's  $IA_{t-1} > IA_t = IA_{t-1} > IA_t = IA_{t-1} > IA_t = IA_{t-1} > IA_t = IA_t =$ 

Table B6. Pooled Regression Including Husband's Labor Market Experience and Previous Job Status

Table Bo. Pooled Reglession I	Table B6. Pooled Regression Including Husband's Labor Market Experience and Previous Job Status							
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT$			
Household characteristics								
Married	-0.039***	-0.011**	-0.028***	-0.021***	-0.031***			
	(0.009)	(0.006)	(0.008)	(0.007)	(0.008)			
o. of children	-0.023***	-0.009***	-0.014***	-0.012***	-0.014***			
	(0.003)	(0.002)	(0.003)	(0.002)	(0.004)			
hild age 0 to 3	-0.015*	-0.005	-0.010	-0.020***	0.003			
	(0.008)	(0.005)	(0.007)	(0.006)	(0.010)			
hild age 4 to 6	0.039***	0.010**	0.029***	0.013**	0.005			
	(0.009)	(0.005)	(0.008)	(0.006)	(0.008)			
og. equiv. disposable income (in thsd.)	0.020***	-0.010***	0.031***	-0.009**	0.024***			
	(0.006)	(0.003)	(0.005)	(0.004)	(0.007)			
epayment of debts	0.032***	0.013***	0.018***	0.018***	0.011*			
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)			
welling type (ref.: detached house)								
emi-detached house	-0.011	0.000	-0.009	0.006	0.007			
	(0.007)	(0.004)	(0.007)	(0.005)	(0.007)			
partment or flat	-0.006	0.004	-0.009*	0.013***	0.013*			
	(0.006)	(0.003)	(0.005)	(0.004)	(0.007)			
/ife's characteristics								
ge	-0.004***	-0.001***	-0.003***	-0.003***	0.000			
	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)			
ducation (ref.: medium skilled)								
ow skilled	-0.041***	-0.009**	-0.032***	-0.012***	-0.012			
	(0.006)	(0.004)	(0.005)	(0.004)	(0.007)			
igh skilled	0.078***	0.004	0.069***	0.034***	0.023***			
	(0.010)	(0.005)	(0.009)	(0.007)	(0.008)			
ccupation (ref.: white collar high)	` /	, ,	, ,	` /	, ,			
hite collar low	-	-	_	-	-0.031***			
					(0.007)			
ue collar high	_	_	_	_	0.067***			
					(0.015)			
lue collar low	_	_	_	_	-0.032***			
ade condi 10 W					(0.009)			
usband's characteristics					(0.00)			
ge	-0.003***	-0.001**	-0.002***	0.000	-0.005***			
gc	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)			
lucation (ref.: medium skilled)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)			
ow skilled	-0.015**	-0.002	-0.016***	-0.001	-0.011			
JW SKIIIEU								
. 1 1.11 1	(0.006)	(0.004)	(0.006)	(0.005)	(0.008)			
igh skilled	-0.014*	0.005	-0.018***	-0.010*	-0.009			
	(0.008)	(0.005)	(0.007)	(0.006)	(0.007)			
ccupation (ref.: white collar high)								
hite collar low	0.002	0.004	-0.001	0.005	0.022***			
	(0.009)	(0.005)	(0.007)	(0.006)	(0.008)			
lue collar high	0.007	0.007	0.002	0.010*	-0.013			
	(0.008)	(0.005)	(0.007)	(0.005)	(0.009)			
ue collar low	0.008	0.002	0.008	0.009	0.019**			
	(0.008)	(0.004)	(0.007)	(0.006)	(0.009)			
nare of years in employment	-0.035*	-0.008	-0.026	-0.025*	-0.116***			
	(0.019)	(0.010)	(0.017)	(0.014)	(0.022)			
emporary job	0.021***	0.004	0.016**	0.003	0.027***			
	(0.008)	(0.004)	(0.007)	(0.005)	(0.010)			
ountry characteristics	(*****)	()	(/	(/	()			
DP growth rate	0.003**	-0.001	0.003***	-0.001	0.008***			
51 510 Mil 1410	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)			
nemployment rate	0.001)	0.001)	-0.002	0.001)	-0.001			
nomproyment rate	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)			
amala I ED rata	` ,	'	` '	` '	(/			
emale LFP rate	-0.012***	-0.007***	-0.007***	-0.004*	-0.007*			
	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)			
11.1	0.02244	0.010****	0.001	0.000	0.044			
dded worker dummy	0.023**	0.019***	0.001	0.039***	0.041**			
	(0.011)	(0.006)	(0.009)	(0.009)	(0.016)			
seudo-R <sup>2</sup>	0.111	0.094	0.124	0.087	0.101			
Observations	56,320	56,320	56,320	50,153	43,296			

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's possible search transitions;  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions.

Table B7. Pooled Regression for Married Couples

		$\frac{\text{ession for Marr}}{\text{IA}_{t-1} \rightarrow \text{UE}_t}$		ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics	$IA_{t-1} \rightarrow A_t$	IA <sub>t-1</sub> -> UL <sub>t</sub>	$IA_{t-1} \rightarrow E_t$	Δ JS	Г1 <sub>t-1</sub> -> Г1 <sub>t</sub>
Married					
viamed	-	-	-	-	-
No. of children	-0.022***	-0.007***	-0.014***	-0.008***	-0.018***
ivo. of children	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)
Child age 0 to 3	-0.001	-0.008*	0.002)	-0.025***	-0.015*
Liniu age 0 to 3					
Child 44- 6	(0.008)	(0.004)	(0.007)	(0.005)	(0.009)
Child age 4 to 6	0.043***	0.007*	0.035***	0.001	-0.003
	(0.007)	(0.004)	(0.007)	(0.005)	(0.008)
og. equiv. disposable income (in thsd.)	0.012***	-0.005**	0.017***	-0.008***	-0.003
	(0.004)	(0.002)	(0.004)	(0.002)	(0.005)
Repayment of debts	0.031***	0.009***	0.021***	0.021***	0.009*
	(0.005)	(0.003)	(0.004)	(0.003)	(0.005)
Owelling type (ref.: detached house)					
Semi-detached house	-0.002	0.004	-0.003	0.006	0.002
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)
Apartment or flat	-0.006	0.008***	-0.013***	0.014***	0.010
•	(0.005)	(0.003)	(0.004)	(0.003)	(0.007)
Vife's characteristics	(******)	(/	(/	(/	()
Age	-0.004***	-0.002***	-0.003***	-0.003***	0.000
<del>-o-</del>	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
Low skilled	-0.029***	-0.007**	-0.022***	-0.010***	0.002
Low skilled	(0.005)	(0.003)	(0.004)		
T' 1 1'11 1	,		( /	(0.003) 0.028***	(0.007)
High skilled	0.077***	0.006	0.068***		0.025***
	(0.008)	(0.004)	(0.007)	(0.006)	(0.007)
Occupation (ref.: white collar high)					
White collar low	-	-	-	-	-0.044***
					(0.006)
Blue collar high	-	-	-	-	0.050***
					(0.012)
Blue collar low	-	-	-	-	-0.042***
					(0.008)
Husband's characteristics					
Age	-0.003***	-0.001**	-0.002***	-0.001	-0.004***
	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
Education (ref.: medium skilled)	(***** )	(/	(/	( , , ,	()
Low skilled	-0.015***	-0.004	-0.012**	-0.002	-0.009
30 W SALINGE	(0.005)	(0.003)	(0.005)	(0.004)	(0.007)
High skilled	-0.014**	-0.001	-0.012**	-0.005	0.000
ngn skined	(0.006)	(0.004)	(0.005)	(0.005)	(0.007)
2	(0.000)	(0.004)	(0.003)	(0.003)	(0.007)
Occupation (ref.: white collar high)	0.001	0.002	0.002	0.004	0.020***
White collar low	-0.001	0.003	-0.003	0.004	0.028***
	(0.007)	(0.004)	(0.006)	(0.005)	(0.008)
Blue collar high	0.006	0.005	0.003	0.007*	-0.016**
	(0.006)	(0.003)	(0.005)	(0.004)	(0.007)
Blue collar low	-0.004	0.004	-0.006	0.011**	0.020**
	(0.006)	(0.003)	(0.006)	(0.004)	(0.008)
Country characteristics					
GDP growth rate	0.002	0.000	0.002	0.001	0.007***
-	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Jnemployment rate	0.003**	0.000	0.000	0.002*	0.000
1 7	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Female LFP rate	-0.008***	-0.007***	-0.004	-0.005***	-0.003
	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)
	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)
Added worker dummy	0.051***	0.034***	0.010	0.056***	0.051***
nucu worker duminy					
D d- D2	(0.010)	(0.006)	(0.008)	(0.008)	(0.014)
Pseudo-R <sup>2</sup>	0.097	0.100	0.103	0.086	0.094
Observations	74,451	74,451	74,451	66,401	59,733

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} > E_t$  refers to women's pob search transitions;  $IA_{t-1} > IA_{t-1} > IA$ 

Table B8. Pooled Regression for Cohabiting Couples

Table 1	B8. Pooled Regres	ssion for Cohat	oiting Couples		
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics					
Married	-	-	-	-	-
N 6 1 11 1	0.025***	0.011 ###	0.005***	0.01544	0.020**
No. of children	-0.035*** (0.010)	-0.011***	-0.025** (0.010)	-0.015**	-0.020**
Child age 0 to 3	-0.062***	(0.004) -0.007	-0.053***	(0.006) -0.032***	(0.008) -0.017
Cliffd age 0 to 3	(0.021)	(0.008)	(0.020)	(0.012)	(0.016)
Child age 4 to 6	0.021)	0.019**	0.020)	0.012)	-0.022
Cliffd age 4 to 0	(0.023)	(0.010)	(0.022)	(0.013)	(0.015)
Log. equiv. disposable income (in thsd.)	0.011	-0.008	0.022	-0.001	0.018
<i>3</i> 1	(0.015)	(0.006)	(0.014)	(0.008)	(0.013)
Repayment of debts	0.022	0.010	0.013	0.010	-0.002
	(0.016)	(0.007)	(0.015)	(0.010)	(0.011)
Dwelling type (ref.: detached house)					
Semi-detached house	-0.066***	-0.008	-0.059***	0.000	0.008
	(0.022)	(0.009)	(0.020)	(0.014)	(0.015)
Apartment or flat	-0.042**	-0.002	-0.041**	0.000	0.027*
XXVC to A to A to A	(0.019)	(0.008)	(0.018)	(0.011)	(0.016)
Wife's characteristics	0.005***	0.000	0.005***	0.002***	0.001
Age	-0.005***	0.000	-0.005***	-0.003***	-0.001
Education (not a modium shilled)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Education (ref.: medium skilled) Low skilled	-0.077***	0.004	-0.085***	0.005	-0.009
Low skilled	(0.017)	(0.009)	(0.015)	(0.011)	(0.015)
High skilled	0.095***	-0.007	0.100***	0.015	0.032**
Tigi skined	(0.023)	(0.007)	(0.023)	(0.014)	(0.014)
Occupation (ref.: white collar high)	(0.025)	(0.007)	(0.020)	(0.01.)	(0.01.)
White collar low	-	-	-	-	-0.028**
					(0.014)
Blue collar high	-	-	-	-	0.066**
					(0.030)
Blue collar low	-	-	-	-	-0.008
					(0.019)
Husband's characteristics	0.000		0.0024	0.004	0.005444
Age	-0.002*	0.000	-0.003*	0.001	-0.005***
Education (not a modium abilled)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Education (ref.: medium skilled) Low skilled	-0.016	0.001	-0.020	-0.016	-0.005
Low skilled	(0.020)	(0.009)	(0.019)	(0.011)	(0.015)
High skilled	-0.016	0.010	-0.026	-0.018	-0.001
Tigi skilled	(0.022)	(0.009)	(0.020)	(0.013)	(0.014)
Occupation (ref.: white collar high)	(***==)	(0.000)	(010_0)	(0.000)	(0.02.)
White collar low	0.027	0.010	0.017	0.040**	0.017
	(0.026)	(0.010)	(0.025)	(0.019)	(0.016)
Blue collar high	0.030	0.008	0.022	0.017	-0.039**
	(0.021)	(0.009)	(0.020)	(0.013)	(0.015)
Blue collar low	0.037	0.012	0.024	0.015	-0.019
	(0.023)	(0.008)	(0.022)	(0.013)	(0.017)
Country characteristics	0.004	0.004	0.000	0.002	0.002
GDP growth rate	0.004	0.001	0.002	-0.003	0.003
II	(0.004)	(0.001)	(0.004)	(0.002)	(0.004)
Unemployment rate	0.008	0.004**	-0.006 (0.006)	0.003	0.002
Female LFP rate	(0.006) -0.003	(0.002) -0.003	(0.006) -0.002	(0.003) -0.011*	(0.005) -0.005
I chiaic Li I Tate	(0.010)	(0.004)	(0.010)	(0.006)	(0.007)
	(0.010)	(0.004)	(0.010)	(0.000)	(0.007)
Added worker dummy	-0.034	0.011	-0.054**	0.001	0.082**
	(0.029)	(0.013)	(0.027)	(0.018)	(0.032)
Pseudo-R <sup>2</sup>	0.098	0.116	0.103	0.117	0.110
Observations	11,542	11,542	11,542	9,731	14,158
C FILCH C 11					

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} > E_t$  refers to women's pob search transitions;  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. – The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. – Both country and year fixed effects are additionally included in the regressions.

Table B9 Nordic Countries

	Table D9. INC	ordic Countries			
	$\mathbf{I}\mathbf{A}_{t-1} \rightarrow \mathbf{A}_{t}$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics					
Married	-0.012	-0.002	-0.011	-0.015	0.014
	(0.016)	(0.007)	(0.015)	(0.012)	(0.012)
No. of children	-0.024***	-0.004	-0.020***	-0.002	-0.035***
	(0.007)	(0.003)	(0.007)	(0.006)	(0.006)
Child age 0 to 3	-0.010	0.010	-0.020	-0.023	0.097***
emid age o to 3	(0.020)	(0.010)	(0.019)	(0.016)	(0.021)
Child ago 4 to 6	0.047**	0.005	0.040*	-0.002	0.007
Child age 4 to 6					
	(0.023)	(0.011)	(0.021) 0.079***	(0.018)	(0.016)
Log. equiv. disposable income (in thsd.)	0.052***	-0.029***		-0.024*	-0.002
	(0.019)	(0.007)	(0.019)	(0.013)	(0.014)
Repayment of debts	0.016	0.004	0.012	-0.007	0.012
	(0.013)	(0.006)	(0.013)	(0.011)	(0.010)
Dwelling type (ref.: detached house)					
Semi-detached house	-0.024	0.003	-0.026	0.016	-0.001
	(0.019)	(0.008)	(0.018)	(0.016)	(0.016)
Apartment or flat	-0.061***	0.016*	-0.079***	0.000	0.020
-partition of har	(0.018)	(0.009)	(0.016)	(0.013)	(0.016)
Wife's characteristics	(0.010)	(0.00)	(0.010)	(0.013)	(0.010)
	-0.002	0.001	-0.003*	-0.002	-0.002
Age					
T	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)
Education (ref.: medium skilled)					
Low skilled	-0.068***	0.011	-0.080***	-0.001	0.016
	(0.020)	(0.011)	(0.019)	(0.015)	(0.017)
High skilled	0.090***	0.000	0.088***	0.022*	0.030**
č	(0.016)	(0.007)	(0.015)	(0.013)	(0.014)
Occupation (ref.: white collar high)	(3.3.3)	()	(/	()	(/
White collar low					-0.069***
white condition	-	-	-	-	
N					(0.013)
Blue collar high	-	-	-	-	0.074**
					(0.029)
Blue collar low	-	-	-	-	-0.033
					(0.021)
Husband's characteristics					
Age	-0.002	0.000	-0.001	0.000	-0.006***
	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)
Education (ref.: medium skilled)	(*****)	(,	(/	()	(/
Low skilled	-0.002	0.002	-0.004	0.019	0.015
Low skined	(0.021)	(0.010)	(0.020)	(0.018)	(0.016)
T' 1 1'11 1	` /	,	,	` /	
High skilled	0.007	-0.010	0.017	-0.005	0.024*
	(0.018)	(0.007)	(0.017)	(0.014)	(0.013)
Occupation (ref.: white collar high)					
White collar low	0.007	0.000	0.006	-0.006	0.039**
	(0.024)	(0.011)	(0.022)	(0.019)	(0.016)
Blue collar high	0.016	-0.014	0.030*	-0.003	-0.011
	(0.020)	(0.009)	(0.018)	(0.015)	(0.014)
Blue collar low	0.015	-0.002	0.016	0.004	-0.028*
Side contai low					
Country above eteristics	(0.021)	(0.010)	(0.020)	(0.016)	(0.016)
Country characteristics	0.005	0.000	0.005	0.000*	0.004
GDP growth rate	0.005	0.000	0.005	-0.008*	0.004
	(0.005)	(0.002)	(0.005)	(0.004)	(0.004)
Jnemployment rate	-0.018	0.003	-0.023	0.034**	-0.003
	(0.021)	(0.010)	(0.020)	(0.017)	(0.016)
Female LFP rate	-0.013	-0.006	-0.004	-0.001	0.027**
	(0.019)	(0.009)	(0.019)	(0.015)	(0.013)
	(=.01)	(/	(/	(=====)	()
Added worker dummy	0.089**	0.038*	0.041	-0.005	0.020
nuded worker dummy					
2 1 72	(0.042)	(0.020)	(0.042)	(0.027)	(0.038)
Pseudo-R <sup>2</sup>	0.085	0.048	0.091	0.078	0.064
Observations	7,339	7,339	7,339	4,641	11,228

 $Source: EU\text{-}SILC, own \ calculations.$ 

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} -> A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} -> UE_t$  refers to women's transitions from inactivity to unemployment;  $\Delta JS$  refers to women's job search transitions;  $PT_{t-1} -> FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions.

Table B10. Continental Europe

	Table B10. C	ontinental Euro	pe		
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics					
Married	-0.054***	-0.009**	-0.044***	-0.016*	-0.019***
	(0.013)	(0.005)	(0.013)	(0.008)	(0.006)
No. of children	-0.024***	-0.003	-0.021***	-0.009***	-0.013***
	(0.006)	(0.002)	(0.006)	(0.003)	(0.004)
Child age 0 to 3	-0.056***	-0.010***	-0.044***	-0.023***	-0.020**
	(0.014)	(0.004)	(0.014)	(0.008)	(0.008)
Child age 4 to 6	0.045***	0.018***	0.028*	0.023**	0.010
	(0.016)	(0.006)	(0.015)	(0.010)	(0.008)
Log. equiv. disposable income (in thsd.)	-0.003	-0.004	0.001	-0.002	0.001
	(0.011)	(0.004)	(0.011)	(0.006)	(0.006)
Repayment of debts	0.031***	0.007	0.025**	0.017***	0.005
	(0.011)	(0.004)	(0.010)	(0.006)	(0.006)
Dwelling type (ref.: detached house)					
Semi-detached house	-0.023**	0.002	-0.024**	0.003	-0.001
	(0.011)	(0.004)	(0.011)	(0.007)	(0.006)
Apartment or flat	-0.013	-0.001	-0.012	0.003	0.011
T	(0.013)	(0.004)	(0.013)	(0.007)	(0.008)
Wife's characteristics	(33322)	(0.00.1)	(0.0.22)	(*****)	(01000)
Age	-0.006***	-0.001**	-0.005***	-0.004***	-0.001
50	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Low skilled	-0.048***	-0.001	-0.048***	-0.004	-0.004
Low skilled	(0.010)	(0.004)	(0.009)	(0.006)	(0.007)
High skilled	0.078***	-0.001	0.079***	0.022***	0.018***
riigii skined			(0.014)		
Occupation (nof subite collar bich)	(0.014)	(0.004)	(0.014)	(0.009)	(0.006)
Occupation (ref.: white collar high)					0.027***
White collar low	-	-	-	-	-0.027***
DI 11 1' 1					(0.006)
Blue collar high	-	-	-	-	0.048***
n					(0.017)
Blue collar low	-	-	-	-	-0.028***
					(0.009)
Husband's characteristics	0.000	0.000	0.000	0.000	0.004:1:1:1:
Age	-0.003***	0.000	-0.003***	0.000	-0.004***
	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Education (ref.: medium skilled)					
Low skilled	-0.022*	0.000	-0.023**	-0.004	-0.002
	(0.012)	(0.005)	(0.012)	(0.008)	(0.008)
High skilled	-0.007	0.005	-0.011	-0.007	-0.006
	(0.012)	(0.004)	(0.012)	(0.007)	(0.006)
Occupation (ref.: white collar high)					
White collar low	-0.005	-0.001	-0.004	0.003	0.018**
	(0.014)	(0.005)	(0.014)	(0.009)	(0.008)
Blue collar high	0.027**	0.005	0.023*	-0.001	-0.011
•	(0.013)	(0.005)	(0.013)	(0.008)	(0.007)
Blue collar low	0.020	0.002	0.017	0.002	0.004
	(0.014)	(0.005)	(0.014)	(0.008)	(0.009)
Country characteristics	` ,	,	, ,	, ,	, ,
GDP growth rate	0.026***	-0.006**	0.030***	-0.005	0.006
8	(0.007)	(0.003)	(0.007)	(0.004)	(0.004)
Unemployment rate	0.004	0.003	0.004	0.008	-0.008
r	(0.014)	(0.004)	(0.013)	(0.008)	(0.006)
Female LFP rate	0.004	0.004*	0.000	0.004	-0.003
	(0.007)	(0.002)	(0.007)	(0.004)	(0.004)
	(0.007)	(0.002)	(0.007)	(0.001)	(0.001)
Added worker dummy	-0.015	0.006	-0.024	0.015	0.058***
Added Worker duffilly	(0.020)	(0.007)	(0.019)	(0.013)	(0.020)
Pseudo-R <sup>2</sup>	0.126	0.080	0.125	0.110	0.082
Observations  Superations	21,099	21,099	21,099	17,355	36,482

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} > E_t$  refers to women's pob search transitions;  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. – The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. – Both country and year fixed effects are additionally included in the regressions.

Table B11. Anglo-Saxon Countries						
	IA <sub>t-1</sub> -> A <sub>t</sub>	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$	
Household characteristics						
Married	0.004	-0.022*	0.020	-0.033	-0.033	
	(0.026)	(0.012)	(0.024)	(0.020)	(0.021)	
No. of children	-0.031***	-0.003	-0.027***	0.001	-0.037***	
	(0.011)	(0.003)	(0.010)	(0.006)	(0.008)	
Child age 0 to 3	-0.027	-0.016**	-0.009	-0.052***	-0.086***	
	(0.028)	(0.007)	(0.027)	(0.014)	(0.017)	
Child age 4 to 6	-0.037	-0.009	-0.026	-0.049***	-0.055***	
	(0.027)	(0.008)	(0.026)	(0.012)	(0.017)	
Log. equiv. disposable income (in thsd.)	0.006	0.000	0.008	-0.010	0.006	
-	(0.016)	(0.005)	(0.015)	(0.009)	(0.015)	
Repayment of debts	0.049***	-0.007	0.056***	0.004	0.003	
	(0.017)	(0.006)	(0.016)	(0.012)	(0.012)	
Dwelling type (ref.: detached house)	0.012	0.000	0.020	0.021	0.014	
Semi-detached house	-0.013	0.008	-0.020	-0.021	0.014	
A	(0.021)	(0.006)	(0.020)	(0.015)	(0.013)	
Apartment or flat	-0.028	0.027*	-0.066*	0.006	0.049	
Wifels above atomistics	(0.039)	(0.016)	(0.034)	(0.027)	(0.034)	
Wife's characteristics	-0.006***	-0.001*	-0.005**	-0.003**	-0.003*	
Age						
Education (ref.: medium skilled)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	
Low skilled	-0.040	0.022**	-0.067***	0.009	0.006	
Low skilled	(0.025)	(0.010)	(0.022)	(0.017)	(0.022)	
High skilled	0.092***	0.013**	0.079***	0.036**	0.023	
ingh skined	(0.023)	(0.007)	(0.023)	(0.017)	(0.015)	
Occupation (ref.: white collar high)	(0.023)	(0.007)	(0.023)	(0.017)	(0.013)	
White collar low	_	_	_	_	-0.051***	
White condition					(0.015)	
Blue collar high	_	_	_	_	0.186***	
					(0.050)	
Blue collar low	-	_	-	-	-0.056***	
					(0.021)	
Husband's characteristics						
Age	-0.004*	0.001	-0.004*	-0.001	-0.004***	
	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	
Education (ref.: medium skilled)						
Low skilled	-0.053**	-0.005	-0.051**	-0.013	-0.010	
	(0.027)	(0.006)	(0.025)	(0.016)	(0.020)	
High skilled	-0.035	0.010	-0.044**	0.002	-0.013	
	(0.023)	(0.008)	(0.021)	(0.016)	(0.015)	
Occupation (ref.: white collar high)						
White collar low	-0.021	-0.003	-0.021	-0.004	0.036*	
	(0.031)	(0.009)	(0.029)	(0.020)	(0.021)	
Blue collar high	-0.017	0.001	-0.018	0.002	-0.024	
T	(0.027)	(0.009)	(0.026)	(0.017)	(0.018)	
Blue collar low	-0.032	0.007	-0.036	-0.001	0.018	
Control to the state of	(0.027)	(0.009)	(0.026)	(0.017)	(0.021)	
Country characteristics	0.002	0.002	0.002	0.006	0.006	
GDP growth rate	0.002	0.002	0.002	0.006	0.006	
Unampleyment rate	(0.021)	(0.007)	(0.020)	(0.013)	(0.016)	
Unemployment rate	-0.021 (0.059)	-0.002 (0.019)	-0.018 (0.058)	-0.049 (0.038)	-0.012 (0.046)	
Female LFP rate	-0.013	-0.005	-0.007	-0.045	-0.015	
remaie Ely fate	-0.013 (0.046)	-0.005 (0.015)	-0.007 (0.045)	-0.045 (0.029)	-0.015 (0.035)	
	(0.040)	(0.013)	(0.043)	(0.029)	(0.033)	
Added worker dummy	-0.064	0.020	-0.089**	0.024	0.069	
Anded worker duminy	(0.043)	(0.018)	(0.039)	(0.024)	(0.044)	
Pseudo-R <sup>2</sup>	0.076	0.138	0.085	0.107	0.055	
Observations	4,005	4,005	4,005	3,180	5,867	
Gosci vations	1,005	1,000	1,005	5,100	2,007	

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. – IA<sub>1-1</sub>-> A<sub>1</sub> refers to women's transitions from inactivity to activity;  $IA_{t-1} \rightarrow UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} \rightarrow E_t$  refers to women's transitions from inactivity to employment;  $\Delta JS$  refers to women's job search transitions;  $PT_{t-1} \rightarrow FT_t$  refers to women's transitions from part-time to full-time employment. – The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. – Both country and year fixed effects are additionally included in the regressions.

Table B12. Mediterranean Countries

	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics					
Married	-0.079***	-0.025**	-0.049***	-0.038***	0.001
	(0.017)	(0.011)	(0.014)	(0.013)	(0.021)
No. of children	-0.019***	-0.012***	-0.008**	-0.011***	-0.008
	(0.004)	(0.003)	(0.003)	(0.003)	(0.008)
Child age 0 to 3	0.033***	0.017**	0.014*	-0.006	0.027
	(0.011)	(0.008)	(0.009)	(0.008)	(0.021)
Child age 4 to 6	0.011	0.010	0.001	0.003	-0.019
	(0.010)	(0.007)	(0.007)	(0.007)	(0.016)
Log. equiv. disposable income (in thsd.)	0.024***	-0.003	0.028***	-0.002	0.014
	(0.005)	(0.003)	(0.004)	(0.004)	(0.012)
Repayment of debts	0.030***	0.021***	0.009**	0.032***	-0.012
	(0.006)	(0.004)	(0.005)	(0.005)	(0.012)
Dwelling type (ref.: detached house)					
Semi-detached house	0.007	0.007	0.001	0.018***	-0.022
	(0.008)	(0.005)	(0.006)	(0.006)	(0.016)
Apartment or flat	0.002	0.013***	-0.010**	0.022***	-0.026*
1	(0.007)	(0.004)	(0.005)	(0.005)	(0.014)
Wife's characteristics	(,	('/	()	()	(/
Age	-0.004***	-0.002***	-0.002***	-0.004***	0.004***
<b>O</b> .	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education (ref.: medium skilled)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Low skilled	-0.024***	-0.013***	-0.011**	-0.012**	0.011
20 W SKINGO	(0.006)	(0.005)	(0.005)	(0.005)	(0.014)
High skilled	0.051***	0.001	0.047***	0.018*	0.039**
ligh skilled	(0.012)	(0.007)	(0.010)	(0.010)	(0.017)
Occupation (ref.: white collar high)	(0.012)	(0.007)	(0.010)	(0.010)	(0.017)
White collar low	-	_	-		-0.053***
vinte conar low	-	-	-	-	(0.014)
Olya gallar high					0.056**
Blue collar high	-	-	-	-	
21 11 1					(0.025)
Blue collar low	-	-	-	-	-0.030
To December 11 and a second of the con-					(0.019)
Husband's characteristics	0.002***	0.001***	0.002***	0.001	0.006***
Age	-0.003***	-0.001***	-0.002***	-0.001	-0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education (ref.: medium skilled)					
Low skilled	-0.007	-0.004	-0.004	-0.003	-0.023*
	(0.007)	(0.005)	(0.005)	(0.005)	(0.014)
High skilled	-0.011	-0.004	-0.008	-0.011	0.017
	(0.009)	(0.006)	(0.007)	(0.007)	(0.017)
Occupation (ref.: white collar high)					
White collar low	0.002	0.008	-0.004	0.014**	0.025
	(0.009)	(0.006)	(0.007)	(0.007)	(0.017)
Blue collar high	0.008	0.006	0.003	0.016***	-0.033**
Ç	(0.008)	(0.005)	(0.006)	(0.006)	(0.016)
Blue collar low	-0.002	0.002	-0.003	0.022***	0.037**
	(0.008)	(0.006)	(0.006)	(0.007)	(0.018)
Country characteristics	(/	()	(/	()	(3.3.3)
GDP growth rate	0.000	-0.002	0.000	-0.002	0.007
6	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)
Jnemployment rate	-0.005***	-0.002	-0.005***	0.001	-0.008*
	(0.002)	(0.001)	(0.001)	(0.001)	(0.004)
Female LFP rate	-0.014***	-0.011***	-0.005	-0.002	-0.011
CHAIC LIT TAIC	(0.004)	(0.003)	(0.003)	(0.003)	(0.009)
	(0.004)	(0.003)	(0.003)	(0.003)	(0.009)
Added worker dummy	0.066***	0.044***	0.019*	0.062***	0.095***
Added worker dummy			0.018*		
	(0.012)	(0.009)	(0.009)	(0.011)	(0.027)
Pseudo-R <sup>2</sup>	0.087	0.098	0.058	0.103	0.036
Observations	29,232	29,232	29,232	27,028	11,920

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to employment; AJS refers to women's job search transitions;  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions.

Table B13. Central and Eastern Europe

	Table B13. Centra	al and Eastern	Europe		
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
Household characteristics					
Married	0.015	0.003	0.011	-0.004	-0.091***
	(0.010)	(0.005)	(0.009)	(0.006)	(0.030)
No. of children	-0.023***	-0.006***	-0.017***	-0.010***	-0.014
	(0.004)	(0.002)	(0.004)	(0.003)	(0.010)
Child age 0 to 3	-0.046***	-0.028***	-0.017*	-0.044***	0.076**
	(0.011)	(0.005)	(0.010)	(0.006)	(0.036)
Child age 4 to 6	0.087***	0.007	0.079***	0.011	0.049*
	(0.012)	(0.006)	(0.010)	(0.007)	(0.027)
Log. equiv. disposable income (in thsd.)	-0.004	-0.003	-0.001	-0.011***	0.024*
	(0.007)	(0.004)	(0.006)	(0.004)	(0.013)
Repayment of debts	0.020***	0.005	0.014**	0.011**	0.058***
	(0.007)	(0.004)	(0.006)	(0.005)	(0.017)
Dwelling type (ref.: detached house)					
Semi-detached house	-0.011	-0.005	-0.008	0.017*	0.026
	(0.013)	(0.007)	(0.011)	(0.009)	(0.034)
Apartment or flat	-0.003	-0.001	-0.003	0.017***	0.012
•	(0.007)	(0.004)	(0.006)	(0.005)	(0.018)
Wife's characteristics	` /	, ,	` /	, ,	, ,
Age	-0.003***	-0.002***	-0.001*	-0.002***	-0.001
6	(0.001)	(0.000)	(0.001)	(0.001)	(0.002)
Education (ref.: medium skilled)	(***** )	(/	(/	(,	(3.3.3.)
Low skilled	-0.038***	-0.001	-0.037***	-0.006	-0.024
	(0.009)	(0.005)	(0.008)	(0.006)	(0.022)
High skilled	0.105***	0.003	0.098***	0.029***	0.044
ingh skined	(0.013)	(0.006)	(0.012)	(0.009)	(0.027)
Occupation (ref.: white collar high)	(0.013)	(0.000)	(0.012)	(0.00)	(0.027)
White collar low	_	_	_	_	-0.003
William Collai Tow					(0.024)
Blue collar high					0.025
Dide condi nigh	_	_	_	_	(0.027)
Blue collar low					-0.043
Blue collai low	-	-	-	-	(0.026)
Husband's characteristics					(0.020)
Age	-0.002**	0.000	-0.002**	0.000	-0.002
Age	(0.001)	(0.000)	(0.001)	(0.001)	(0.002)
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.001)	(0.001)	(0.002)
Low skilled	-0.014	-0.006	-0.008	-0.007	0.004
Low skilled	(0.011)		(0.010)		
TT:_11_1111	. ,	(0.005)		(0.007)	(0.025)
High skilled	-0.012	-0.012**	-0.001	-0.017**	0.046
0	(0.012)	(0.006)	(0.010)	(0.007)	(0.028)
Occupation (ref.: white collar high)	0.026**	0.002	0.024***	0.010	0.077***
White collar low	0.036**	0.002	0.034***	0.010	0.077***
D1 11 11 1	(0.014)	(0.007)	(0.013)	(0.009)	(0.028)
Blue collar high	0.012	0.004	0.008	0.007	0.003
	(0.010)	(0.005)	(0.009)	(0.006)	(0.024)
Blue collar low	0.005	0.009	-0.004	0.008	0.032
a	(0.011)	(0.006)	(0.010)	(0.007)	(0.026)
Country characteristics	0.004	0.004	0.004	0.000	0.00544
GDP growth rate	0.001	-0.001	0.001	0.000	0.006**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)
Unemployment rate	0.007*	0.006***	0.000	0.003	-0.024***
	(0.004)	(0.002)	(0.003)	(0.002)	(0.008)
Female LFP rate	-0.002	-0.001	0.000	-0.005	-0.032***
	(0.006)	(0.003)	(0.005)	(0.004)	(0.012)
Added worker dummy	0.038***	0.029***	0.004	0.051***	-0.028
	(0.015)	(0.009)	(0.013)	(0.012)	(0.035)
Pseudo-R <sup>2</sup>	0.114	0.111	0.105	0.091	0.056
Observations	25,828	25,828	25,828	23,929	8,394

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} -> IA_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} -> III_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} -> III_t$  refers to women's possible search transitions;  $III_{t-1} -> III_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions.

*Table B14.* Added Worker Effect by Country Group – Including Country-Year Fixed Effects

	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
			Nordic Countries		
ME	0.092**	0.036*	0.046	-0.003	0.015
StdE	(0.042)	(0.020)	(0.041)	(0.027)	(0.038)
$\Delta\%$	26.50%	-	-	-	-
Observations	7,335	7,335	7,335	4,560	11,227
			Continental Europ	e	
ME	-0.018	0.005	-0.025	0.014	0.058***
StdE	(0.020)	(0.007)	(0.019)	(0.013)	(0.020)
$\Delta\%$		-	=	-	62.82%
Observations	21,099	21,099	21,099	17,355	36,482
		A	nglo-Saxon Counti	ries	
ME	-0.063	0.021	-0.089**	0.025	0.069
StdE	(0.043)	(0.018)	(0.039)	(0.030)	(0.044)
$\Delta\%$		-	-39.22%	-	-
Observations	4,005	4,005	4,005	3,180	5,867
		Me	editerranean Coun	tries	
ME	0.063***	0.043***	0.016*	0.061***	0.100***
StdE	(0.012)	(0.009)	(0.009)	(0.011)	(0.027)
$\Delta\%$	44.84%	73.54%	-	81.21%	39.00%
Observations	29,232	29,232	29,232	27,028	11,920
		Cen	tral and Eastern E	urope	
ME	0.037**	0.029***	0.004	0.050***	-0.028
StdE	(0.015)	(0.009)	(0.013)	(0.012)	(0.035)
$\Delta\%$	20.45%	62.49%	-	81.52%	-
Observations	25,745	25,745	25,745	23,929	8,394

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics (as shown in Table 1). – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} > E_t$  refers to women's transitions from part-time to full-time employment. – The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. – 1% refers to the percentage change in women's probability of adjusting their labor supply due to their husbands' unemployment. Percentage changes are shown for significant added worker effects (5-percent level) only.

*Table B15.* Added Worker Effect by Country Group – Including Region-Year Fixed Effects

	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
			Nordic Countries	ı	
ME	0.085**	0.034*	0.040	-0.001	0.015
StdE	(0.042)	(0.020)	(0.042)	(0.028)	(0.038)
$\Delta\%$	24.64%	· -	-	-	-
Observations	7,249	7,249	7,249	4,529	11,226
			Continental Europ	e	
ME	-0.016	0.010	-0.032	0.022	0.061***
StdE	(0.024)	(0.009)	(0.022)	(0.014)	(0.020)
$\Delta\%$	-	-	-	-	65.88%
Observations	17,948	17,948	17,948	16,329	35,289
		A	nglo-Saxon Count	ries	
ME	-0.014	0.048	-0.062	0.064	0.071
StdE	(0.055)	(0.033)	(0.049)	(0.041)	(0.046)
$\Delta$ %	-	-	-	-	-
Observations	3,129	3,129	3,129	2,760	5,596
		Me	editerranean Coun	tries	
ME	0.067***	0.042***	0.021**	0.062***	0.098***
StdE	(0.012)	(0.009)	(0.010)	(0.011)	(0.027)
$\Delta$ %	47.68%	70.99%	25.43%	81.58%	38.31%
Observations	28,585	28,585	28,585	26,811	11,885
		Cen	tral and Eastern E	urope	
ME	0.039**	0.031***	0.005	0.050***	-0.040
StdE	(0.015)	(0.009)	(0.013)	(0.012)	(0.034)
$\Delta\%$	20.01%	57.92%	-	78.08%	-
Observations	23,919	23,919	23,919	23,393	8,336

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics (as shown in Table 1). — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} \rightarrow A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} \rightarrow UE_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} \rightarrow UE_t$  refers to women's transitions from nactivity to employment;  $IA_{t-1} \rightarrow UE_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. —  $IA_t \rightarrow IA_t \rightarrow IA_$ 

## **Supplementary Appendix** (not intended for publication)

Table C1. Multinomial Logit							
	$IA_{t-1} \rightarrow IA_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$				
Household characteristics							
Married	0.030***	-0.013***	-0.018***				
	(0.007)	(0.004)	(0.006)				
No. of children	0.024***	-0.007***	-0.017***				
	(0.003)	(0.001)	(0.003)				
Child age 0 to 3	0.016**	-0.005	-0.011*				
	(0.007)	(0.004)	(0.006)				
Child age 4 to 6	-0.034***	0.010***	0.025***				
	(0.007)	(0.003)	(0.006)				
Log. equiv. disposable income (in thsd.)	-0.012***	-0.005***	0.017***				
	(0.004)	(0.002)	(0.004)				
Repayment of debts	-0.031***	0.010***	0.021***				
	(0.005)	(0.002)	(0.004)				
Dwelling type (ref.: detached house)							
Semi-detached house	0.010	0.002	-0.011**				
	(0.006)	(0.003)	(0.006)				
Apartment or flat	0.009*	0.006***	-0.016***				
	(0.005)	(0.002)	(0.005)				
Wife's characteristics							
Age	0.004***	-0.001***	-0.003***				
	(0.001)	(0.000)	(0.000)				
Education (ref.: medium skilled)							
Low skilled	0.039***	-0.005*	-0.034***				
	(0.005)	(0.003)	(0.004)				
High skilled	-0.074***	0.004	0.070***				
	(0.007)	(0.003)	(0.007)				
Husband's characteristics							
Age	0.003***	-0.001**	-0.002***				
	(0.001)	(0.000)	(0.000)				
Education (ref.: medium skilled)							
Low skilled	0.019***	-0.003	-0.016***				
	(0.005)	(0.003)	(0.005)				
High skilled	0.014**	0.000	-0.015***				
	(0.006)	(0.003)	(0.006)				
Occupation (ref.: white collar high)							
White collar low	-0.002	0.004	-0.002				
	(0.007)	(0.004)	(0.006)				
Blue collar high	-0.011*	0.005	0.007				
	(0.006)	(0.003)	(0.006)				
Blue collar low	-0.002	0.004	-0.002				
	(0.006)	(0.003)	(0.006)				
Country characteristics							
GDP growth rate	-0.002**	0.000	0.003***				
	(0.001)	(0.001)	(0.001)				
Unemployment rate	0.000	0.000	0.000				
	(0.001)	(0.001)	(0.001)				
Female LFP rate	0.012***	-0.008***	-0.004*				
	(0.003)	(0.001)	(0.002)				
Added worker dummy	-0.029***	0.029***	0.000				
	(0.009)	(0.005)	(0.009)				
Pseudo-R <sup>2</sup>		0.112					
Observations		87,503					

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from a multinomial logit estimation of women's labor market transitions on a set of individual, household, and country characteristics. - Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. - IA<sub>t-1</sub> -> IA<sub>t</sub> refers to women remaining in inactivity;  $IA_{t-1} \rightarrow A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} \rightarrow A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} \rightarrow A_t$  refers to women's transitions from inactivity to activity.  $UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} \rightarrow E_t$  refers to women's transitions from inactivity to employment. - The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. – Both country and year fixed effects are additionally included in the regressions. Table C2. Pooled Regression Based on Sample Including Husband's Labor Market Experience

	$IA_{t-1} -> A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT$
Household characteristics					
Married	-0.040***	-0.011**	-0.029***	-0.021***	-0.032***
	(0.009)	(0.006)	(0.008)	(0.007)	(0.008)
lo. of children	-0.023***	-0.009***	-0.014***	-0.012***	-0.015***
	(0.003)	(0.002)	(0.003)	(0.002)	(0.004)
Child age 0 to 3	-0.015*	-0.005	-0.010	-0.020***	0.002
	(0.008)	(0.005)	(0.008)	(0.006)	(0.010)
Child age 4 to 6	0.039***	0.010**	0.029***	0.013**	0.003
	(0.009)	(0.005)	(0.008)	(0.006)	(0.009)
og. equiv. disposable income (in thsd.)	0.018***	-0.010***	0.030***	-0.010***	0.017**
	(0.006)	(0.003)	(0.005)	(0.004)	(0.007)
depayment of debts	0.031***	0.013***	0.018***	0.018***	0.010*
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)
Owelling type (ref.: detached house)					
emi-detached house	-0.010	0.000	-0.009	0.006	0.008
	(0.007)	(0.004)	(0.007)	(0.005)	(0.007)
partment or flat	-0.006	0.004	-0.009*	0.013***	0.015**
F	(0.006)	(0.003)	(0.005)	(0.004)	(0.008)
Vife's characteristics	(/	(/	(/	(7)	(/
ige	-0.004***	-0.001***	-0.003***	-0.003***	0.000
·5~	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
ducation (ref.: medium skilled)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
ow skilled	-0.040***	-0.009**	-0.032***	-0.012***	-0.012
ow skilled	(0.006)	(0.004)	(0.005)	(0.004)	(0.007)
ligh skilled	0.079***	0.004)	0.070***	0.035***	0.023***
ngn skined					(0.008)
) ( f t : H t : - t )	(0.010)	(0.005)	(0.009)	(0.007)	(0.008)
Occupation (ref.: white collar high)					0.022***
White collar low	-	-	-	-	-0.033***
					(0.007)
lue collar high	-	-	-	-	0.070***
					(0.015)
lue collar low	-	-	-	-	-0.032***
					(0.009)
Iusband's characteristics					
age	-0.003***	-0.001**	-0.002***	0.000	-0.006***
	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
ducation (ref.: medium skilled)					
ow skilled	-0.014**	-0.002	-0.015***	-0.001	-0.009
	(0.006)	(0.004)	(0.006)	(0.005)	(0.008)
ligh skilled	-0.013*	0.005	-0.017**	-0.009*	-0.005
	(0.008)	(0.005)	(0.007)	(0.006)	(0.008)
Occupation (ref.: white collar high)	, ,	` /	, ,	` /	` /
Vhite collar low	0.002	0.004	-0.001	0.005	0.023***
	(0.008)	(0.005)	(0.007)	(0.006)	(0.008)
lue collar high	0.007	0.007	0.002	0.010*	-0.014*
	(0.008)	(0.005)	(0.007)	(0.005)	(0.009)
slue collar low	0.008)	0.003)	0.007)	0.009*	0.009)
THE COLLET TOW	(0.008)	(0.004)	(0.007)	(0.006)	(0.009)
Country characteristics	(0.000)	(0.004)	(0.007)	(0.000)	(0.009)
•	0.003**	-0.001	0.003***	-0.001	0.008***
DP growth rate					
In annual armount water	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
nemployment rate	0.001	0.000	-0.002	0.002**	-0.001
1.170	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)
emale LFP rate	-0.012***	-0.007***	-0.007***	-0.004*	-0.006*
	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)
Added worker dummy	0.030***	0.021***	0.006	0.041***	0.060***
	(0.011)	(0.006)	(0.009)	(0.009)	(0.016)
Pseudo-R <sup>2</sup>	0.110	0.094	0.123	0.087	0.099
Observations	56,320	56,320	56,320	50,153	43,296

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} -> A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} -> UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} -> E_t$  refers to women's possible search transitions;  $PT_{t-1} -> FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions.

Table C3. Pooled Regression Including Interaction with the GDP Growth Rate

<i>Table C3.</i> Pooled Regression Including Interaction with the GDP Growth Rate						
	$IA_{t-1} -> A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$	
Household characteristics						
Married	-0.031***	-0.012***	-0.021***	-0.020***	-0.028***	
	(0.007)	(0.004)	(0.007)	(0.006)	(0.007)	
No. of children	-0.024***	-0.007***	-0.016***	-0.009***	-0.019***	
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)	
Child age 0 to 3	-0.014**	-0.005	-0.009	-0.024***	-0.017**	
CITI A C	(0.007)	(0.003)	(0.006)	(0.004)	(0.008)	
Child age 4 to 6	0.037***	0.010***	0.027***	0.004	-0.010	
Ti di (i 4bd.)	(0.007)	(0.004)	(0.006) 0.017***	(0.004)	(0.007)	
Log. equiv. disposable income (in thsd.)	0.011***	-0.005***		-0.007***	0.001	
Repayment of debts	(0.004) 0.031***	(0.002) 0.009***	(0.004) 0.021***	(0.002) 0.020***	(0.005) 0.007	
Repayment of debts	(0.005)	(0.002)	(0.004)	(0.003)	(0.005)	
Dwelling type (ref.: detached house)	(0.003)	(0.002)	(0.004)	(0.003)	(0.003)	
Semi-detached house	-0.010*	0.002	-0.010*	0.005	0.004	
Senii detaened nouse	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)	
Apartment or flat	-0.010*	0.006***	-0.016***	0.013***	0.014**	
aparement of flut	(0.005)	(0.002)	(0.004)	(0.003)	(0.006)	
Wife's characteristics	(0.000)	(0.002)	(0.001)	(0.005)	(0.000)	
Age	-0.004***	-0.001***	-0.003***	-0.003***	0.000	
	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	
Education (ref.: medium skilled)	* *	* *	* *			
Low skilled	-0.036***	-0.005**	-0.031***	-0.009***	-0.001	
	(0.005)	(0.003)	(0.004)	(0.003)	(0.006)	
High skilled	0.079***	0.003	0.073***	0.026***	0.026***	
	(0.007)	(0.003)	(0.007)	(0.006)	(0.006)	
Occupation (ref.: white collar high)						
White collar low	-	-	-	-	-0.041***	
					(0.006)	
Blue collar high	-	-	-	-	0.054***	
					(0.011)	
Blue collar low	-	-	-	-	-0.036***	
Husband's characteristics					(0.008)	
Age	-0.003***	-0.001*	-0.002***	0.000	-0.005***	
nge	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	
Low skilled	-0.016***	-0.004	-0.014***	-0.004	-0.008	
20 11 3111124	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)	
High skilled	-0.014**	0.001	-0.014***	-0.006	0.000	
8	(0.006)	(0.003)	(0.006)	(0.004)	(0.006)	
Occupation (ref.: white collar high)	(	(/	()	( , , ,	(	
White collar low	0.001	0.004	-0.001	0.008	0.027***	
	(0.007)	(0.004)	(0.006)	(0.005)	(0.007)	
Blue collar high	0.010*	0.005*	0.006	0.009**	-0.020***	
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)	
Blue collar low	0.000	0.005	-0.003	0.012***	0.012*	
	(0.006)	(0.003)	(0.006)	(0.004)	(0.007)	
Country characteristics						
GDP growth rate	0.003***	0.000	0.003***	0.000	0.005***	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Unemployment rate	0.004***	0.000	-0.001	0.002**	0.000	
Z1- LED	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	
Female LFP rate	-0.010***	-0.007***	-0.005**	-0.006***	-0.004	
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)	
Added worker dummy	0.035***	0.031***	-0.003	0.047***	0.060***	
Added worker dummy	(0.009)	(0.005)	(0.008)	(0.007)	(0.014)	
Pseudo-R <sup>2</sup>	0.101	0.098	0.112	0.089	0.095	
Observations	87,416	87,416	87,416	76,133	73,891	
Common FLI CH Common all relations	07,410	07,410	07,410	10,133	13,071	

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\*\* at the .05 level; \*\*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's transitions;  $PT_{t-1} > FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country fixed effects, year fixed effects, and an interaction of the added worker dummy with the GDP growth rate are additionally included in the regressions. The average marginal effects of the added worker dummy over the GDP growth rate, are shown in Figure 1.

Table C4. Pooled Regression Including Interaction with the Unemployment Rate

Table C4. Pooled Regression Including Interaction with the Unemployment Rate							
** 1 11 1	$IA_{t-1} -> A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$		
Household characteristics	0.021***	0.012***	0.001 ####	0.0204444	0.020****		
Married	-0.031***	-0.013***	-0.021***	-0.020***	-0.028***		
	(0.007)	(0.004)	(0.007)	(0.006)	(0.007)		
No. of children	-0.024***	-0.007***	-0.016***	-0.009***	-0.019***		
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)		
Child age 0 to 3	-0.015**	-0.006	-0.009	-0.024***	-0.017**		
	(0.007)	(0.003)	(0.006)	(0.004)	(0.008)		
Child age 4 to 6	0.037***	0.010***	0.027***	0.004	-0.010		
	(0.007)	(0.004)	(0.006)	(0.004)	(0.007)		
og. equiv. disposable income (in thsd.)	0.011***	-0.005***	0.017***	-0.007***	0.001		
	(0.004)	(0.002)	(0.004)	(0.002)	(0.005)		
Repayment of debts	0.031***	0.009***	0.021***	0.020***	0.007		
	(0.005)	(0.002)	(0.004)	(0.003)	(0.005)		
Owelling type (ref.: detached house)							
emi-detached house	-0.010*	0.002	-0.010*	0.005	0.004		
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)		
Apartment or flat	-0.009*	0.006***	-0.015***	0.013***	0.014**		
	(0.005)	(0.002)	(0.004)	(0.003)	(0.006)		
Vife's characteristics							
Age	-0.004***	-0.001***	-0.003***	-0.003***	0.000		
	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)		
Education (ref.: medium skilled)							
ow skilled	-0.036***	-0.005**	-0.031***	-0.009***	-0.001		
	(0.005)	(0.003)	(0.004)	(0.003)	(0.006)		
ligh skilled	0.079***	0.003	0.073***	0.026***	0.026***		
	(0.007)	(0.003)	(0.007)	(0.006)	(0.006)		
Occupation (ref.: white collar high)							
Vhite collar low	-	-	-	-	-0.041***		
					(0.006)		
Blue collar high	-	-	-	_	0.054***		
					(0.011)		
Blue collar low	_	-	-	_	-0.036***		
					(0.008)		
Iusband's characteristics					` /		
Age	-0.003***	-0.001*	-0.002***	0.000	-0.005***		
	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)		
ducation (ref.: medium skilled)	(3.33)	(/	(/	()	(/		
ow skilled	-0.017***	-0.004	-0.014***	-0.004	-0.008		
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)		
ligh skilled	-0.014**	0.001	-0.014***	-0.006	0.000		
	(0.006)	(0.003)	(0.006)	(0.004)	(0.006)		
Occupation (ref.: white collar high)	(*****)	(01002)	(0.000)	(*****)	(0.000)		
White collar low	0.001	0.004	-0.001	0.008*	0.027***		
, mile committee in	(0.007)	(0.004)	(0.006)	(0.005)	(0.007)		
Blue collar high	0.010*	0.005*	0.006	0.009**	-0.020***		
nuc conur mgn	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)		
Blue collar low	0.001	0.005	-0.003	0.012***	0.012*		
riuc conar low	(0.006)	(0.003)	(0.006)	(0.004)	(0.007)		
Country characteristics	(0.000)	(0.003)	(0.000)	(0.004)	(0.007)		
DP growth rate	0.003***	0.000	0.003***	0.000	0.005***		
DI GIOWIII IUC	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		
Inemployment rate	0.001)	0.001)	-0.001)	0.001)	0.001)		
memproyment rate	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)		
emale LFP rate	(0.001) -0.010***	(0.001) -0.007***	(0.001) -0.005**	-0.006***	-0.004		
cinaic LFF fate							
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)		
ddad rrawlraw dymmyr	0.026***	0.029***	0.006	0.046***	0.063***		
Added worker dummy			-0.006	0.046***			
)1- D2	(0.009)	(0.005)	(0.008)	(0.007)	(0.015)		
Pseudo-R <sup>2</sup>	0.102	0.098	0.112	0.089	0.095		
Observations	87,416	87,416	87,416	76,133	73,891		

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. – Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. –  $IA_{t-1} -> A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} -> IC_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} -> IC_t$  refers to women's transitions from inactivity to employment;  $IA_{t-1} -> IC_t$  refers to women's pob search transitions;  $IC_{t-1} -> IC_t$  refers to women's transitions from part-time to full-time employment. – The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. – Both country fixed effects, year fixed effects, and an interaction of the added worker dummy with the unemployment rate are additionally included in the regressions. The average marginal effects of the added worker dummy over the unemployment rate, including the interaction effects with the unemployment rate, are shown in Figure 2.

Table C5. Pooled Regression Including Interaction with the Female LFP Rate

<i>Table C5.</i> Pooled Regression Including Interaction with the Female LFP Rate						
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$	
Household characteristics						
Married	-0.031***	-0.012***	-0.021***	-0.020***	-0.028***	
	(0.007)	(0.004)	(0.007)	(0.006)	(0.007)	
No. of children	-0.024***	-0.007***	-0.016***	-0.009***	-0.019***	
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)	
Child age 0 to 3	-0.014**	-0.005	-0.009	-0.024***	-0.017**	
	(0.007)	(0.003)	(0.006)	(0.004)	(0.008)	
Child age 4 to 6	0.037***	0.010***	0.027***	0.004	-0.010	
	(0.007)	(0.004)	(0.006)	(0.004)	(0.007)	
Log. equiv. disposable income (in thsd.)	0.012***	-0.005***	0.017***	-0.007***	0.001	
	(0.004)	(0.002)	(0.004)	(0.002)	(0.005)	
Repayment of debts	0.031***	0.009***	0.021***	0.020***	0.007	
• •	(0.005)	(0.002)	(0.004)	(0.003)	(0.005)	
Dwelling type (ref.: detached house)						
Semi-detached house	-0.010	0.002	-0.010*	0.005	0.004	
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)	
Apartment or flat	-0.009*	0.006***	-0.015***	0.013***	0.014**	
	(0.005)	(0.002)	(0.004)	(0.003)	(0.006)	
Wife's characteristics	(0.003)	(0.002)	(0.007)	(0.003)	(0.000)	
Age	-0.004***	-0.001***	-0.003***	-0.003***	0.000	
1150	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	
Education (ref.: medium skilled)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	
Low skilled	-0.036***	-0.005**	-0.031***	-0.009***	-0.001	
Low skilled						
TT: 1 1:11 1	(0.005) 0.079***	(0.003)	(0.004)	(0.003)	(0.006)	
High skilled		0.003	0.073***	0.026***	0.026***	
	(0.007)	(0.003)	(0.007)	(0.006)	(0.006)	
Occupation (ref.: white collar high)					0.044.656	
White collar low	-	-	-	-	-0.041***	
					(0.006)	
Blue collar high	-	-	-	-	0.054***	
					(0.011)	
Blue collar low	-	-	-	-	-0.036***	
					(0.008)	
Husband's characteristics						
Age	-0.003***	-0.001*	-0.002***	0.000	-0.005***	
	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	
Education (ref.: medium skilled)						
Low skilled	-0.017***	-0.004	-0.014***	-0.004	-0.008	
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)	
High skilled	-0.014**	0.001	-0.015***	-0.006	0.000	
6	(0.006)	(0.003)	(0.006)	(0.004)	(0.006)	
Occupation (ref.: white collar high)	(0.000)	(0.000)	(31333)	(0.00.)	(01000)	
White collar low	0.001	0.004	-0.001	0.008*	0.027***	
William Collair To W	(0.007)	(0.004)	(0.006)	(0.005)	(0.007)	
Blue collar high	0.010*	0.005*	0.006	0.009**	-0.020***	
Dide conar nigh	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)	
Blue collar low	0.000)	0.005	-0.003	0.012***	0.012*	
Blue Collai low	(0.006)	(0.003)	(0.006)	(0.004)	(0.007)	
Country characteristics	(0.000)	(0.003)	(0.000)	(0.004)	(0.007)	
·	0.003***	0.000	0.003***	0.000	0.005***	
GDP growth rate						
TT 1	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Unemployment rate	0.004***	0.000	-0.001	0.002**	0.000	
T 1 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	
Female LFP rate	-0.010***	-0.007***	-0.005**	-0.006***	-0.004	
	(0.003)	(0.001)	(0.002)	(0.002)	(0.003)	
Added worker dummy	0.028***	0.030***	-0.008	0.045***	0.063***	
•	(0.009)	0.030*** (0.005)	-0.008 (0.008)	(0.007)	(0.015)	
Added worker dummy Pseudo-R <sup>2</sup>						

 $Source: EU\text{-}SILC, own \ calculations.$ 

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} -> A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} -> II_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} -> II_t$  refers to women's transitions from inactivity to enterployment became search transitions;  $PT_{t-1} -> FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country fixed effects, year fixed effects, and an interaction of the added worker dummy with the female labor force participation rate are additionally included in the regressions. The average marginal effects of the added worker dummy over the female labor force participation rate, including the interaction effects with the female labor force participation rate, are shown in Figure 3.

Table C6. Pooled Regression Based on Giving Each Country the Same Total Weight

<i>Table C6.</i> Pooled Regression Based on Giving Each Country the Same Total Weight						
	$IA_{t-1} \rightarrow A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$	
Household characteristics						
Married	-0.013**	-0.002	-0.011**	-0.010**	-0.014***	
	(0.006)	(0.003)	(0.005)	(0.004)	(0.005)	
No. of children	-0.022***	-0.005***	-0.017***	-0.009***	-0.020***	
	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	
Child age 0 to 3	-0.033***	-0.015***	-0.016***	-0.032***	0.011	
	(0.006)	(0.003)	(0.006)	(0.004)	(0.008)	
Child age 4 to 6	0.062***	0.007**	0.055***	0.012***	0.001	
	(0.006)	(0.003)	(0.006)	(0.004)	(0.006)	
Log. equiv. disposable income (in thsd.)	-0.005	-0.013***	0.008***	-0.012***	-0.025***	
	(0.003)	(0.002)	(0.003)	(0.002)	(0.004)	
Repayment of debts	0.028***	0.006***	0.022***	0.012***	0.020***	
	(0.004)	(0.002)	(0.004)	(0.003)	(0.004)	
Dwelling type (ref.: detached house)						
Semi-detached house	-0.003	0.006**	-0.008	0.008**	-0.005	
	(0.005)	(0.003)	(0.005)	(0.004)	(0.005)	
Apartment or flat	-0.001	0.011***	-0.013***	0.018***	0.019***	
Ī	(0.004)	(0.002)	(0.004)	(0.003)	(0.006)	
Wife's characteristics	· · · · · · ·	(,	(******)	(,	(*****,	
Age	-0.004***	-0.001***	-0.003***	-0.003***	0.000	
6-	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Education (ref.: medium skilled)	(0000)	(0.000)	(0.000)	(0.000)	(*****)	
Low skilled	-0.028***	-0.002	-0.027***	-0.009***	0.002	
2011 (01111100	(0.005)	(0.002)	(0.004)	(0.003)	(0.006)	
High skilled	0.076***	0.000	0.072***	0.020***	0.030***	
High skined	(0.006)	(0.003)	(0.005)	(0.005)	(0.005)	
Occupation (ref.: white collar high)	(0.000)	(0.003)	(0.003)	(0.003)	(0.005)	
White collar low	_	_	_	_	-0.048***	
Willie Collar low	-	=	=	=	(0.005)	
Dha callar high					0.047***	
Blue collar high	-	-	-	-		
DI 111					(0.010)	
Blue collar low	-	-	-	-	-0.037***	
W 3 10 10 10 10 10 10 10 10 10 10 10 10 10					(0.007)	
Husband's characteristics	0.002***	0.00044	0.001444	0.000	0.005444	
Age	-0.002***	-0.000**	-0.001***	0.000	-0.005***	
/ / / 1111 1)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Education (ref.: medium skilled)	2.005	A A A = 16		0.00		
Low skilled	-0.005	-0.005*	-0.001	-0.007**	-0.004	
	(0.005)	(0.002)	(0.005)	(0.003)	(0.006)	
High skilled	-0.010**	-0.004	-0.007	-0.008**	0.004	
	(0.005)	(0.003)	(0.005)	(0.004)	(0.005)	
Occupation (ref.: white collar high)						
White collar low	0.007	0.001	0.007	0.006	0.022***	
	(0.007)	(0.003)	(0.006)	(0.005)	(0.006)	
Blue collar high	0.007	0.000	0.010**	0.005	-0.024***	
	(0.005)	(0.003)	(0.005)	(0.004)	(0.006)	
Blue collar low	-0.010*	0.004	-0.014***	0.012***	0.000	
	(0.006)	(0.003)	(0.005)	(0.004)	(0.006)	
Country characteristics						
GDP growth rate	0.000	-0.001	0.000	-0.001	0.005***	
- 6	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	
Unemployment rate	0.011***	0.003***	0.005***	0.005***	0.002	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	
Female LFP rate	0.006**	-0.002	0.006***	0.001	-0.006**	
Tenidle El Frace	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	
	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	
Added worker dummy	0.025***	0.028***	-0.009	0.047***	0.044***	
Added worker duffilly	(0.008)	(0.005)	(0.007)	(0.007)	(0.012)	
Pseudo-R <sup>2</sup>	0.110			0.096	0.129	
		0.116	0.110			
Observations	87,416	87,416	87,416	76,133	73,891	

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics. — Asterisks denote statistical significance \* at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} > DE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} > E_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. — Both country and year fixed effects are additionally included in the regressions. — The original weights provided with the EU-SILC data, which do not only correct for different selection probabilities of individuals within each country as well as panel attrition, but also ensure that each country is represented in proportion to its actual population size, have been recalculated such that in each year, every country gets the same total weight.

Table C7. Added Worker Effect by Country Group Based on Sample Including Region-Year Fixed Effects

	$IA_{t-1} -> A_t$	$IA_{t-1} \rightarrow UE_t$	$IA_{t-1} \rightarrow E_t$	ΔJS	$PT_{t-1} \rightarrow FT_t$
	Nordic Countries				
ME	0.084**	0.039*	0.035	-0.003	0.020
StdE	(0.042)	(0.020)	(0.042)	(0.028)	(0.038)
$\Delta\%$	24.28%	-	-	-	-
Observations	7,249	7,249	7,249	4,529	11,226
		C	ontinental Euro	pe	
ME	-0.016	0.009	-0.033	0.016	0.062***
StdE	(0.024)	(0.009)	(0.022)	(0.014)	(0.021)
$\Delta\%$	-	-	·	-	67.92%
Observations	17,948	17,948	17,948	16,329	35,289
		An	glo-Saxon Count	ries	
ME	-0.016	0.042	-0.060	0.051	0.073
StdE	(0.055)	(0.030)	(0.050)	(0.040)	(0.046)
$\Delta\%$		-	-	-	-
Observations	3,129	3,129	3,129	2,760	5,596
	Mediterranean Countries				
ME	0.066***	0.045***	0.018*	0.063***	0.095***
StdE	(0.012)	(0.009)	(0.009)	(0.011)	(0.027)
$\Delta\%$	47.18%	76.49%	-	82.34%	37.07%
Observations	28,585	28,585	28,585	26,811	11,885
		Centr	al and Eastern E	Curope	
ME	0.042***	0.033***	0.007	0.053***	-0.028
StdE	(0.015)	(0.010)	(0.013)	(0.013)	(0.035)
$\Delta\%$	21.91%	60.51%	-	82.08%	<u> </u>
Observations	23,919	23,919	23,919	23,393	8,336

Source: EU-SILC, own calculations.

Notes: The results shown represent average marginal effects, calculated as average effects over all individuals in the respective sample, and robust standard errors (clustered at the household level) obtained from probit estimations of women's labor market transitions on a set of individual, household, and country characteristics (as shown in Table 1). — Asterisks denote statistical significance \* at the .10 level; \*\*\* at the .05 level; \*\*\* at the .01 level. —  $IA_{t-1} - > A_t$  refers to women's transitions from inactivity to activity;  $IA_{t-1} - > UE_t$  refers to women's transitions from inactivity to unemployment;  $IA_{t-1} - > E_t$  refers to women's transitions from inactivity to employment; AJS refers to women's job search transitions;  $PT_{t-1} - > FT_t$  refers to women's transitions from part-time to full-time employment. — The added worker dummy takes value one if the husband becomes unemployed from t-1 to t and zero if he stays employed. —  $\Delta$ % refers to the percentage change in women's probability of adjusting their labor supply due to their husbands' unemployment. Percentage changes are shown for significant added worker effects (5-percent level) only.