Wageindicator	***WOLIWEB*** ***The socio-economic determinants of citizens' work life attitudes, preferences and perceptions, using data from the continuous web-based European Wage Indicator Survey***

Research Paper

`Wage Effects of Parenthood:

A comparison of

Finland, the Netherlands and Poland'

Research Paper Version:	Final version
Research Paper Preparation Date:	31.03.2007
Deliverable:	D08b Working papers on wages

Author of this research paper:

Cecile Wetzels, AIAS, University of Amsterdam

Comments are very welcome: c.m.m.p.wetzels@uva.nl

Project funded by the European Community under the 6th Frame Work Programme PRIORITY 7 Citizens and Governance in a knowledge based society (FP6-2004-50659)

Introduction

Much research in applied economics has commented on the advantages associated with parenthood. Parenthood has been found to have positive effects both on reported levels of happiness and health for men and women. However, an increasing number of studies have found that having children is associated with a penalty in female wages. For men, until now, very few studies focus on the wage effects of children, but a number of studies found a wage premium due to marriage. The reasons put forward in the literature, would lead us to think that there should be an even higher premium for married men who have children. There is an argument and there is evidence from the literature, but there is also an ever growing number of studies that do not even have information on whether the respondent has a child/the number of children or on gross hourly wages, and still pretend to give evidence on the child gap, especially in cross-country comparative perspective (Dupuy and Fernandez-Kranz 2007). We still think these studies have value but they do not strongly enough put the lack of their empirical material forward.

This study aims to improve exactly this shortcoming by aiming at giving very precise measures of the crucial empirical data on gross hourly wages, children and actual human capital. So, the contribution this study aims at is far more in the field of making use of the most precise measurement of the phenomenon analysed, and estimating the original models to the field and extend these with using more detailed actually measured data, than using more advanced statistical techniques using well-known data sets with their advantages and disadvantages.

The date set we use is new, and has other potentially major shortcoming of its own, but we will discuss these disadvantages and advantages of these data.

Why analyse wage effects of parenthood? If motherhood is genuinely productivity decreasing, then changes in the motherhood composition of the workforce will affect productivity (Korenman and Neumark 1991). If there are no productivity effects of motherhood, then changes in the motherhood composition of the workforce will have no impact on economic output. Similarly, if fatherhood is indeed productivity increasing, a change in the fatherhood composition of the workforce will affect productivity.

We aim at a cross country comparative perspective, since, if parenthood has different effects on wages in different countries this may be related to the labour market, policies related to paid work and to unpaid care and to families, to culture, and disentangling these

effects, will lead us to better understand and facilitate reaching European goals of participation in paid work, of having children and how costs of children are interpreted by employed men and women in different countries.

Our data source, collected from March 2004-November 2006, financed by the European Commission, allows us to test our hypotheses in three countries[1] which have not been analysed in a comparative framework before, and actually no other data exist at the moment that are comparative on gross hourly wages, actual human capital and number of children in Finland, the Netherlands and Poland (See, Appendix Table A.1). Since gender equality in market work is a European policy goal we estimate the original models that aimed to analyze women's wages, for men and women. We will interpret our results which are based on our cross sectional data that are not from a sample of the population with results in recent literature which use more sophistic panel data and data from samples of the population.

This paper is structured as follows. Section two presents an overview of relevant literature on research and results focusing on the potential wage effects of parenthood and explanatory factors. Informed by the findings of existing studies, we develop our own hypothesis in section three. Section four discusses the methodology used. Section five discusses the data, and argues the benefits and drawbacks of the data source, and it further discusses the selection of countries included in our analysis. Our estimation results are presented in section six. The paper ends with a conclusion in section seven.

2. Literature review

Previous research has reported large wage gaps associated with motherhood, varying between 10% and 20% in cross-sectional studies (Waldfogel 1995, see also Wetzels 2006 Table A.3 for a review). A marriage premium for men is a common finding (Korenman and Neumark 1991; Schoeni 1995; Loh 1996; Chun and Lee 2001; Ribar 2004) with reported wage premiums associated with marriage for men, varying between 10% and 20% in cross-sectional US studies (Korenman and Neumark 1991). Studies that use panel data typically report that the motherhood penalty and the marriage premium for men are

[1] The Wage Indicator Survey has collected data in nine European countries and is extended to 17 countries in 2006. However, the specific information on households that is needed for our analysis is only available in three countries (See Tijdens et al 2006). A previous version of this paper compared the Netherlands, Spain and the UK. However, the analysis required more detailed information on the household and career break which is not (yet) available in the Spanish and UK WI-dataset.

considerably reduced, if not eradicated altogether, when allowing for individual specific fixed effects (Waldfogel 1995, a review in Wetzels 2006, Korenman and Neumark 1991; Cornwell and Rupert 1995; Jacobsen and Rayack 1996; Stratton 2002). This indicates that at least part of the penalty is related to unobserved characteristics of the worker. Studies focussing on men in Britain report a marriage premium ranging from 10% to 14%, although the majority of these use cross-sectional data (Greenhalgh 1980; Schoeni 1995; Disney and Whitehouse 1996). Exceptions are Joshi and Newell (1989), who use birth cohort data and report a wage premium of about 10% for married men. Davies and Peronaci (1997) uses data from the first four years of the British Household Panel Survey, and finds that the size of the premium falls dramatically when allowing for time invariant individual specific effects.

There are a number of possible explanations for why mothers would earn less than their childless counterparts and why fathers would earn more than their childless counterparts, some of which emerge directly from economies of scale and specialization within the family (Becker 1973; 1974; 1991). Parenthood may lead to higher specialization of paid labour in the household and traditionally results in the father becoming more labour market intensive and the mother becoming less market intensive. Increased specialization in the labour market increases a father's productivity and wages, whereas decreased specialization in the labour market decreases a mother's productivity that translates into lower wages. A number of previous studies find evidence in favour of this specialization hypothesis in the analysis for the marriage premium in men's wages (Daniel 1992; Gray 1997; Chun and Lee 2001), while others find evidence against it (Davies and Peronaci 1997; Loh 1996). In addition, US evidence suggests that fathers are more likely to receive work-related training and accumulate human capital at a higher rate (Loh 1996).

It is possible that motherhood creates conditions under which the accumulation of human capital is less efficient than as a childless worker. It may decrease the time available to invest in market specific human capital, or the wife may contribute directly to the husband's human capital by supplying a flow of services. If this motherhood reduced human capital accumulation translates into lower wages and slower wage growth, then mothers will exhibit a wage penalty, whereas for men the conditions may lead to the opposite situation that favors their human capital accumulation and translates into higher wages and faster wage growth for married men and even more so for married fathers (Nakosteen and Zimmer 1987; Stratton 2002).

A parenthood wage penalty can also result from employer discrimination, which may or may not reflect lower productivity. For example, employers may discriminate against mothers not because of lower productivity but because they conform to a social norm that women should be having children and supporting families Employers may at the same time be paternalistic in supporting men with families and may be particularly supportive of men whose wife does not work in the labour market (Loh 1996; Davies and Peronaci 1997). Employers may also use parenthood as a signal for higher productivity of men, as parenthood is associated with highly valued unobservable characteristics such as ability, honesty, loyalty, dependability and determination for men, but not for woman. The latter has found some empirical support for men's wages in the US literature (Korenman and Neumark 1991; Cornwell and Rupert 1995; Loh 1996).

A final and related explanation is that the observed motherhood wage penalty and the fatherhood premium are statistical artefacts. The negative selection of low wage females into motherhood and of high wage males into marriage (no study known on fatherhood) creates an appearance of a penalty in observed mothers' earnings and a premium in observed married men's earnings (Nakosteen and Zimmer 1987; Gray 1997; Davies and Peronaci 1997). Women that possess attributes rewarded in the labour market are also less valued in the motherhood and caring market – women with wage increasing unobserved characteristics are selected into childlessness, and men with wage increasing unobserved characteristics are selected into fatherhood. Again, there are empirical studies for men's wages that produce evidence both in favour (Nakosteen and Zimmer 1987; Jacobsen and Rayack 1996; Davies and Peronaci 1997) and against (Korenman and Neumark 1991; Chun and Lee 2001) the selection and unobserved heterogeneity hypothesis.

The European Context

Several researchers have emphasized the influence of institutions which characterize the context in which labor market decisions take place (See for a review as regards women's labour supply e.g. Del Boca and Wetzels 2007). Labor market regulations, low availability of flexible employment arrangements and lack of family policies may contribute to creating difficulties for leaving and re-entering the labor market while becoming a parent and raising children, making the employment adjustment more costly. In the European context, labour market regulations differ quite substantially. Not only is the southern European labour market still a highly regulated one, with strict regulations concerning the hiring and firing of workers and the types of employment arrangements

permitted, in spite of recent institutional changes.[2] Also in other countries the labour market is characterized by a hiring system and high entry wages along with very strict firing rules severely restrict employment opportunities for labor market entrants. These labor market regulations have been largely responsible for the high unemployment rates of women and youth (Houseman and Osawa 2003). Participation and employment rates are higher and unemployment rates are lower among men than women in all three countries in our study Finland, NL and Poland (Aliaga 2005). Polish Labour Force Survey data for the period 2001-2004 show women's unemployment rate each year higher than men's unemployment rate, but the difference systematically decreased and in 2003 accounted only for 1.3 percentage point. On the other hand, relatively more women (51.2%) are qualified as long-term unemployed (46.4% for men's population).
Polish Labour Force Survey data for the period 2001-2004 also indicate a sharp increase (by 76.6%) of the hired employment for a fixed term, particularly among women – by 86.1%. Still, in the second quarter of 2004, temporary work was more prevalent among men (23.7%) than among women (21.3%). More than 90% of the working population works on a full time basis. This share remains stable in the whole transformation period. Although women constitute 45.9% of total employment, they form 57.3% of part time employment. An analysis of Poland by Matysiak (2005) demonstrates that part-time employment scarcely features as an approach to work-family reconciliation in Poland.

Employed women who decide to have a child, despite employment uncertainty and rigidity in working hours, are expected to either not withdraw from the labor market or never re-enter after childbirth. In addition, analyzing in-kind transfers, it has been shown that the availability of childcare services significantly affects women's preferences for non-market time versus time spent in paid work. Differences emerge among European countries especially as regards to parental leave duration and payment and child care facilities. Appendix Tables A.1-A.3 present characteristics of parental leave arrangements in Finland, the Netherlands and Poland. Firstly, in the Netherlands parental leave is the shortest and only paid 75% in the public sector, whereas in Poland parental leave is the

[2] In addition, in Poland, only 15.1% of the unemployed registered in the labour offices receive unemployment benefits. Public expenditures on ALMP have even fallen. Low-skilled persons, loosely linked with labour market are not able (encouraged) to come back into the labour market again. For a significant part of the population that stays out of employment, social assistance has become the main source of income. (via voce Morawksi (Warsau University).

longest but paid much less than in Finland where parental leave is around 43 weeks with on average 66% of earnings paid. (Appendix Table A.3).

Appendix Tables A.4-A.5. show that in the Netherlands and Poland the percentage of children under three who are in childcare is quite low compared with Finland, while the proportion of children over three in childcare is relatively high in the Netherlands even compared to Finland. In Poland relatively lower proportions of 3-5 years olds make use of child care facilities.

In this paper, we choose to analyze the effect of children under age 3, between 3 and 6 years old, between 6-12 years old children and between 12 -16 years old on parental wages. In general, in the age group between 0-3 years child care facilities are very limited in making the combination of work and care easily (Del Boca and Wetzels 2007), in the age groups 3-6 yrs. childcare is available to a larger extent in the Netherlands and Finland however child care centers' and schools' opening hours do not match with regular work hours of full-time workers. Whereas, in the age 6-12 years, this problem may occur to a lesser extent as children are less dependent on their parents for transport or play than the very young.[3]

Appendix Table A.6 shows an overall picture of employment rates of childless women and mothers (of children aged under 12) aged 20-49 in Finland, the Netherlands and Poland. The difference in employment rates by parenthood is the highest in the Netherlands and Poland compared with Finland. Appendix Table A.7 shows how the large, respectively small, effect of children on mothers' and fathers' employment translates in the parental organisation of paid labour. The table refers to all couples with partners aged 20-49 and confirms the cross-national variation in female employment patterns found in other studies with the Netherlands relying on female part-time work, and Finland (and to a lesser extend Poland) relying on both partners engaged in full-time jobs. In Poland there is also a more substantial third category with many jobless women, although the figures in Table A.7 also show that the category of employed men with

[3] Under EU law, employed women are entitled to a maternity leave of 14 weeks. This law sets minimum guaranteed levels of protection, and member states can therefore choose to extend these minimum requirements. Member states are also free to decide on how to apply this protection in national law. This explains the wide discrepancy on this issue from country to country within the EU. Thus, for instance, maternity leave varies from a minimum of 14 weeks in the UK and 16 weeks in the Netherlands and Poland to 26 weeks in Finland and 28 in Denmark. See also Appendix Tables A.1-A.3. There is not always a correlation between the length of maternity leave and the benefit levels provided. Some countries offer long leave entitlements but low statutory pay such as Poland, and women may not be able to afford to take extended leave.

housewives is equal to the EU-25-average in Poland and lower in the Netherlands and Finland.[4]

3. Hypotheses

Informed by the earlier research on the marriage effects on wages and the research of the child gap in wages (see the review in Table A.9) we derive the following hypotheses.[5]

Specialisation

The first hypothesis we consider is specialisation. This hypothesis derives directly from Becker (1991), in that parenthood traditionally in Europe allows the husband and wife to further specialise in either market or domestic production. Traditionally, the husband and father would be the main responsible for earning the household income whereas his partner would be mainly responsible for other household tasks related to care. This household division of labour allows him to allocate greater effort to this and her less. His productivity and his wage increase as a result and hers would decrease. This hypothesis has a number of implications that can be directly tested with our data. In particular, if the motherhood wage penalty and the fatherhood premium in wages are due to further specialisation then:

1. We expect the same specialisation to occur irrespective of whether the couple married or cohabiting, although given the less stable nature of cohabitation we might expect greater specialization in marriage. The WI-SURVEY data allow us to identify whether a woman is never married, and a positive coefficient on this variable (relative to married women) would support the specialisation hypothesis, whereas a negative coefficient on this variable for men would give support to the specialisation hypothesis. A negative coefficient on the variables of being the main responsible for household tasks, and a positive coefficient on the variable being mainly responsible for the household income would support the specialisation hypothesis.

---

[4] During the last five years participation and employment rates have fallen and unemployment rates have grown in each labour force group in Poland. The unemployment rate (about 18%) and the non-employment rate (56%) are among the highest within the OECD countries. The number of non-working persons has rapidly increased. Most of them are low-skilled workers and dependent on social incomes.

[5] Similar hypothesis have been analysed in e.g. Bardasi and Taylor (2004). They explored slightly different hypotheses since they use the British household panel data which include information on both partners and has the benefits of its panel character.

2. Any wage effects from parenthood should disappear or reduce if a child is not living in the household whether this is because the child left the household to live independently of its parents or whether the child lives only part of the week in the household because there was a divorce or split-up of the parental household structure. In these cases any benefits (Davies and Peronaci 1997) or penalties of specialisation due to children will be lost or at least reduced. In addition, if parents divorce when children are young children, we may expect an effect of care for young children on men's wages, if divorce leads men to spend more time with their child part of the week due to less specialized care for the child if the child is in the father's home (depending on new partnership as well), whereas the opposite may be found for women. Again, the WI-SURVEY data allow us to identify such parents, and a positive coefficient on this variable for women and non positive coefficient for men would support the traditional specialisation hypothesis.
3. The motherhood wage penalty should decline if the woman works full time and if her partner is unemployed or her partner is employed covered by a fixed term contract. The fatherhood wage premium should decrease with men working part-time, but increase when his partner is unemployed or in a less secure labour contract. However, a paid domestic help should not have an effect on the wage premium of fathers but decrease the mother's wage penalty. We can explicitly test this by including partner's labour market position, information whether the respondent works full time and whether the household uses paid domestic help.

Human capital accumulation

The second, and related, hypothesis to explain the parenthood wage effect among women and men is human capital accumulation. In particular, if the motherhood wage penalty is due to human capital accumulation then:
1. We would expect the wage effects to increase with the elapsed duration of the motherhood (the age of children). The less time the husband has been a parent, the less time he has had to improve his human capital. Therefore, a positive coefficient on the elapsed duration of parenthood variable would support the human capital hypothesis for men and a negative coefficient on this variable for women.
2. Unlike under the specialisation hypothesis, the penalty should be retained to some extent on children who do not live in the household any longer (Davies and Peronaci 1997). This is because although the children require less care time and time on additional household keeping due to children, the woman has accumulated less human capital while

having children at home and this should still be reflected in her wage. Therefore a negative coefficient on a variable indicating whether the woman's children are not living in the household (relative to a mother who lives with her children) would support the human capital hypothesis. Similarly for fathers the coefficient is expected to be positive. Since the father benefited from the time the children were at home and the mother invested in supporting the breadwinner.

3. The presence of children and the number of children in the household reduces the time available to the wife to augment her husband's human capital, and thus should lower the wage premium of her partner compared with childless couples in which the wife specializes in the labour market (Davies and Peronaci, 1997). Therefore a negative coefficient of the number of children in the household on father's wage premium would support the human capital hypothesis. However, the number of children is likely to reduce the mother's own human capital accumulation. On the other hand, if fathers support the career of their wife, we expect a negative coefficient of the number of children in the household on his wages.

Employer discrimination

The third explanation used to explain the wage effects for parents concerns employer negative discrimination against mothers and positive discrimination for fathers. There are two potential reasons for this discrimination. The first is that employers favour fathers but not mothers as they conform to social expectations, although there may not be any actual productivity differences.[6] If this employer paternalism is the cause of the motherhood wage penalty then:

1. We would expect women with more children to enjoy a larger penalty than those without children as the presence of children reinforces the social expectation of the motherhood institution. Therefore, a negative coefficient on the number of children indicator would support the employer discrimination hypothesis for woman. In contrast we expect that men with more children enjoy a higher premium than those with fewer children.

[6] Bardasi and Taylor 2004 have estimated models using a sample including self-employed workers. Despite trying various different model specifications, they did not find any fatherhood premium for self-employed men. This can be interpreted as evidence in support of the hypothesis that employers favour married men.

2. According to this hypothesis, it might also be the status of having children rather than the duration of the parenthood (the age of the oldest child) that is important, and following this reasoning, therefore there should be no relationship between elapsed duration of the parenthood and the wage received.

The second reason for employer discrimination against mothers is that employers might use motherhood as a signal of particular, less valued unobserved characteristics that are productivity decreasing, such as less commitment, lower motivation, less honesty etc. On the contrary, employers might use fatherhood as a signal of these particular, highly valued unobserved characteristics that are productivity increasing, such as commitment, motivation, honesty etc. We test this hypothesis by including variables that indirectly measure signalling behaviour, indicate the reasons for having a career break and the reasons for working part-time, the timing of career break, and the timing of starting to work part-time.[7] We further estimate the effects of investments in additional qualifications and whether these have resulted in better pay, another job or in other benefits for man and women in all three countries.

Our hypothesis are likely to be affected by the cross country differences in labour markets, social policies to combine paid work and unpaid care by parents, standards of living and culture. We described differences in social policies that are likely to have a direct effect on specialisation and parents' human capital accumulation. We will in this research only estimate effects of these cross country differences by using the information on children, career break and where possible the reasons for career break and for working part-time.

4. Econometric and empirical specification

The original empirical model of wage determination was developed in Mincer (1974), based on a life-cycle earnings model, and contains only age as a measure of the individual work history and years of pre-labour market schooling. The Mincer type models, the question of what variables to include in the wage model, and gender wage discrimination have already been reviewed extensively (Cain 1986; Blau and Ferber 1987; Gundarson 1989; Blau 1998; Kunze 2000).

[7] If this signaling is the cause of the mother hood wage penalty, then the motherhood wage penalty should disappear in models that allow for time invariant individual specific effects. Plans to collect the Wage-Indicator Survey data in a panel structure could provide this information.

The conceptual framework for the analysis of an individual's acquisition of earning power and the distribution among groups of individuals originates in Becker's theory of human capital (1964). Investments in people are time consuming. Each additional year of schooling or on-the-job training postpones the time of the individual's receipt of earnings or reduces the span of his working life if he retires at a fixed age. The deferral of earnings and the possible reduction of earning life are costly. These time-cost plus money outlays make up the total cost of investment. Because of these costs, investment is not undertaken unless it raises the level of the deferred income stream. Hence, at the time it is undertaken, the present value of real earnings streams, with and without investment, are equal only at a positive discount rate. This rate is the internal rate of return on the investment. Since earnings are a return on cumulated net investments, they also rise at a diminishing rate over the working-life and decline when net investment becomes negative, as in old age. The typical logarithmic working life earnings profile is therefore concave from below. Its rate of growth is a positive function of the amount invested and of the rate of return. Its degree of concavity depends on how rapidly investments decline over time.

In this study, market wages are assumed to be determined by the following equation[8]:

$$\ln(w_i) = X_i\beta + CH_i\gamma + \alpha_i + \varepsilon_i$$

where w_i is the market wage of individual *i*, *X* is a vector of observable individual, household, job and employer related characteristics that determine wages, CH_i is the variable capturing the parenthood status of the individual, α_i captures the unobserved, time-invariant characteristics of the individual, and ε_i is random error. Estimating this equation by OLS implicitly assumes that α_i is zero, and therefore uncorrelated with both w_i and X_i. Although this is unrealistic in the present context, as X_i includes measures of

[8] By using panel data we would be able to allow for possible correlations between unobservables, motherhood and wages. Failure to do so may bias the coefficient of interest – some of the returns attributed to motherhood may actually be returns to some unobserved qualities correlated with motherhood. If so, the observed wage penalty associated with motherhood largely reflects unobserved individual characteristics that are also valued by the employer. However, at this stage we only have the cross-section data available. Appendix Table A.11 reviews some research which implicitly tested for unobserved heterogeneity in wage models. Interpreting the research learns that there is bias found by using OLS, however it is not yet clear whether this will apply to different countries, whether the bias will be as strong in other countries, and whether the effect of the bias would lead us to say that OLS estimates are not showing the right direction.

education and job tenure that are correlated with, for example, any unobserved ability captured in α_i, we do include more precise variables in X_i than in previous research and we analyse countries that have not been analyzed as regards the effect of parenthood on wages. A second problem discussed in the literature is that if these unobserved individual specific effects are also correlated with the probability of being a parent, then the main coefficient of interest, γ, will be biased. In particular, the selection of people with unobserved wage-enhancing characteristics into parenthood implies a correlation between CH_i and α_i, and results in an upwardly biased estimate of γ.[9] Appendix A.12 provides some research on the testing of bias from endogeneity in wage models. To find instrument variables to test for endogeneity of children and wages has proved to be very difficult, and this potential bias is still waiting for more analysis.

We present and discuss the results from our estimation procedures below. We estimate a number of different empirical specifications in order to test the various potential hypotheses presented in section 3 explaining the presence of parenthood effects in wages.

5. Data

In order to analyse the potential effects of parenthood on wages across our three European countries, we make use of the data from the Wage Indicator Survey (WI) developed and conducted within the scope of a European commission project called WOLIWEB[10].

The *WI* questionnaire aims to collect information on wages and working conditions of employed people and job seekers.[11] Due to the voluntary nature, a sampling frame is absent and no response rate can be given. In addition, possible biases due to Internet

[9] We do not know whether in 2007 this applies equally to women and men. Traditionally men with more labour enhancing characteristics would be selected into fatherhood, whereas women with unpaid care enhancing characteristics would select into motherhood and aid at breadwinner's career. This seems not as much likely as before.

[10] An international, continuous web-based project with national *WI* websites that consist of four pillars, notably
- a *website* with content about wages and other work-related topics,
- a crowd-pulling *Salary Check* providing occupation-specific information about average wages taken into account a number of individual factors;
- a *Wage Indicator (WI)* questionnaire and a quarterly released dataset;
- visitors' *emails* to the national web-managers.

[11] The WI questionnaire aims to include all forms of waged employment, thus workers in dependent employment as well as apprentices, self-employed, own-account workers, people working on the basis on civil law (so called contracted by results and free-for-task contracted (Malkowska, 2004)- it concerns mainly Poland), workers in family businesses, partly unemployed/ disabled/retired workers, and students with a job on the side.

access, interest in wage- and work-related issues, and willingness to complete the questionnaire may all cause bias in the data.[12]

All questionnaires, but particularly voluntary and frequently visited web-based ones require a user-friendly wording, design and layout. All questions need to be easy understandable, as this speeds up the pace of completion and reduces dropout rates for visitors who have less advanced reading skills. The mode of web based self-administered questionnaires combines the advantages of Paper and Pencil Interviewing (PAPI) and Computer Assisted Telephone or Personal Interviewing (CATI or CAPI). Among others, it allows for alerts for unlikely combinations of answers or to warn respondents who are outside the target population.[13] Advanced routing prevents visitors from answering questions that are not applicable to their group. Visitors who completed the questionnaires on average needed 18-20 minutes.

Currently three years of data are available, covering the period 2004-2006. We restrict our analysis to women aged between 22 and 55 (inclusive) who share their household with a partner and, who report being in paid work as their main status.[14] We select only people who were full respondents. Selection based on these criteria results in observations on 2,475 Finnish women, 2,206 Finnish men, 2,743 Dutch women, 3,376 Dutch men, 1,365 Polish women, and 1,244 Polish men.

Dependent variable

Our dependent variable is log gross[15] hourly wage. One of the aims of the *WI* questionnaire is to measure wages as reliable and as detailed as possible. Respondents are asked to have the last pay slip at hand, before entering the questionnaire.[16]

---

[12] Richard Freeman (2005) pointed at some possible solutions to correct for these types of bias in the data that derive from the Wage Indicator survey. However, there has not been performed any corrections yet.

[13] The *WI* questionnaire has a unique routing through the questionnaire, based on the first question: 'Which description matches best your current employment activity?'. These groups are (A) employee, (B) selfemployed/own-account worker/working for family business, working on the basis of contract by results and free-for task agreement (Poland) (C) apprentice/trainee, (D) school pupil/student in full-time education with a job on the side, (E) unemployed/looking for a job/sickness benefit/incapacity for work.

[14] We focus only on employees, because the inclusion of self-employed workers in our sample is problematic for several reasons. First, almost one half of the self-employed did not respond to the earnings question. Second, it is well documented that the self-employed have a tendency to under-report their earnings. Third, income from self-employment includes returns from both labour and from physical capital. Fourth, the number of hours worked in a normal week is likely to be more unreliable for the self-employed than employees.

[15] Since we work with gross wages, we refrain from the effects of taxation regimes as regards individualization of taxes of household members.

The research team decided at the WOLIWEB launch meeting 8-10 July 2004 to ask for gross and net last wage, including allowances and bonuses. [17] The reliability of the information was a major argument to do so, because otherwise respondents need to subtract allowances in order to come to their wage without allowances, which may decrease reliability. The Appendix A.14 provides the program used to calculate the hourly gross wage and the specific questions on allowances and other additions to pay.[18] Our gross hourly wages in Poland are better comparable internationally than the current Polish data on wages.[19] The wages are expressed in real terms, deflated to 2006 prices.

---

[16] The data on gross hourly wages have been corrected for extreme values (see the program in the Appendix). The reason why we had to set the minimum wage lower in Poland than in the other two countries is as follows. The minimum monthly wage in Poland in 2004 is 824 PLN (average exchange rate according to National Central Bank in 27. 05. 2004 is 1 € = 4,6721 PLN). According to Polish labour law it is possible to pay a new employee the 1 year of employment the minimum wage minus 20% - that is 659,2 PLN gross, and in second year – the minimum wage minus 10%. A lot of employers use this possibility. These employees earn gross – about 4 PLN per hour (taking into account exchange rate that is 0,856 euro gross) and 3,2 PLN net – € 0,684 net.
The survey also puts the currency sign – in Poland most of people are paid in PLN, but some receive their salary in EURO, GBP or USD. The same was done in a Polish on-line survey Internet Wage List by Gazeta Wyborcza.

[17] The questions about wages have so-called masks, checking instantly that data intake is numerical, that it includes at most two digits and that the gross wage is higher than the net wage. If the latter requirement is not met, an alert pops up: 'Your gross wage cannot be lower than your net wage'. In addition, we have used the technical possibilities to add a check controlling that the net wage should be at least 0.4 * the gross wage.

[18] The question about the wage has an instruction to include allowances and bonuses. Thereafter, a list of specific allowances and bonuses relevant in the country of survey is presented (see the Appendix for the full list. A web-visitor gets a much shorter list, since many allowances are country-specific.).

We control the observations with overtime bonus for reporting overtime hours and payment of overtime hours. When preparing the wage-input for the hourly wage calculations subtract the rightly reported overtime bonuses from the reported wages.

Some allowances are typically paid on a non-regular, mostly annual basis such as the holiday allowance. In a number of countries it is a legal part of the wage, but paid at irregular intervals. Other examples are the end-of-year/Christmas bonus and 13th 'month' bonus. As we measure the last wage including bonuses and allowances, two problems may arise:
(1) a respondent has not ticked such an allowance, and it's unclear whether this bonus/allowance is not received or because it is not received in the month measured (Christmas bonuses will not be measured in questionnaires completed in July).
(2) a respondent ticked such a bonus/allowance, but it's unclear whether this bonus/allowance is paid on an annual, bi-annual or monthly basis.
To solve these problems an extra question asks about annual bonuses or allowances.

In addition, we added one question listing other additions to pay received from the employer in the past 12 months such as lower rate of interest on mortgage, public transport pass, housing allowance, and contributions to a savings scheme, leased car, or company car. Although the value of these additions to pay may be substantial and therefore may affect labour market behaviour, from the data-collection point of view we are not able to valorise these additions.

Moreover, the questionnaire includes a list of work-related schemes or benefits, such as a pension scheme, either at company or industry level, Flexible Benefit Plan, maternity / parental leave scheme (above statutory minimum), company based day care / crèche, free housing, canteen or food vouchers. Although the tax authorities may perceive these benefits as wage elements, from the data collection point of view we are not able to valorise these work-related schemes or benefits.

[19] Two Polish data sources include information on wages: 1) the Study of Population Economic Activity provides working time in survey week and the net wage for the last month. 2) The Employer Survey of the

Our variables are defined in Table I and their means and standard deviations are presented in Table II for women and men living in couples and in Table III for parents and in Annex Table III we present a summary of statistics for parents who experienced a career break. Tables II and III show that parents earn higher wages than childless men and women in all three countries. Furthermore, as expected, wages in Euros are lower in Poland. These wages are raw data and do not take account of the potential differences in age composition and human capital accumulation between parents and childless people. The Table II and III also reveal that men earn on average higher wages per hour than women in all three countries, regardless whether they have children or not.

Independent Variables

National educational attainments have been recoded using International Standard Classification of Education (ISCED) designed by UNESCO in 1997 (see, Appendix Table A.8.).[20]

In all three countries women's education is higher than men's, but as expected the differences by gender is less for parents. Education levels in Poland are the highest comparing the data in our three countries. The education structure of Polish women's employment has considerably changed after 1998. Employment of females with tertiary education – increase of 40.6%, while in the case of men similar growth rate accounted for 28%. At the same time the employment of women with primary education diminished by 42.1%, while for men by 38.6%.[21]

Obtaining further qualifications and whether this has resulted in higher pay, another job or whether this had other positive effects reveals that Finland and Poland seem more alike, but that in the Netherlands proportions obtaining further qualifications are much higher. However, Dutch women, although the proportion of women obtaining further education is higher on the Netherlands than in Finland and Poland, score less on obtaining further education than men, especially Dutch mothers compared with Dutch fathers.

Central Statistical Office collected in 2002 indicate the total number of working hours for all employed in the company and total gross wage.

[20] Poland had two school reforms. In 1966, the first reform – extended primary school from 7 to 8 years. People born after June 1952, were the first, who were covered by this reform. In 1999, a second reform of the education system–1) shortened primary school – from 8 years till 7 years, added a new stage in education – grammar school (in Polish – gimnazjum) – 3 years, and shortened basic vocational from 3 to 2 years, general secondary from 4 to 3, vocational secondary from 5 to 4 years of education. From June 2005 people having had their education after the second reform may enter the labour market. (Information provided by M.Andralojc and P.Michon)

[21] via voce Morawksi (Warsau University)

Women score slightly better on finding another job due to further qualifications, whereas men seem to benefit slightly more from higher pay.

Household characteristics

Between 38% and 58% of our samples have one or more children. We have included specific information on children: whether they live at home, live independently or live at home only part of the week, their age, which we categorized according to the social policies on combining paid work and child care for parents, and the number of children. About a quarter of all parents have their oldest child in the age category 0-3 years, which is fairly high. Only Finnish mothers are an exception: only 9 percent has an oldest child in this age, which may be explained by the long parental leave. Our data reflect more "traditional" specialisation in main responsibility for paid work (for men) and unpaid care (for women) for employed parent's households than for employed childless women and childless men living together with their partner. However, a higher proportion of Polish mothers is mainly responsible for the household income compared with all Polish women.

Labour market characteristics

Moreover, we include information on career break, the length, the reason for the break, the income source during the break, and the timing of the break as regards before, at or after the first child was born if there was a child born. Furthermore, we include information on part-time work and the reasons for it.

As expected, women are proportionately more often employed in fixed term contracts than men in all three countries, and a similar pattern in shown for mothers and fathers although the rates of fixed term contract, and the difference between females and males, are lower for parents in all three countries. There is one exception: Polish mothers are more likely to be employed in a fixed term contract of two years or more than the total of Polish women. In addition, the expectation to be again employed in a fixed term contract is higher for women than men, but not in Poland where more men expect to be in a fixed term contract again than women.

Figures 1-3 in the appendix depict wage age and wage experience curves by gender and parenthood (and having obtained higher than ISCED4 level education or not in Finland, the Netherlands and Poland.

6. Results

In this study, we ignore issues surrounding potential selection effects and endogeneity, and estimate models using OLS. Table IV-X present the results from our regressions, with

the natural log of hourly wages as the dependent variable and parenthood and related variables among the explanatory variables. Each Table shows the results from a different specification, testing the hypotheses described above comparing women and men aged 22-55 living in a couple in Finland, the Netherlands and Poland. All Tables include firstly, education level obtained, which we recoded into having less than ISCED 4 level of education, having ISCED4 and higher than ISCED 4 level of education, and a categorical variable indicating the industry of work (NACE-code), and the size of the firm/organisation.

Firstly, we start comparing our estimations of the most simple OLS equation with the proxy of actual human capital (age) and the model with the actual human capital as we measure it by pre-break experience (if there was a break, otherwise this variable is the number of years in employment till the year of survey), the time period of the break and the time of post break experience. Furthermore, we compare whether never been married has an effect on these estimations. Tables IV.a-d show the results and including age results in a negative effect of having a child on women's wages in Finland and the Netherlands which is in line with other results in the literature reported in Appendix A.10, and a positive effect on men's wages in the Netherlands. Controlling for never been married takes away the significance of the negative effect of children on Finnish women's wages. The model estimating the effect of actual human capital does not show any effect of children on women's wages, and positive effects on Dutch men's and Polish men's wages. Comparing the effects of pre break experience across gender by country shows that in Finland the wage increase per additional year of employment pre break experience is lower than for Finnish men, whereas this gender difference is small in the Netherlands and Poland. The break duration has a negative effect on men's wages in the Netherlands and Poland (showing depreciation of human capital during tine out), and years of post-break experience have a positive wage effect in the Netherlands (pointing at restoration of human capital after the career break). However, controlled for never been married the effect of post break experience is not significant anymore for Dutch women which leads us to think that married Dutch women compared to never married Dutch women end up in jobs after their career break with less opportunities for human capital restoration, whereas the period of break shows a negative effect for Dutch women controlled for never been married (leading us again to think that especially married women as compared with never married women suffer from depreciation of human capital during career

break). Controlling for never been married takes away the positive effect of parenthood for Polish men's wages.

Next, we extend the model with actual human capital and never been married with more detailed specifications of having children such as information whether the child lives at home, or lives in dependently, or only lives at home part of the week, the elapsed duration of the parenthood (measured in years the age of the children) and the number of children in Tables V.a-c.

Including the age of the oldest child takes away the significance of the effect of the period of break on wages in the Netherlands and Poland showing that the break is caused by the entering parenthood and elapsed duration of parenthood. The years of post break experience do now show a positive effect on Finnish men's wages showing restoration of human capital.

The positive wage effects of children for Dutch men show to be related to the oldest child being in the ages 6-16 years. This seems an indication that Dutch men benefited from fatherhood career wise, perhaps by their opportunities to invest in further wage enhancing human capital because of their partner's specialisation in unpaid care work for children and their partner's support of a labour market career. Furthermore, living with a child part of the week only has a positive effect on Dutch men's wages. Living with children part of the week in most cases applies to divorced parents. The causality is complex to unravel at this stage. Father's specialisation into paid work while being a parent might have led t a divorce. On the other hand, a divorce may have led to increased investments in a paid career in order to pay for additional costs caused by the divorce.

The model specification including information on whether child are living at home or live independently show that Finnish women's wages are affected negatively by children living independently. This makes the country with the best available options for combining paid work and care for children show negative effects for the human capital accumulation of mothers. The positive effect of children on Dutch men's wages is associated with two children living at home.

In the next models we includes tenure with the current employer (with is correlated with the actual experience variable). The effect of tenure takes away the effect of the time having a break for Dutch men. On the other hand, in Poland, the effect of tenure is not significant in men's wages, but makes the effect of break significantly negative. The effect of tenure is significant on Finnish women's wages and Dutch men and women's wages.

The final set of models VII.a-c analyse the wage effects of whether additional qualifications were obtained and whether additional qualifications have resulted in higher pay, another job or whether this led to other positive effects, and secondly, labour market characteristics such as flexible non-tenured contracts, and expectations on renewal of the flexible contract or expectations to a permanent position (Table VII.a), and in addition to the specification in Table VII.a, having a full-time job (Table VII.b), and additional information on household characteristics and the timing of the career break and the reasons for career break in Table VII.c. We can only perform the analyses of Table VII.c in the Netherlands. Firstly, having obtained additional qualifications that led to higher pay indeed show positive wage effects in Finnish men's wages, Dutch men's and women's wages, and Polish women's wages; whereas we also find positive wage effects of obtained qualifications that led another job in Finnish women's wages, and also in Dutch men's and women's wages and Polish women's wages.

If qualifications were obtained that led to other benefits, then this was found associated with wages for bother gender in all three countries. To obtain further qualifications had only a negative effect in Poland.

Fixed term contracts shorter than one year have negative effects on wages of all groups in our analyses except the effect is not significant for Polish men. A contract between 1 and 2 years is negative in Polish wages, in Dutch women's wages and in Finnish men's wages. A fixed term contract of two years of more shows a negative effect on Finnish women's wages. Expecting a permanent position only shows to be associated, and positively, with Dutch women's wages.

The extensions of the model in Tables VII show positive effects of the oldest child being between 0-3 years, and the oldest child being between 6-12 years old, whereas a negative effect is found for Polish men's wages if there oldest child is between 6-12. Inclusion of working full-time shows that Finnish women's wages are associated with fulltime work positively.

The final model shows that in the Netherlands having a career break before the first child is born, at the time the first child is born or after the first child is born do all result in negative wage effects for Dutch men, but the highest negative effect is found if the break is taken when the first child is born. However, this effect is totally offset by the effect of leave coverage during the career break for Dutch men. No such effects are revealed for Dutch women. And, unfortunately there was not sufficiently information included in the other two countries to estimate the final model. Further, the specification of the final

model aims at unraveling whether signaling by taking a career break plays a role in addition to human capital depreciation. We tested for this by analyzing the reasons for time out. Similarly, the more detailed specification aimed at finding effects of starting part-time work before the birth of the first child or after and the number of years working part-time.

Children who live outside the home show no significantly negative effect on women's wages. This contradicts the human capital accumulation hypothesis over the specialisation hypothesis in that women retain the human capital deficits of motherhood even after children leave the house or do not stay in the household for part of the week. Children who live outside of the home have a positive effect on Polish men's wages, indicating that men may continue to have the benefits from being a parent especially after the children live independently.
The results indicate that never married Dutch women suffer a wage penalty relative to women who have (been) married of between 4% but also never married Finnish and Dutch men suffer from a wage penalty.
Being the main responsible for household income has a positive wage effect on men and women. Being the main responsible for household care is negatively associated with wages for men and women in the Netherlands, for Finnish men and for Polish women. These associations are only very slightly reduced by including the variable on domestic help (which by itself has a strong association with wages although we can not analyze the causality here).

Tables VII-IX include information on the age of the children. We find no evidence of a statistically significant relationship between wages and elapsed duration of the parenthood, evidence contrary to the human capital accumulation argument and in favour of the employer favouritism hypothesis. We also do not find a negative and statistically significant association between the number of children and wages, which is also contrary to the human capital accumulation argument and in favour of employer favouritism for men.
These OLS results suggest that observable characteristics, household specialisation, human capital accumulation and employer discrimination explain a large proportion of the motherhood wage penalty observed in the raw data for Finnish and Dutch women but

also reveals that variables related to the labour market and social policies are important in explaining men's and women's wages in the countries we have analysed.

7. Conclusions

In this paper we provide new and unique evidence on the potential relationship between parenthood and wages among women and men in Finland, the Netherlands, and Poland. Cross-sectional analysis yields a wage penalty for mothers of about 4% when potential experience is controlled for consistent with much of the previous literature. However, as it is shown independent effects of children lose significance if actual human capital is controlled for. Furthermore, we find that in the case of Dutch fathers, children affect wages positively and more so when there are two children at home, and when they are older. This may point at the specialisation effect in Dutch men's wages. However, we also found that for both women and men never married had a negative effect on their wages, which may mean that women also benefit in their wage form being married. Although we found for men and women in the Netherlands that being the main responsible for household income is associated with higher wages, we only found a negative effect on women's wages for being the main responsible for household tasks. Our analysis showed that the main effect of children in women's wages (in Finland and the Netherlands) is the difference between potential experience and actual experience. There did not seem to be an additional exogenous effect on women's wages as it was found in the UK (Table A.9). The age of children (the elapsed duration of parenthood) did not give support controlled for the actual employment experience (and therefore used to pick up the additional effect of children to the years of employment experience accumulation due to children) to the human capital accumulation hypothesis, but it seems to give support to the employer favouritism hypothesis in the case of fatherhood. Also the number of children did not show consistent patterns within countries, across gender and across countries, which leads us to conclude that the relationship between parenthood and wages needs more detailed analyses in order to find more strong evidence in favour of the specialisation, human capital accumulation and employer favouritism hypotheses. Especially the selection into paid work and having children should be further investigated by using making use of data source with information on people not participating in paid work.

Our analysis, however, has found that the labour market effects of education, of obtaining further qualifications and of fixed term contracts are significant in determining wages in

the three countries analysed. Furthermore, it also seems that in Poland the effects of parenthood are very small. Our Polish results however, seem in line with other research in Poland showing that Polish women have invested in education strongly, and that Polish men who have been unemployed suffer wage consequences.

Although our data do not come from a random sample in general the pattern showed in the descriptive tables II and III makes sense: hourly wages, employment experience, the part-time rates, the reasons for working part-time, career break and its causes and income coverage during career break seem general to depict the situation in the countries analyses as we would expect from other research and from other sources on social policies and labour markets.

There is much scope for further research such as extend the research to more countries, and comparing our analysis within countries in a more detailed analysis of the wage effects of career breaks (reason and timing) by gender in more detail if the number of observations increases by continuous data collection in the coming years (especially if all countries would include household information in their national questionnaires).

References

Adema, W. (2001), An overview of benefits that foster the reconciliation of work and family life in OECD countries, *Labour market and social policy occasional papers* 20.

Aliaga, C. (2005), Gender-gaps in the reconciliation between work and family life, *Eurostat Statistics in Focus* 4/2005, Luxembourg: Office for Official Publications of the European Communities.

Bardasi E. and M. Taylor (2004) Marriages and Wages, Research paper presented to the BHPS 2005 conference, Colchester, UK.

Becker, G.S. (1973), A theory of marriage: Part I, *Journal of Political Economy* 81 (4), 813-846.

Becker, G.S. (1974), A theory of marriage: Part II, *Journal of Political Economy* 82 (2), S11-S26.

Becker, G.S. (1991), *A treatise on the family*, Cambridge MA: Harvard University Press.

Berg-le Clercq, L.E, A. van den Heuvel & D.M.E.G.W. Snellen (2002), *Kinderopvang in gemeenten, de monitor over 2001*, Rapport in opdracht van het ministerie van Sociale Zaken en Werkgelegenheid, opgesteld door SGBO, Onderzoeks- en Adviesbureau van de Vereniging van Nederlandse Gemeenten BV, Den Haag.

Borkowska S. (2004a) (ed.), Wynagrodzenia – rozwiązanie problemów w praktyce*, Oficyna Ekonomiczna,* Kraków. (The importance of compensation and reward systems for employees' motivation towards work: evidence from case studies).

Borkowska S. (2004b), Strategie wynagrodzeń, *Oficyna Ekonomiczna*, Kraków (Remuneration and new methods of rewarding)

Chun, H. and I. Lee (2001), Why do married men earn more: Productivity or marriage selection?, *Economic Inquiry* 39 (2), 307-319.

Cornwell, C. and P. Rupert (1995), Marriage and earnings, Federal Reserve Bank of Cleveland *Economic Review* 31 (4), 10-20.

Daniel, K. (1992), Does marriage make men more productive?, *NORC Discussion Paper* no. 92-2, University of Chicago.

Davies, H. and R. Peronaci (1997), Male wages and living arrangements: Recent evidence for Britain, *Discussion Paper in Economics* 5/97, Birkbeck college, University of London.

Del Boca, D. and C. Wetzels eds. (2007), *Social Policies, Labour Markets and Motherhood: a Comparative Analysis of European Countries*. Cambridge University Press, October.

Del Boca ,D., S. Pasqua and C. Pronzato (2004), Employment and Fertility Decisions in Italy, France and the UK, *Working Paper ChilD* 8/2004.

Del Boca, D., S. Pasqua, C. Pronzato and C. Wetzels (2007), Fertility, Work, and Wages: An empirical analysis using the European Household Community Panel, in: Del Boca D. and C. Wetzels (eds.), *Social Policies, Labour Markets and Motherhood: a Comparative Analysis of European Countries*. Cambridge University Press, October.

Disney, R. and E. Whitehouse (1996), What are occupational pension plan entitlements worth in Britain?, *Economica* 63, 213-38.

Dragstra, A. & K.G. Tijdens (2004), How many hours do you usually work? An analysis of the working hours questions in 26 large-scale surveys in 6 countries and the European Union. Amsterdam, University of Amsterdam, Amsterdam Institute for Advanced Labour Studies AIAS, *Working Paper* 04/31, www.uva-aias.net/files/aias/wp31.pdf

Dupuy A. and D. Fernandez-Kranz (2007), International differences in the Family Gap in Pay: the role of Labour Market Institutions, IZA working paper No 2719,

Eurostat (1999), *European Community Household Panel (ECHP): Selected Indicator for the 1995 wave*, Office for Official Publications of the European

Communities, Luxembourg.

Eurostat (2002), *European Community Household Panel (ECHP):UDB Description of variables*, *Data Dictionary, Codebook and Differences between countries and waves*, doc Pan 166/2002-12.

Evans, J. M., D. C. Lippoldt, P. Marianna (2001), Trends in working hours in OECD countries. Paris, Organisation for Economic Co-operation and Development (OECD*), Labour Market and Social Policy Occasional Papers* No 45, Executive summary of the Chief Labour Inspector's Report on the National Labour Inspectorate's activity in 2003, http://pip.bip.ornak.pl, 30.03.2005.

Gray, J.S. (1997), The fall in men's return to marriage: Declining productivity effects or changing selection?, *Journal of Human Resources* 32 (3), 481-504.

Greenhalgh, C. (1980), Male-female wage differentials in Great Britain: Is marriage an equal opportunity?, *Economic Journal* 90, 751-775.

Gustafsson S., E. Kenjoh and C. Wetzels (2003), Employment Choices and Pay Differences between Non-Standard and Standard Work in Britain, Germany, Netherlands and Sweden, in: Houseman, S. and Osawa, M. (eds.) *Nonstandard Work Arrangements in Japan, Europe, and the United States*,Upjohn Institute for Employment Research. Pp. 215-267.

Gustafsson, S., C. Wetzels, J. D. Vlasblom and S. Dex (1996), Labor Force Transitions in Connection With Child Birth A Panel Data Comparison Between Germany, Great UK and Sweden, *Journal of Population Economics* 9, 223-246.

Houseman, S. and Osawa, M. (eds.), *Nonstandard Work Arrangements in Japan, Europe, and the United States*,Upjohn Institute for Employment Research.

Jacobsen, J. and W. Rayack (1996), "Do men whose wives work really earn less?", American Economic Review, 86 (2), pp.268-273.

Joshi, H. and M-L Newell (1989), Pay differentials and parenthood: Analysis of men and women born in 1946, *Research Report*, Institute for Employment Research, University of Warwick.

Korenman, S. and D. Neumark (1991), Does marriage really make men more productive?, *Journal of Human Resources* 26(2), 282-307.

Knijn, T. (2003), Social and family policy: the case of the Netherlands, *third report for the project 'Welfare policy and employment in the context of family change'*, drafted for the meeting, 8-9 October in Utrecht, the Netherlands.

Locatelli M., Moscato V. and Pasqua S. (2001), The European Community Household Panel (ECHP):Elements for Users with Special Focus on Labour and Household Economics, *Working Paper ChilD* 24/2001.

Loh, E.S (1996), Productivity differences and the marriage wage premium for white males, *Journal of Human Resources* 31 (3), 566-589.

Lourie, J. (1999), Family Leave. House of Commons, *Library Research paper 99/89*, 11 November.

Malkowska, D. 2004, *Wynagrodzenia – ewidencja, dokumentacja, rozliczenia, Ośrodek Doradztwa i Doskonalenia Kadr Sp. z o. o*., Gdańsk 2004. The English title: The wages – the record, documentation, calculations.

Matysiak, A., (2005), Part-time employment in Poland – family friendly employment form or a mere alternative for the low skilled?, *paper for the LOWER conference*, Mannheim, 15-16 April.

Michoń, P. (2005), Economics and the debate on care in social policy. What can economists learn from mothers caring for their children?, Zeszyty Studiów Doktoranckich Akademii Ekonomicznej w Poznaniu, *Wydział Ekonomii*, Poznań, p. 57-83.

Ministry of Social Affairs and Health (2002), *Finnish Social Protection in 2002*, Helsinki, 28p.

Ministry of Social Affairs and Health (2003), *Trends and Social Protection in Finland 2003*, Helsinki.

Ministry of Social Affairs and Health (2004), Early Childhood Education and Care in Finland, *Brochure* 2004:14, Helsinki.

MISSOC (2003) (http://europa.eu.int/comm/employment_social/missoc2003/missoc_89_fr.htm)

Nakosteen, R.A. and M.A. Zimmer (1987), Marital status and the earnings of young men: A model with endogenous selection, Journal of Human Resources, 22 (2), pp.248-268.

NIDI (2003), Arbeid, zorg en beleid', Netherlands Interdisciplinary Demographic Institute, The Hague, *Demos* 8(19), September.

Polish Central Statistics Office 2003. Structure of wages and salaries by occupation in October 2002, Warsow.

OECD (2001), Starting Strong: Early Childhood Education and Care, OECD, Paris.

Reed, R. and K. Hartford (1989), The marriage wage premium and compensating wage differentials, *Journal of Population Economics* 2, pp.237-265.

Ribar, D. (2004), What do social scientists know about the benefits of marriage? A review of quantitative methodologies, *IZA Discussion paper* no. 998.

Schoeni, R.F. (1995), Marital status and earnings in developed countries, *Journal of Population Economics* 8, 351-359.

Stancanelli, E. (2003), Do fathers care?, OFCE, *Working paper* 2003-08, December. (http://www.ofce.sciences-po.fr/pdf/dtravail/wp2003-08.pdf)

The Clearinghouse on International Developments in Child, Youth and Family Policies (2003) *(*http://childpolicyintl.org/)

The Clearinghouse on International Developments in Child, Youth and Family Policies (2002), *Mother's day: more than candy and flowers, working parents need paid time-off. Issue brief on parental leave*, Spring (http://childpolicyintl.org/issuebrief/issuebrief5.htm)

Stratton, L. (2002), Examining the wage differential for married and cohabiting men, *Economic Inquiry* 40(2), 199-212.

Tijdens, K.G., (2006), The calculation of hourly wages in the WageInidicator dataset, *Report to the European Commission.*

Tijdens, K. and C. Wetzels (2005),Wage measurements and Determination using Survey Data, *Report on the Woliweb Workshop* 25.02.2005.

Tijdens, K.G. and C.Wetzels (2005), Classifications and Choosers in the Wage Indicator Questionnaires, *Report to the European Commission.*

Tijdens, K.G., C.Wetzels, M. Andralojc and P. Michon. (2005), Measuring wages and calculating hourly wages in the Wage Indicator dataset, *Report to the European Commission D07 State of the Art.*

Tijdens, K.G., C.Wetzels, H. Dribbusch, R. Bispinck, M. Andralojc, P. Michon, P.de Pedraza, R.de Bustillo, A.Usher, R.Storry, K. Kevatsalo, R. Sund, F.Tindemand, M. Gronbaek, T.Vandenbrande, M.Lamberts, T.Addabbo and G.Giannelli (2005), The Wage Inidicator questionnaire in nine countries, *Report to the European Commission D20.*

Tijdens, K.G., C.Wetzels, M. Andralojc and P. Michon. (2005), Measuring working hours in the Wage Indicator dataset, *Report to the European Commission.*

The Clearinghouse on International Developments in Child, Youth and Family Policies (2003) http://childpolicyintl.org/ .

TSFEPS (2002), *Changing Family Structure and Social Policy: Childcare Services in Europe and Social Cohesion*, national reports. (http://www.emes.net/en/recherche/tsfeps/etudes.php)

Vehovar, V. 2003, Web Surveys: A meta-analysis. Presentation at the Institute of Statistical Mathematics, Tokyo, March 25.

Waldfogel, Jane (1995), The price of motherhood: family status and women's pay in a young British cohort, *Oxford Economic Papers* 47, 584-640.

Wetzels, C.M.M.P. (2006), Wages and Children in Europe: A Review, *Research Paper for the Woliweb project.*

Wetzels, C.M.M.P. (2001), *Squeezing Birth into Working Life, household panel data analysis comparing UK, Germany, the Netherlands and Sweden*. Ashgate Publishing Ltd. Aldershot, Hampshire.

Wetzels, C.M.M.P. (2007), Motherhood and Wages, in: Del Boca, D. and C. Wetzels (eds., *Social Policies, Labour Markets and Motherhood: a Comparative Analysis of European Countries*. Cambridge University Press, October

Wetzels, C. (2006), Wage Analysis in Europe: A Comparison of European Community Household Panel and Wage Indicator Survey Data, *Research Paper for the WOLIWEB project*. Work in progress.

Tables

Table I *Independent variables defined*

Category	Variable	Description
Personal Characteristics: Human Capital	(1) Respondent's age	Continuous variable
	(2) Respondent's education	Three dummy variables are used: tertiary level education, secondary level of education, and less than secondary level of education. The latter level is used as the base category.
	(3) Obtained additional qualifications	Dummy variable: 1= if having obtained additional qualifications; zero otherwise
	(4) Obtained additional qualifications led to higher wage	Three dummy variables indicating whether obtained additional qualifications led to 1) higher wage; 2) other job; 3) other improvements of career; zero otherwise
Household Characteristics	(1) Having a child	Dummy variable: 1 = if having a child; zero otherwise.
	(2) Sharing household with a child part of the week	Dummy variable: 1 = if sharing household with a child part of the week; zero otherwise.
	(3) Child in household	Dummy variable: 1 = a child living in the household; zero otherwise.
	(4) Child lives independently of household	Dummy variable: 1 = a child lives out of the parental household; zero otherwise.
	(5) Number of children living in household	Three Dummy variables: indicating one child, two children and three or more children living in household; zero otherwise.
	(6) Age of oldest child present in the household:	Four dummy variables for oldest child in household: age between 0-3 years; between 4-5; between 6-12; between 12-16; zero otherwise.
	(7) Main responsible for household income	Dummy variable: 1 = main responsible for household income; zero otherwise.
	(8) Main responsible for household care	Dummy variable: 1 = main responsible for household care; zero otherwise.
	(9) Domestic help	Dummy variable: 1 = having paid domestic help; zero otherwise.
	(10) Never married	Dummy variable: 1 = never married; zero otherwise.
	(11) Partner has permanent employed	Dummy variable: 1 = partner has permanent contract, zero otherwise.
	(12) Partner has fixed term contract	Dummy variable: 1 = partner has fixed term contract, zero otherwise.
	(13) Partner is self-employed	Dummy variable: 1 = partner is self-employed, zero otherwise.
	(14) Partner is unemployed	Dummy variable: 1= partner is unemployed; zero otherwise
Labor market characteristics	(1) Experience pre break	Continuous variable (if no break till survey year)
	(2) Duration of break	Continuous variable (0 if no break)
	(3) Experience post-break	Continuous variable (0 if no break)
	(4) Reasons for break	Four dummy variables indicating the reasons for career break: 1) unemployment; 2) training; 3) care for child < 1 year; 4) family reason

(5) Income during break	Four dummy variables indicating the source of income during career break: 1) unemployment benefit; 2) leave coverage; 3) partner or family; 4) other;
(6) Timing of break in relation with timing of first child	Three dummy variables indicating the timing of break in relation to the birth of the first child: 1) Before 1st child; 2) at 1st child; 3) after 1st child's birth;
(7) Timing of part-time work in relation with timing of first child	Two dummy variables indicating whether the respondent worked part-time before the first child was born, and after the first child was born;
(8) Years part-time before 1st child	Continuous variable (0 if no part-time work before the birth of the first child)
(9) Years part-time after 1st child	Continuous variable (0 if no part-time work after the birth of the first child)
(10) Tenure with current employer	Continuous variable
(11) Respondent works full-time	Dummy variable: 1= resp. works full-time; zero otherwise
(12) Respondent always worked full-time	Dummy variable: 1= resp. always worked full-time; zero otherwise
(13) years full-time	Continuous variable (0 if never worked full-time)
(14) reasons working part-time	Three dummy variables indicating reasons for working part-time: 1) education; 2no full-time job available; 3) care for children
(15) Respondent expects to obtain permanent contract	Dummy variable: 1= resp. expects a permanent position; zero otherwise
(16) Respondent expects to work on a fixed term basis again	Dummy variable: 1= resp. expects to work on a fixed term base again; zero otherwise
(17) Duration of fixed term contract	Four dummy variables indicating contract duration: 1) less than 6 months; 2) between six months and one year; 3) between one and two years; 4) more than two years; zero otherwise;
(18) Firm size	Categorical variable: 3
(19) NACE	Categorical variable: 4

Table II Characteristics of Husbands and Wives in paid work: Means and standard deviations, percentages for dichotomous variables)

	Finland				The Netherlands				Poland			
	Women		Men		Women		Men		Women		Men	
Variable*	N = 2,475		N = 2,206		N = 2,743		N = 3,376		N = 1,365		N = 1,244	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
Log hourly wage	2.543	0.40	2.784	0.46	2.572	0.41	2.790	0.43	1.23	0.672	1.52	0.739
(1) Respondent's age	36.042	9.10	35.143	8.21	32.746	8.12	37.009	8.28	31.96	7.431	33.35	7.681
(2) Respondent's education	3.591	1.16	3.399	1.30	4.056	1.05	3.864	1.18	4.78	0.499	4.69	0.743
(3) Obtained furth.qual	0.342		0.289		0.612		0.734		0.43		0.39	
(4) Higher pay due to frth qual	0.042		0.049		0.104		0.199		0.05		0.07	
(5) Other job due to furth qual	0.040		0.028		0.118		0.132		0.09		0.08	
(6) Other improve. due to fqal.	0.131		0.121		0.146		0.166		0.14		0.13	
Household characteristics												
(1) Having a child	0.539		0.542		0.381		0.575		0.53		0.58	
(2) Child part of the week	0.034		0.047		0.087		0.120		0.01		0.03	
(3) Children in household	0.475		0.484		0.331		0.535		0.51		0.56	
(4) Children live independently	0.191		0.153		0.101		0.121		0.07		0.08	
(5) Number of children home:												
One child	0.170		0.179		0.127		0.170		0.31		0.32	
Two children	0.211		0.211		0.156		0.267		0.17		0.19	
Three children	0.075		0.073		0.040		0.080		0.02		0.04	
Four or more children	0.019		0.022		0.008		0.018		0.00		0.01	
(6) Age of oldest child♠ :												
Between 0-3 years	0.049		0.132		0.090		0.132		0.13		0.15	
Between 4-6 years	0.051		0.072		0.050		0.090		0.07		0.09	
Between 6-12 years	0.109		0.121		0.074		0.125		0.10		0.09	
Between 12-16 years	0.082		0.063		0.052		0.071		0.05		0.06	

	Finland				The Netherlands				Poland			
	Women		Men		Women		Men		Women		Men	
Variable*	N = 2,475		N = 2,206		N = 2,743		N = 3,376		N = 1,365		N = 1,244	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
(7) Main responsible hh. Inc.	0.108		0.252		0.315		0.700		0.21		0.36	
(9) Main resp. housework	0.334		0.034		0.695		0.083		0.38		0.07	
(10) Domestic help	0.018		0.016		0.141		0.107		0.03		0.02	
(11) Never married	0.332		0.340		0.524		0.353		0.22		0.19	
(12) Partner permanent contract	0.364		0.230		0.697		0.571		0.30		0.24	
(13) Partner fixed term contract	0.048		0.058		0.121		0.120		0.10		0.10	
(14) Partner is self-employed	0.055		0.014		0.089		0.034		0.09		0.03	
(15) Partner is unemployed	0.019		0.027		0.024		0.031		0.04		0.05	
Labour market characteristics												
(1) Experience pre-break (yrs)	13.131	9.83	12.073	9.08	10.084	7.59	14.728	9.38	9.16	7.847	10.06	8.405
(2)⌂ Duration of break (yrs)	0.234	0.93	0.157	0.74	0.732	2.58	0.164	0.80	0.15	0.601	0.12	0.646
(3)⌂ Experience post break	0.959	3.30	1.011	3.33	1.514	4.14	1.575	4.98	0.57	2.288	0.67	2.763
(4)⌂ Br_unemployment	0.085		0.097		0.061		0.094		0.08		0.08	
Br_training	0.037		0.029		0.013		0.013		0.01		0.02	
Br_care for child <1yr	0.038		♣		0.063		0.001		0.03		0.00	
Br_fam.reason	0.015		0.001		0.053		0.003		0.02		0.00	
(5)⌂ Br_inc_unempl.b	0.081		0.094		0.077		0.113		0.05		0.04	
Br_inc_leavecov	0.004		0.003		0.004		0.001		0.01		♣	
Br_inc_fam/partner	0.030		0.013		0.067		0.012		0.07		0.06	
Br_inc_disabt	0.012		0.013		0.016		0.012		0.00		0.00	
Br_inc_oth	0.062		0.040		0.055		0.035		0.01		0.03	
(6) ⌂⌂ Break before first child	0.165		0.181		0.278		0.465		0.16		0.22	
⌂⌂ Break when first child	0.015		0.010		0.067		0.013		0.02		0.01	

	Finland				The Netherlands				Poland			
	Women		Men		Women		Men		Women		Men	
Variable*	N = 2,475		N = 2,206		N = 2,743		N = 3,376		N = 1,365		N = 1,244	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
⌂⌂ Break after first child	0.052		0.041		0.046		0.044		0.03		0.03	
(7) # Part-time before first child	0.001		♣		0.027		0.003		0.00		0.00	
# Part-time after first child	0.015		0.000		0.191		0.027		0.01		0.00	
(8) # years part-time bfr 1st child	0.003	0.13	♣		0.068		0.011		0.00		0.00	
(9) # years part-time after 1st chld	0.050	0.56	0.000	0.02	1.482	3.80	0.114	0.94	0.02	0.348	0.01	0.297
(10) tenure curr.empl	6.940	7.69	6.896	7.16	4.821	4.94	7.789	7.60	4.98	5.805	5.63	6.592
(11) Respondent works fulltime	0.918		0.982		0.562		0.947		0.95		0.98	
(12) Resp. always worked ft	0.344		0.335		0.443		0.878		0.41		0.39	
(13) Number of yrs work. Ft	5.626	9.88	5.009	9.01	4.057	6.42	14.635	10.27	4.50	7.654	4.78	8.218
(14) Pt work_educ	0.010		0.005		0.029		0.007		0.01		0.00	
Pt_no ft job	0.038		0.005		0.024		0.006		0.02		0.01	
Pt_child	0.013		0.000		0.249		0.024		0.01		0.00	
(15) Permanent contract	0.818		0.925		0.758		0.874		0.70		0.78	
(16) Duration fixed term contr.:												
Two yrs and more	0.007		0.004		♣		♣		0.05		0.03	
Between one and two years	0.027		0.007		0.022		0.015		0.06		0.05	
Between 6 months & 1 year	0.072		0.029		0.134		0.069		0.08		0.04	
Less than 6 months	0.057		0.023		0.046		0.022		0.05		0.04	
(17) Resp. expects permanent contr.	0.032		0.018		0.091		0.057		0.12		0.10	
(18) Resp. expects fixed term contr.	0.087		0.037		0.072		0.035		0.09		0.06	
(19) Firm size (three cat.)	1.416	0.68	1.623	0.79	1.587	0.79	1.629	0.80	1.45	0.697	1.69	0.804
(20) NACE 1 (four cat.)	2.743	1.06	2.180	1.08	2.731	1.12	2.055	1.09	2.35	2.312	2.05	2.103

Key: * = For a description of these variables please refer to Table I. ♣ = too few observations; ⌂= includes no break (=0); ⌂⌂== includes no break (=0).and no child (=0); ♠==no child=0; # = includes no part-time = 0

Table III Characteristics of Parents in Employment (Means and standard deviations, percentages for dichotomous variables)

	Finland				The Netherlands				Poland			
	Mothers		Fathers		Mothers		Fathers		Mothers		Fathers	
Variable*	N = 1,333		N = 1,195		N = 1,045		N = 1,942		N = 728		N = 720	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
Log hourly wage	2.564	0.40	2.807	0.46	2.619	0.41	2.858	0.43	1.26	0.701	1.56	0.762
(1) Respondent's age	40.965	7.67	38.430	7.93	38.473	7.81	40.481	7.40	35.41	7.847	36.68	7.764
(2) Respondent's education	3.440		3.314	1.32	3.772	1.16	3.708	1.23	4.69	0.563	4.58	0.893
(3) Obtained furth.qual	0.407		0.339		0.689		0.802		0.46		0.43	
(4) Higher pay due to frth qual	0.058		0.058		0.105		0.226		0.06		0.09	
(5) Other job due to furth qual	0.050		0.042		0.150		0.152		0.08		0.07	
(6) Other improve. due to f.qual.	0.137		0.135		0.157		0.182		0.14		0.15	
Household characteristics												
(2) Child part of the week	0.041		0.079		0.213		0.200		0.03		0.05	
(3) Children in household	0.882		0.894		0.870		0.930		0.95		0.97	
(4) Children live independently	0.354		0.282		0.265		0.211		0.13		0.14	
(5) Number of children home:												
One child	0.315		0.330		0.332		0.295		0.58		0.56	
Two children	0.392		0.390		0.410		0.464		0.32		0.33	
Three children	0.139		0.134		0.106		0.140		0.05		0.07	
Four or more children	0.036		0.040		0.022		0.032		0.00		0.01	
(6) Age of oldest child :												
Between 0-3 years	0.092		0.244		0.236		0.230		0.24		0.26	
Between 4-6 years	0.094		0.133		0.131		0.157		0.13		0.15	
Between 6-12 years	0.203		0.223		0.195		0.218		0.19		0.16	
Between 12-16 years	0.152		0.117		0.138		0.123		0.09		0.10	
(7) Main responsible hh. Inc.	0.104		0.293		0.301		0.789		0.25		0.39	

	Finland	The Netherlands	Poland

Variable*	Mothers N = 1,333		Fathers N = 1,195		Mothers N = 1,045		Fathers N = 1,942		Mothers N = 728		Fathers N = 720	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
(9) Main resp. housework	0.384		0.033		0.766		0.050		0.44		0.06	
(10) Domestic help	0.026		0.022		0.154		0.102		0.04		0.03	
(11) Never married	0.119		0.141		0.197		0.128		0.05		0.04	
(12) Partner permanent contract	0.417		0.269		0.731		0.536		0.33		0.28	
(13) Partner fixed term contract	0.035		0.047		0.078		0.082		0.08		0.07	
(14) Partner is self-employed	0.071		0.014		0.088		0.037		0.09		0.03	
(15) Partner is unemployed	0.021		0.023		0.028		0.030		0.05		0.05	
Labour market characteristics												
(1) Employment experience pre-break (yrs)	17.447	9.85	15.167	9.49	13.664	8.50	18.128	9.28	12.50	8.597	13.30	8.966
(2) ⌂Duration of break (yrs)	0.287	1.07	0.178	0.87	1.699	3.89	0.182	0.93	0.21	0.749	0.12	0.750
(3) ⌂Employment exp. post break	1.129	3.82	1.161	3.70	2.995	5.72	1.921	5.75	0.79	2.908	0.85	3.412
(4) ⌂ Br_due to unemployment	0.066		0.099		0.058		0.101		0.08		0.08	
Break due to training	0.023		0.026		0.007		0.009		0.00		0.01	
Break due to care for child <1yr	0.068		♣		0.160		0.001		0.05		♣	
Break due to family reason	0.026		0.002		0.137		0.004		0.03		♣	
(5) ⌂Income Break: unempl.benefit	0.071		0.093		0.103		0.128		0.07		0.04	
Br_inc_leavecoverage	0.003		0.003		0.009		0.001		0.02		0.00	
Br_inc_fam/partner	0.029		0.013		0.142		0.008		0.06		0.06	
Br_inc_disabt	0.012		0.012		0.030		0.012		♣		♣	
Br_inc_oth	0.069		0.040		0.068		0.031		0.00		0.03	
(6) ⌂Break before first child	0.164		0.208		0.517		0.693		0.19		0.28	
⌂ Break when first child	0.028		0.018		0.176		0.022		0.04		0.01	
Break after first child	0.097		0.075		0.121		0.077		0.06		0.06	

	Finland				The Netherlands				Poland			
	Mothers		Fathers		Mothers		Fathers		Mothers		Fathers	
Variable*	N = 1,333		N = 1,195		N = 1,045		N = 1,942		N = 728		N = 720	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
(7)# Part-time before first child	0.002		♣		0.072		0.006		♣		♣	
# Part-time after first child	0.029		0.001		0.500		0.046		0.02		0.01	
(8) # years part-time bfr 1st child	0.006	0.17	♣		0.180	0.82	0.020	0.46	♣		♣	
(9) # years part-time after 1st chld	0.092	0.76	0.001	0.03	3.907	5.36	0.198	1.23	0.04	0.476	0.02	0.391
(10) tenure curr.empl	9.490	8.66	8.620	7.84	6.470	5.76	9.540	8.39	6.89	6.845	7.61	7.608
(11) Respondent works fulltime	0.923		0.987		0.266		0.941		0.95		0.98	
(12) Resp. always worked ft	0.409		0.397		0.169		0.893		0.45		0.43	
(13) Number of yrs work. Ft	8.259	11.68	7.024	10.49	2.753	7.14	18.256	10.24	6.52	9.304	6.67	9.643
(14) Missing info on (13)	0.077		0.013		0.734		0.059		0.05		0.02	
(15) Pt work_educ	0.003		0.003		0.017		♣		0.01		♣	
Pt_no ft job	0.029		0.003		0.011		♣		0.02		♣	
Pt_child	0.023		0.001		0.633		0.041		0.02		0.00	
(16) Permanent contract	0.889		0.949		0.817		0.906		0.77		0.83	
(17) Duration fixed term contr.:												
Two yrs and more	0.008		0.005		♣		♣		0.05		0.03	
Between one and two years	0.014		0.006		0.014		0.011		0.05		0.03	
Between 6 months & 1 year	0.041		0.018		0.095		0.047		0.06		0.03	
Less than 6 months	0.034		0.015		0.036		0.018		0.03		0.03	
(18) Resp. expects permanent contract	0.017		0.013		0.059		0.040		0.08		0.06	
(19) Resp. expects fixed term contract	0.057		0.026		0.050		0.023		0.09		0.05	
(20) Firm size (three cat.)	1.370	0.65	1.575	0.76	1.570	0.78	1.648	0.80	1.47	0.720	1.70	0.807
(21) NACE 1 (four cat.)	2.805	1.09	2.130	1.12	2.747	1.18	1.999	1.10	2.33	2.412	2.09	1.928

Key: * = For a description of these variables please refer to Table I. ♣ = too few observations.⌂= includes no break (=0); # = includes no part-time work = 0

Table III annex: Characteristics of Parents in Employment who had a career break (Means and standard deviations, percentages for dichotomous variables)

	Finland				The Netherlands				Poland			
	Mothers		Fathers		Mothers		Fathers		Mothers		Fathers	
Variable	N = 168		N = 116		N = 311		N = 201		N = 71		N = 47	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
Educat	3.321	1.25	2.931	1.28	3.511	1.19	3.413	1.27	4.45	0.650	4.57	0.853
Household characteristics												
Hhchildp	0.065		0.164		0.264		0.254		0.06		0.09	
CHLDHOMEa	0.839		0.871		0.859		0.891		0.97		0.96	
CHLDOUTa	0.375		0.379		0.370		0.318		0.11		0.19	
child1h	0.321		0.276		0.302		0.254		0.58		0.64	
child2h	0.357		0.440		0.363		0.433		0.35		0.26	
child3h	0.125		0.121		0.164		0.174		0.04		0.04	
child4h	0.036		0.034		0.029		0.030		♣		0.02	
ochld0_3	0.101		0.190		0.113		0.179		0.24		0.34	
ochld4_6	0.083		0.129		0.077		0.124		0.11		0.17	
ochld6_12	0.250		0.250		0.174		0.204		0.25		0.13	
ochld12_16	0.161		0.112		0.177		0.139		0.07		0.09	
Never married	0.101		0.095		0.129		0.149		0.04		0.06	
Labour market characteristics												
Prebreakexp	10.784	6.92	9.339	7.56	8.133	5.62	10.130	7.85	6.08	6.606	5.73	5.559
Period_br	2.274	2.14	1.836	2.21	5.707	5.29	1.761	2.37	2.13	1.298	1.89	2.315
Postbreakexp	7.577	6.97	8.198	6.00	8.788	6.68	10.353	9.08	6.65	6.197	7.40	7.439
br_unempl	0.399		0.655		0.129		0.567		0.55		0.62	
could not continue own business	0.006		0.009		0.010		0.040		0.03		0.13	
br_train	0.167		0.190		0.023		0.060		0.03		0.11	

	Finland				The Netherlands				Poland			
	Mothers		Fathers		Mothers		Fathers		Mothers		Fathers	
Variable	N = 168		N = 116		N = 311		N = 201		N = 71		N = 47	
	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.	mean	St.dv.
br_care_1yr	0.512		♣		0.521		0.010		0.48		0.02	
br_fam	0.196		0.017		0.460		0.035		0.30		0.04	
unemplbene~t	0.458		0.631		0.265		0.756		0.59		0.44	
Leavecov	0.012		0.018		0.029		♣		0.21		♣	
Partnfam	0.208		0.090		0.467		0.055		0.46		0.56	
disbenefit	0.089		0.099		0.098		0.090		♣		0.04	
othsource	0.512		0.288		0.193		0.184		0.01		0.13	
Brkbfrch	0.107		0.328		0.071		0.348		0.19		0.34	
Brkchld	0.227		0.159		0.572		0.180		0.34		0.17	
Brkaftch	0.643		0.474		0.350		0.453		0.46		0.49	
Tenempl	6.778	6.51	6.500	5.57	4.852	4.90	7.393	7.78	4.39	5.061	4.70	6.236
Ft	0.929		0.991		0.260		0.896		0.94		0.98	
Yrsftmis	0.071		0.009		0.740		0.104		0.06		0.02	
pt_ed	0.006		0.009		0.016		0.005		0.01		♣	
pt_nf	0.036		♣		0.016		0.020		0.04		0.02	
pt_ch	0.018		♣		0.601		0.065		♣		♣	
Perm	0.875		0.914		0.685		0.776		0.68		0.68	
contr1_2yrs	0.012		0.000		0.019		0.020		0.06		0.02	
contr_6mns~r	0.060		0.043		0.167		0.095		0.10		0.09	
contr_less~s	0.030		0.026		0.061		0.040		0.06		0.11	
exp_perm	0.012		0.009		0.087		0.080		0.08		0.13	
exp_newfix	0.071		0.052		0.080		0.045		0.15		0.11	
Firmsiz3	1.280	0.58	1.405	0.70	1.572	0.78	1.647	0.82	1.37	0.615	1.70	0.720
NACEFNUM	2.946	1.09	1.948	1.11	2.749	1.08	2.119	1.14	2.66	1.082	2.26	1.113

Key: * = For a description of these variables please refer to Table I. ♣ = too few observations.

Table IV.a. OLS estimates Dependent variable log hourly gross wage: proximate of actual human capital: age

Independent Variable*	Finland		NL		Poland	
	women	men	women	men	women	men
edul4	-0.090	-0.118	-0.074	-0.105	-0.350	-0.137
	(0.019)**	(0.023)**	(0.020)**	(0.016)**	(0.117)**	(0.104)
edum4	0.240	0.171	0.220	0.286	0.402	0.416
	(0.020)**	(0.023)**	(0.015)**	(0.015)**	(0.040)**	(0.047)**
age	0.051	0.063	0.091	0.074	0.119	0.171
	(0.008)**	(0.011)**	(0.008)**	(0.008)**	(0.021)**	(0.025)**
Age squared	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002
	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
Firm size	0.089	0.058	0.068	0.070	0.107	0.157
	(0.010)**	(0.012)**	(0.009)**	(0.009)**	(0.027)**	(0.025)**
NACE	-0.022	-0.026	0.018	-0.004	-0.010	0.018
	(0.007)**	(0.009)**	(0.006)**	(0.006)	(0.008)	(0.008)*
any children	-0.041	-0.038	-0.040	0.042	0.013	0.004
	(0.020)*	(0.022)	(0.017)*	(0.014)**	(0.042)	(0.051)
Constant	1.400	1.425	0.572	0.907	-1.434	-2.304
	(0.146)**	(0.212)**	(0.144)**	(0.146)**	(0.360)**	(0.449)**
Observations	2465	2194	2742	3371	1365	1242
R-squared	0.17	0.13	0.25	0.31	0.11	0.13

Key:

* = For a description of these variables please refer to Table I.

Robust standard errors in parentheses; * significant at 5%; ** significant at 1%

Table IV.b. OLS estimates Dependent variable log hourly gross wage
Proximate of actual human capital: age, including never married

Independent Variable*	Finland		NL		Poland	
	women	men	women	men	women	men
nevermarr	0.018	0.059	0.003	-0.023	0.077	-0.012
	(0.020)	(0.022)**	(0.017)	(0.017)	(0.046)	(0.054)
edul4	-0.090	-0.121	-0.074	-0.105	-0.343	-0.137
	(0.019)**	(0.023)**	(0.021)**	(0.016)**	(0.120)**	(0.104)
edum4	0.240	0.175	0.220	0.287	0.403	0.416
	(0.020)**	(0.023)**	(0.015)**	(0.015)**	(0.040)**	(0.048)**
age	0.052	0.066	0.091	0.073	0.126	0.170
	(0.008)**	(0.011)**	(0.008)**	(0.008)**	(0.021)**	(0.025)**
Age squared	-0.001	-0.001	-0.001	-0.001	-0.002	-0.002
	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
Firm size	0.089	0.058	0.068	0.070	0.107	0.157
	(0.010)**	(0.012)**	(0.009)**	(0.009)**	(0.027)**	(0.025)**
NACE industry	-0.022	-0.025	0.018	-0.004	-0.010	0.018
	(0.007)**	(0.009)**	(0.006)**	(0.006)	(0.008)	(0.008)*
any children	-0.036	-0.019	-0.039	0.035	0.034	0.001
	(0.021)	(0.022)	(0.018)*	(0.016)*	(0.044)	(0.052)
Constant	1.366	1.330	0.566	0.953	-1.588	-2.282
	(0.151)**	(0.217)**	(0.144)**	(0.152)**	(0.365)**	(0.468)**
Observations	2465	2194	2742	3371	1365	1242
R-squared	0.17	0.13	0.25	0.32	0.11	0.13

Key:

* = For a description of these variables please refer to Table I.

Robust standard errors in parentheses; * significant at 5%; ** significant at 1%

Table IV.c. OLS estimates Dependent variable log hourly gross wage
Actual human capital: prebreak experience, post break and break duration

Independent Variable*	Finland		NL		Poland	
	women	men	women	men	women	men
edul4	-0.099	-0.146	-0.081	-0.106	-0.370	-0.087
	(0.019)**	(0.023)**	(0.020)**	(0.016)**	(0.130)**	(0.106)
edum4	0.276	0.200	0.267	0.337	0.426	0.421
	(0.020)**	(0.023)**	(0.015)**	(0.016)**	(0.040)**	(0.049)**
prebreakexp	0.013	0.025	0.030	0.029	0.042	0.036
	(0.003)**	(0.003)**	(0.003)**	(0.003)**	(0.007)**	(0.009)**
prebrsq	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.007	0.017	0.012	0.013	0.018	0.025
	(0.006)	(0.009)	(0.006)*	(0.004)**	(0.019)	(0.017)
postbrsq	-0.000	-0.000	0.000	-0.000	-0.001	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.028	-0.026	-0.019	-0.039	0.066	-0.153
	(0.017)	(0.023)	(0.010)	(0.016)*	(0.092)	(0.069)*
period_brsq	0.002	0.002	0.001	0.001	-0.008	0.013
	(0.002)	(0.001)	(0.001)	(0.001)	(0.022)	(0.008)
Firm size	0.090	0.061	0.069	0.075	0.115	0.170
	(0.011)**	(0.012)**	(0.009)**	(0.009)**	(0.027)**	(0.025)**
NACE industry	-0.019	-0.027	0.015	-0.002	-0.007	0.018
	(0.006)**	(0.009)**	(0.006)*	(0.006)	(0.008)	(0.008)*
any children	0.021	-0.013	0.022	0.083	0.043	0.101
	(0.018)	(0.021)	(0.017)	(0.015)**	(0.041)	(0.051)*
Constant	2.316	2.556	2.090	2.226	0.501	0.655
	(0.032)**	(0.039)**	(0.028)**	(0.026)**	(0.068)**	(0.083)**
Observations	2451	2173	2734	3353	1355	1234
R-squared	0.16	0.12	0.22	0.29	0.11	0.11

Key:

* = For a description of these variables please refer to Table I.

Robust standard errors in parentheses; * significant at 5%; ** significant at 1%

Table IV.d. OLS estimates Dependent variable log hourly gross wage
Actual human capital: prebreak experience, post break and break duration, and never married

Independent Variable*	Finland		NL		Poland	
	Women	men	women	men	women	men
nevermarr	-0.011	0.045	-0.047	-0.057	0.050	-0.066
	(0.019)	(0.022)*	(0.017)**	(0.018)**	(0.046)	(0.055)
edul4	-0.099	-0.150	-0.079	-0.104	-0.367	-0.087
	(0.019)**	(0.023)**	(0.020)**	(0.016)**	(0.132)**	(0.106)
edum4	0.276	0.204	0.269	0.335	0.428	0.416
	(0.020)**	(0.023)**	(0.015)**	(0.016)**	(0.040)**	(0.049)**
prebreakexp	0.013	0.026	0.029	0.027	0.043	0.034
	(0.003)**	(0.003)**	(0.003)**	(0.003)**	(0.007)**	(0.009)**
prebrsq	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.007	0.018	0.010	0.011	0.019	0.024
	(0.006)	(0.009)*	(0.006)	(0.004)**	(0.018)	(0.017)
postbrsq	-0.000	-0.000	0.000	-0.000	-0.001	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.028	-0.026	-0.020	-0.037	0.068	-0.152
	(0.017)	(0.023)	(0.010)*	(0.016)*	(0.091)	(0.069)*
period_brsq	0.002	0.002	0.001	0.001	-0.008	0.013
	(0.002)	(0.001)	(0.001)	(0.001)	(0.022)	(0.008)
Firm size	0.089	0.061	0.069	0.075	0.115	0.169
	(0.011)**	(0.012)**	(0.009)**	(0.009)**	(0.027)**	(0.025)**
NACE industry	-0.019	-0.026	0.015	-0.001	-0.007	0.018
	(0.006)**	(0.009)**	(0.006)*	(0.006)	(0.008)	(0.008)*
any children	0.017	0.003	0.007	0.061	0.059	0.082
	(0.020)	(0.022)	(0.018)	(0.016)**	(0.043)	(0.053)
Constant	2.324	2.522	2.131	2.279	0.473	0.691
	(0.036)**	(0.043)**	(0.032)**	(0.032)**	(0.071)**	(0.089)**
Observations	2451	2173	2734	3353	1355	1234
R-squared	0.16	0.12	0.22	0.30	0.11	0.11

Key:

* = For a description of these variables please refer to Table I.

Robust standard errors in parentheses; * significant at 5%; ** significant at 1%

Table V.a. OLS estimates Dependent variable log hourly gross wage
Actual human capital, never married, age of children

Independent Var*	Finland		NL		Poland	
Nevermarr	-0.015	0.048	-0.040	-0.067	0.063	-0.106
	(0.019)	(0.022)*	(0.022)	(0.021)**	(0.043)	(0.054)
edul4	-0.096	-0.149	-0.065	-0.114	-0.196	-0.062
	(0.019)**	(0.023)**	(0.026)*	(0.019)**	(0.114)	(0.106)
edum4	0.274	0.206	0.250	0.332	0.404	0.403
	(0.020)**	(0.023)**	(0.019)**	(0.020)**	(0.039)**	(0.048)**
prebreakexp	0.013	0.025	0.030	0.024	0.049	0.043
	(0.003)**	(0.004)**	(0.004)**	(0.003)**	(0.007)**	(0.009)**
Prebrsq	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	(0.000)*	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.008	0.018	0.006	0.011	0.026	0.019
	(0.006)	(0.009)*	(0.007)	(0.005)*	(0.018)	(0.017)
Postbrsq	-0.000	-0.000	0.000	0.000	-0.001	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.028	-0.027	-0.015	-0.036	0.020	-0.111
	(0.018)	(0.023)	(0.012)	(0.019)	(0.085)	(0.068)
period_brsq	0.002	0.002	0.001	0.001	0.000	0.009
	(0.002)	(0.001)	(0.001)	(0.001)	(0.021)	(0.007)
Firm size	0.088	0.061	0.051	0.052	0.091	0.165
	(0.011)**	(0.012)**	(0.011)**	(0.010)**	(0.026)**	(0.024)**
NACE	-0.018	-0.025	0.017	0.006	-0.008	0.019
	(0.007)**	(0.009)**	(0.008)*	(0.007)	(0.007)	(0.008)*
ochld0_3	0.064	0.011	0.030	-0.010	0.092	0.034
	(0.038)	(0.030)	(0.029)	(0.029)	(0.056)	(0.063)
ochld4_6	0.043	-0.008	0.046	0.053	0.018	0.060
	(0.036)	(0.037)	(0.037)	(0.029)	(0.080)	(0.073)
ochld6_12	0.013	0.044	0.009	0.049	0.069	-0.087
	(0.025)	(0.031)	(0.037)	(0.024)*	(0.063)	(0.068)
ochld12_16	0.002	-0.032	-0.026	0.074	0.008	-0.045
	(0.030)	(0.044)	(0.037)	(0.030)*	(0.093)	(0.095)
CHLDOUTa	-0.038	0.016	-0.001	-0.006	0.081	0.092
	(0.020)	(0.034)	(0.036)	(0.025)	(0.062)	(0.090)
children part week	0.007	-0.028	0.009	0.051	0.063	0.105
	(0.031)	(0.045)	(0.034)	(0.024)*	(0.099)	(0.140)
Constant	2.323	2.516	2.135	2.322	0.534	0.727
	(0.036)**	(0.044)**	(0.038)**	(0.040)**	(0.070)**	(0.089)**
Observations	2451	2173	1664	2136	1296	1209
R-squared	0.16	0.12	0.21	0.30	0.11	0.12

Robust standard errors in parentheses. * Significant at 5%; ** significant at 1%

Table V.b. OLS estimates Dependent variable log hourly gross wage

Actual human capital, never married, child at home, child not living at home, child living part of the week at home

Independent Variable*	Finland		NL		Poland	
nevermarr	-0.010	0.050	-0.044	-0.063	0.049	-0.077
	(0.019)	(0.022)*	(0.023)	(0.021)**	(0.044)	(0.054)
edul4	-0.096	-0.150	-0.065	-0.114	-0.194	-0.075
	(0.019)**	(0.023)**	(0.026)*	(0.019)**	(0.109)	(0.106)
edum4	0.275	0.204	0.251	0.332	0.403	0.407
	(0.020)**	(0.023)**	(0.019)**	(0.020)**	(0.040)**	(0.048)**
prebreakexp	0.012	0.025	0.031	0.025	0.050	0.036
	(0.003)**	(0.003)**	(0.004)**	(0.003)**	(0.007)**	(0.009)**
prebrsq	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	(0.000)	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.007	0.018	0.006	0.012	0.027	0.014
	(0.006)	(0.009)*	(0.007)	(0.005)*	(0.018)	(0.017)
postbrsq	-0.000	-0.000	0.000	-0.000	-0.001	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.028	-0.026	-0.018	-0.037	0.027	-0.103
	(0.017)	(0.023)	(0.012)	(0.019)*	(0.085)	(0.068)
period_brsq	0.002	0.002	0.001	0.001	-0.002	0.008
	(0.002)	(0.001)	(0.001)	(0.001)	(0.021)	(0.008)
Firm size	0.088	0.062	0.052	0.052	0.093	0.164
	(0.011)**	(0.012)**	(0.011)**	(0.010)**	(0.026)**	(0.024)**
NACE	-0.019	-0.026	0.017	0.005	-0.009	0.018
	(0.006)**	(0.009)**	(0.008)*	(0.007)	(0.007)	(0.008)*
CHLDHOMEa	0.032	0.014	0.003	0.042	0.015	0.084
	(0.018)	(0.021)	(0.023)	(0.018)*	(0.041)	(0.050)
CHLDOUTa	-0.043	0.013	0.003	-0.008	0.090	0.095
	(0.020)*	(0.034)	(0.036)	(0.025)	(0.063)	(0.090)
Living with children part of the week	0.012	-0.018	0.010	0.051	0.056	0.100
	(0.031)	(0.044)	(0.033)	(0.024)*	(0.101)	(0.139)
Constant	2.324	2.515	2.139	2.312	0.552	0.721
	(0.036)**	(0.042)**	(0.038)**	(0.039)**	(0.070)**	(0.088)**
Observations	2451	2173	1664	2136	1296	1209
R-squared	0.16	0.12	0.21	0.30	0.11	0.12

Robust standard errors in parentheses

* Significant at 5%; ** significant at 1%

Table V.c. OLS estimates Dependent variable log hourly gross wage
Actual human capital, never married, number of children

Independent Variable*	Finland		NL		Poland	
nevermarr	-0.015	0.047	-0.044	-0.062	0.048	-0.081
	(0.019)	(0.022)*	(0.023)	(0.021)**	(0.044)	(0.054)
edul4	-0.095	-0.150	-0.067	-0.114	-0.192	-0.076
	(0.019)**	(0.023)**	(0.026)*	(0.019)**	(0.111)	(0.107)
edum4	0.275	0.203	0.251	0.332	0.401	0.406
	(0.020)**	(0.023)**	(0.019)**	(0.020)**	(0.040)**	(0.049)**
prebreakexp	0.013	0.026	0.031	0.025	0.050	0.036
	(0.003)**	(0.003)**	(0.004)**	(0.003)**	(0.007)**	(0.009)**
prebrsq	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	(0.000)*	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.006	0.018	0.006	0.012	0.027	0.015
	(0.006)	(0.009)*	(0.007)	(0.005)*	(0.018)	(0.017)
postbrsq	-0.000	-0.000	0.000	-0.000	-0.001	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.026	-0.027	-0.016	-0.037	0.023	-0.102
	(0.018)	(0.024)	(0.012)	(0.019)*	(0.086)	(0.068)
period_brsq	0.002	0.002	0.001	0.001	0.000	0.008
	(0.002)	(0.001)	(0.001)	(0.001)	(0.021)	(0.008)
Firm size	0.088	0.062	0.053	0.051	0.092	0.163
	(0.011)**	(0.012)**	(0.011)**	(0.010)**	(0.025)**	(0.024)**
NACE	-0.019	-0.025	0.017	0.005	-0.009	0.018
	(0.006)**	(0.009)**	(0.008)*	(0.007)	(0.007)	(0.008)*
child1h	0.044	0.036	0.003	0.006	0.019	0.065
	(0.022)	(0.025)	(0.026)	(0.024)	(0.044)	(0.052)
child2h	0.029	0.004	0.015	0.064	-0.019	0.091
	(0.021)	(0.027)	(0.028)	(0.021)**	(0.056)	(0.065)
child3h	-0.020	-0.021	-0.050	0.052	0.052	0.106
	(0.032)	(0.045)	(0.063)	(0.031)	(0.155)	(0.104)
CHLDOUTa	-0.044	0.008	0.003	0.006	0.087	0.100
	(0.021)*	(0.034)	(0.036)	(0.025)	(0.064)	(0.090)
children part of the week	0.010	-0.018	0.010	0.045	0.070	0.100
	(0.031)	(0.044)	(0.032)	(0.024)	(0.101)	(0.139)
Constant	2.327	2.513	2.136	2.314	0.553	0.729
	(0.036)**	(0.042)**	(0.037)**	(0.039)**	(0.069)**	(0.089)**
Observations	2451	2173	1664	2136	1296	1209
R-squared	0.16	0.12	0.21	0.30	0.11	0.12

Robust standard errors in parentheses

* Significant at 5%; ** significant at 1%

Table VI.a OLS estimates Dependent variable log hourly gross wage
Actual human capital: prebreak experience, post break and break duration

Independent Variable*	Finland		NL		Poland	
edul4	-0.098	-0.146	-0.068	-0.113	-0.212	-0.069
	(0.019)**	(0.023)**	(0.026)**	(0.019)**	(0.111)	(0.106)
edum4	0.276	0.199	0.247	0.338	0.402	0.416
	(0.020)**	(0.023)**	(0.019)**	(0.020)**	(0.039)**	(0.048)**
prebreakexp	0.014	0.024	0.032	0.031	0.048	0.044
	(0.003)**	(0.003)**	(0.004)**	(0.003)**	(0.007)**	(0.008)**
prebrsq	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.007	0.016	0.007	0.016	0.027	0.023
	(0.006)	(0.009)	(0.007)	(0.005)**	(0.018)	(0.016)
postbrsq	-0.000	-0.000	0.000	-0.000	-0.001	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.026	-0.026	-0.014	-0.039	0.022	-0.111
	(0.017)	(0.023)	(0.011)	(0.019)*	(0.086)	(0.066)
period_brsq	0.002	0.002	0.001	0.001	-0.001	0.009
	(0.002)	(0.001)	(0.001)	(0.001)	(0.021)	(0.008)
Firm size	0.089	0.061	0.052	0.053	0.093	0.164
	(0.011)**	(0.012)**	(0.011)**	(0.011)**	(0.026)**	(0.024)**
NACE	-0.018	-0.026	0.017	0.002	-0.009	0.020
	(0.006)**	(0.009)**	(0.008)*	(0.007)	(0.007)	(0.008)*
Constant	2.319	2.552	2.101	2.251	0.582	0.685
	(0.032)**	(0.038)**	(0.035)**	(0.032)**	(0.066)**	(0.081)**
Observations	2451	2173	1664	2136	1296	1209
R-squared	0.15	0.12	0.20	0.29	0.10	0.11

Robust standard errors in parentheses

* Significant at 5%; ** significant at 1%

Table VI.b. OLS estimates Dependent variable log hourly gross wage

Actual human capital: prebreak experience, post break and break duration, never married

Independent Variable*	Finland		NL		Poland	
	women	men	women	men	women	men
nevermarr	-0.011	0.042	-0.042	-0.078	0.027	-0.104
	(0.018)	(0.021)*	(0.016)*	(0.016)**	(0.044)	(0.054)
edul4	-0.101	-0.148	-0.077	-0.104	-0.379	-0.069
	(0.019)**	(0.023)**	(0.020)**	(0.016)**	(0.140)**	(0.107)
edum4	0.276	0.202	0.274	0.342	0.419	0.417
	(0.020)**	(0.023)**	(0.015)**	(0.016)**	(0.040)**	(0.049)**
prebreakexp	0.011	0.024	0.025	0.026	0.048	0.046
	(0.003)**	(0.004)**	(0.003)**	(0.003)**	(0.009)**	(0.009)**
prebrsq	-0.000	-0.000	-0.000	-0.000	-0.001	-0.001
	(0.000)	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.005	0.017	0.011	0.011	0.022	0.029
	(0.006)	(0.009)	(0.006)	(0.004)*	(0.019)	(0.017)
postbrsq	-0.000	0.000	0.000	-0.000	-0.001	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.022	-0.025	-0.017	-0.026	0.060	-0.152
	(0.017)	(0.023)	(0.010)	(0.016)	(0.094)	(0.071)*
period_brsq	0.002	0.002	0.001	0.001	-0.006	0.013
	(0.002)	(0.001)	(0.001)	(0.001)	(0.022)	(0.008)
tenempl	0.009	0.002	0.012	0.012	-0.004	-0.014
	(0.003)**	(0.004)	(0.004)**	(0.003)**	(0.010)	(0.010)
tenemplsq	-0.000	-0.000	-0.000	-0.000	0.000	0.001
	(0.000)*	(0.000)	(0.000)*	(0.000)*	(0.000)	(0.000)
Firm size	0.086	0.062	0.067	0.069	0.119	0.173
	(0.011)**	(0.012)**	(0.009)**	(0.009)**	(0.027)**	(0.026)**
NACE industry	-0.020	-0.026	0.015	-0.000	-0.007	0.020
	(0.006)**	(0.009)**	(0.006)*	(0.006)	(0.008)	(0.008)*
Constant	2.328	2.523	2.111	2.279	0.495	0.707
	(0.035)**	(0.041)**	(0.032)**	(0.031)**	(0.069)**	(0.090)**
Observations	2435	2161	2733	3353	1352	1229
R-squared	0.16	0.12	0.23	0.30	0.11	0.11

Key:

* = For a description of these variables please refer to Table I.

♣ = too few observations.

*Robust standard errors in parentheses; * significant at 5%; ** significant at 1%*

Table VII..a OLS estimates Dependent variable log hourly gross wage

Actual human capital: prebreak experience, post break and break duration, never married, child information, additional qualifications and type of contract

Independent Variable*	Finland		NL		Poland	
	women	men	women	men	women	men
nevermarr	-0.010	0.053	-0.031	-0.050	0.065	-0.051
	(0.019)	(0.023)*	(0.017)	(0.017)**	(0.046)	(0.055)
edul4	-0.094	-0.149	-0.075	-0.095	-0.370	-0.080
	(0.019)**	(0.023)**	(0.021)**	(0.016)**	(0.137)**	(0.106)
edum4	0.283	0.222	0.268	0.322	0.422	0.372
	(0.020)**	(0.023)**	(0.015)**	(0.015)**	(0.040)**	(0.049)**
prebreakexp	0.009	0.022	0.024	0.023	0.041	0.032
	(0.003)**	(0.004)**	(0.004)**	(0.003)**	(0.007)**	(0.010)**
prebrsq	-0.000	-0.000	-0.000	-0.000	-0.001	-0.001
	(0.000)	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
Postbreakexp	0.004	0.016	0.009	0.008	0.006	0.013
	(0.006)	(0.009)	(0.006)	(0.004)*	(0.019)	(0.017)
Postbrsq	0.000	-0.000	0.000	0.000	-0.000	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.017	-0.016	-0.019	-0.026	0.093	-0.143
	(0.018)	(0.025)	(0.010)	(0.016)	(0.092)	(0.067)*
period_brsq	0.001	0.001	0.001	0.001	-0.010	0.013
	(0.002)	(0.001)	(0.001)	(0.001)	(0.023)	(0.008)
further qualf	-0.015	-0.040	-0.020	0.005	-0.194	-0.166
	(0.021)	(0.032)	(0.019)	(0.018)	(0.046)**	(0.068)*
educ_pay	0.053	0.160	0.083	0.114	0.159	0.083
	(0.029)	(0.047)**	(0.024)**	(0.020)**	(0.069)*	(0.088)
educ_job	0.101	0.039	0.128	0.100	0.252	0.115
	(0.036)**	(0.066)	(0.026)**	(0.022)**	(0.073)**	(0.086)
educ_oth	0.053	0.081	0.099	0.108	0.243	0.255
	(0.025)*	(0.037)*	(0.021)**	(0.020)**	(0.063)**	(0.078)**
cntr_2_yrs	-0.150	0.037			-0.127	-0.132
	(0.060)*	(0.137)			(0.098)	(0.113)
cntr1_2yrs	-0.063	-0.278	-0.183	-0.030	-0.183	-0.385
	(0.045)	(0.090)**	(0.077)*	(0.080)	(0.084)*	(0.112)**
cntr_6mns_1yr	-0.108	-0.183	-0.129	-0.094	-0.263	-0.121
	(0.047)*	(0.064)**	(0.035)**	(0.040)*	(0.100)**	(0.126)
cntr_less6mns	-0.246	-0.282	-0.116	-0.120	-0.324	-0.198
	(0.058)**	(0.080)**	(0.039)**	(0.051)*	(0.083)**	(0.127)
exp_perm	0.062	-0.005	0.079	0.034	0.057	-0.110
	(0.046)	(0.069)	(0.037)*	(0.044)	(0.084)	(0.094)
exp_newfix	0.050	0.030	-0.008	-0.081	-0.033	-0.227

	(0.054)	(0.068)	(0.045)	(0.044)	(0.078)	(0.116)
Firm size	0.087	0.062	0.067	0.066	0.099	0.155
	(0.011)**	(0.012)**	(0.009)**	(0.009)**	(0.027)**	(0.025)**
NACE industry	-0.014	-0.023	0.011	-0.000	-0.005	0.011
	(0.007)*	(0.009)**	(0.006)	(0.005)	(0.008)	(0.008)
child1h	0.029	0.056	-0.016	0.008	-0.080	0.113
	(0.030)	(0.036)	(0.032)	(0.025)	(0.071)	(0.088)
child2h	0.018	0.001	0.003	0.027	-0.078	0.166
	(0.027)	(0.035)	(0.031)	(0.021)	(0.068)	(0.089)
child3h	-0.015	-0.022	-0.047	0.005	-0.009	0.144
	(0.037)	(0.047)	(0.052)	(0.030)	(0.155)	(0.109)
ochld0_3	0.035	-0.036	0.039	0.028	0.198	-0.072
	(0.043)	(0.043)	(0.034)	(0.028)	(0.083)*	(0.096)
ochld4_6	0.022	-0.016	0.037	0.021	0.117	-0.065
	(0.042)	(0.045)	(0.039)	(0.027)	(0.096)	(0.098)
ochld6_12	-0.005	0.038	-0.003	0.028	0.153	-0.192
	(0.032)	(0.037)	(0.035)	(0.023)	(0.076)*	(0.088)*
ochld12_16	0.003	-0.038	0.055	0.056	0.043	-0.103
	(0.033)	(0.046)	(0.038)	(0.029)	(0.096)	(0.113)
CHLDOUTa	-0.037	0.015	0.018	0.009	0.085	0.114
	(0.022)	(0.035)	(0.028)	(0.022)	(0.065)	(0.090)
children part	0.003	-0.027	0.020	0.059	-0.082	0.163
	(0.034)	(0.046)	(0.027)	(0.021)**	(0.141)	(0.136)
Constant	2.354	2.536	2.159	2.281	0.577	0.891
	(0.037)**	(0.044)**	(0.033)**	(0.034)**	(0.073)**	(0.094)**
Observations	2408	2145	2606	3196	1339	1213
R-squared	0.18	0.14	0.25	0.33	0.15	0.16

Key:

[*] = For a description of these variables please refer to Table I.

♣ = too few observations.

*Robust standard errors in parentheses; * significant at 5%; ** significant at 1%*

Table VII.b. OLS estimates Dependent variable log hourly gross wage

Actual human capital: prebreak experience, post break and break duration, never married, child information, additional qualifications, type of contract and full-time job

	(1)	(2)	(3)	(4)	(5)	(6)
nevermarr	-0.008	0.055	-0.030	-0.049	0.065	-0.050
	(0.019)	(0.023)*	(0.018)	(0.017)**	(0.046)	(0.055)
edul4	-0.089	-0.151	-0.075	-0.092	-0.373	-0.080
	(0.019)**	(0.023)**	(0.021)**	(0.016)**	(0.139)**	(0.105)
edum4	0.280	0.220	0.266	0.325	0.424	0.368
	(0.020)**	(0.023)**	(0.015)**	(0.015)**	(0.040)**	(0.049)**
prebreakexp	0.008	0.022	0.024	0.024	0.041	0.031
	(0.003)**	(0.004)**	(0.004)**	(0.003)**	(0.007)**	(0.010)**
prebrsq	-0.000	-0.000	-0.000	-0.000	-0.001	-0.001
	(0.000)	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
postbreakexp	0.004	0.016	0.009	0.008	0.007	0.014
	(0.006)	(0.009)	(0.006)	(0.004)*	(0.019)	(0.017)
Postbrsq	0.000	-0.000	0.000	0.000	-0.000	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
period_br	-0.020	-0.015	-0.020	-0.025	0.092	-0.147
	(0.018)	(0.024)	(0.010)*	(0.016)	(0.091)	(0.067)*
period_brsq	0.002	0.001	0.001	0.001	-0.010	0.014
	(0.002)	(0.001)	(0.001)	(0.001)	(0.022)	(0.008)
further qualf	-0.012	-0.045	-0.020	0.008	-0.195	-0.165
	(0.021)	(0.032)	(0.019)	(0.018)	(0.046)**	(0.068)*
educ_pay	0.047	0.164	0.081	0.114	0.158	0.087
	(0.029)	(0.047)**	(0.025)**	(0.020)**	(0.069)*	(0.089)
educ_job	0.102	0.045	0.126	0.099	0.255	0.112
	(0.036)**	(0.066)	(0.026)**	(0.022)**	(0.073)**	(0.086)
educ_oth	0.052	0.081	0.097	0.107	0.243	0.252
	(0.025)*	(0.037)*	(0.021)**	(0.020)**	(0.062)**	(0.079)**
contr_2_yrs	-0.157	0.031	0.000	0.000	-0.132	-0.133
	(0.061)**	(0.136)	(0.000)	(0.000)	(0.098)	(0.113)
contr1_2yrs	-0.064	-0.299	-0.181	-0.027	-0.186	-0.372
	(0.045)	(0.088)**	(0.077)*	(0.080)	(0.083)*	(0.111)**
contr_6mns_1yr	-0.106	-0.184	-0.128	-0.089	-0.273	-0.109
	(0.047)*	(0.063)**	(0.035)**	(0.040)*	(0.096)**	(0.126)
contr_less6mns	-0.237	-0.278	-0.114	-0.113	-0.329	-0.194
	(0.057)**	(0.079)**	(0.039)**	(0.051)*	(0.082)**	(0.128)
exp_perm	0.054	-0.007	0.079	0.029	0.061	-0.112
	(0.046)	(0.069)	(0.037)*	(0.043)	(0.082)	(0.094)
exp_newfix	0.050	0.039	-0.007	-0.085	-0.029	-0.224
	(0.055)	(0.066)	(0.045)	(0.044)	(0.077)	(0.116)

Firm size	0.083	0.059	0.067	0.063	0.097	0.153
	(0.011)**	(0.012)**	(0.009)**	(0.008)**	(0.027)**	(0.025)**
NACE industry	-0.015	-0.022	0.010	0.001	-0.005	0.012
	(0.007)*	(0.009)*	(0.006)	(0.005)	(0.008)	(0.008)
ft	0.103	0.057	-0.007	0.035	-0.042	0.202
	(0.037)**	(0.094)	(0.017)	(0.031)	(0.084)	(0.145)
# supervised	0.000	0.001	0.001	0.000	0.001	0.000
	(0.000)	(0.000)**	(0.000)**	(0.000)**	(0.001)	(0.000)
child1h	0.028	0.055	-0.021	0.001	-0.081	0.113
	(0.030)	(0.036)	(0.032)	(0.024)	(0.071)	(0.088)
child2h	0.019	0.002	-0.001	0.025	-0.081	0.164
	(0.027)	(0.035)	(0.031)	(0.021)	(0.069)	(0.090)
child3h	-0.009	-0.020	-0.052	0.002	-0.013	0.145
	(0.037)	(0.047)	(0.052)	(0.029)	(0.155)	(0.109)
ochld0_3	0.042	-0.035	0.042	0.036	0.201	-0.071
	(0.043)	(0.042)	(0.035)	(0.028)	(0.083)*	(0.096)
ochld4_6	0.020	-0.018	0.041	0.024	0.120	-0.066
	(0.043)	(0.045)	(0.039)	(0.027)	(0.096)	(0.098)
ochld6_12	0.002	0.039	0.000	0.031	0.155	-0.193
	(0.032)	(0.037)	(0.035)	(0.023)	(0.076)*	(0.088)*
ochld12_16	0.003	-0.041	0.058	0.058	0.039	-0.095
	(0.034)	(0.047)	(0.039)	(0.029)*	(0.094)	(0.113)
CHLDOUTa	-0.037	0.015	0.019	0.006	0.090	0.121
	(0.022)	(0.035)	(0.028)	(0.022)	(0.065)	(0.089)
children part	0.001	-0.026	0.020	0.060	-0.081	0.162
	(0.034)	(0.046)	(0.027)	(0.021)**	(0.141)	(0.136)
Constant	2.270	2.482	2.166	2.243	0.614	0.693
	(0.052)**	(0.097)**	(0.037)**	(0.050)**	(0.105)**	(0.172)**
Observations	2404	2145	2606	3196	1338	1212
R-squared	0.19	0.15	0.26	0.34	0.15	0.16

Robust standard errors in parentheses
* significant at 5%; ** significant at 1%

Table VII.c. OLS estimates Dependent variable log hourly gross wage
Actual human capital, household characteristics and job characteristics

	Netherlands	
	women	men
nevermarr	-0.036	-0.049
	(0.017)*	(0.017)**
Main. Hh inc.	0.045	0.052
	(0.015)**	(0.014)**
Main hh tasks	-0.075	-0.032
	(0.016)**	(0.024)
domestic help	0.124	0.183
	(0.020)**	(0.023)**
p_empl_perm	0.023	-0.026
	(0.029)	(0.016)
p_empl_fixe	0.022	-0.024
	(0.034)	(0.022)
p_empl_self	0.068	0.034
	(0.036)	(0.040)
p_unempl	-0.013	-0.060
	(0.068)	(0.034)
edul4	-0.062	-0.096
	(0.021)**	(0.016)**
edum4	0.242	0.299
	(0.016)**	(0.016)**
prebreakexp	0.023	0.022
	(0.004)**	(0.003)**
prebrsq	-0.000	-0.000
	(0.000)**	(0.000)**
postbreakexp	0.015	0.012
	(0.007)*	(0.005)*
postbrsq	-0.000	-0.000
	(0.000)	(0.000)
period_br	-0.009	-0.001
	(0.014)	(0.019)
period_brsq	0.000	0.000
	(0.001)	(0.001)
Br_unemployment	0.016	-0.020
	(0.060)	(0.031)
brkbfrch	0.034	-0.070
	(0.026)	(0.020)**
brkchld	0.095	-0.290
	(0.071)	(0.053)**

brkaftch	-0.037	-0.152
	(0.071)	(0.046)**
ptbfrchld	-0.035	0.107
	(0.074)	(0.079)
ptaftchld	0.041	-0.026
	(0.034)	(0.048)
yrsptbfrch	0.024	-0.057
	(0.018)	(0.016)**
yrsptaftch	-0.003	0.014
	(0.003)	(0.011)
Br_training	-0.135	-0.071
	(0.088)	(0.074)
Br_childrn<1 yr	0.018	-0.105
	(0.041)	(0.200)
Br_family	-0.008	0.162
	(0.051)	(0.115)
unemplbenefit	-0.053	0.054
	(0.070)	(0.043)
leavecov	-0.039	0.414
	(0.103)	(0.167)*
partnfam	-0.096	-0.071
	(0.055)	(0.102)
disbenefit	0.011	-0.079
	(0.062)	(0.059)
othsource	-0.003	0.138
	(0.053)	(0.049)**
tenempl	0.005	0.006
	(0.004)	(0.003)*
tenemplsq	-0.000	-0.000
	(0.000)	(0.000)
further qualif	-0.021	0.007
	(0.019)	(0.018)
educ_pay	0.071	0.107
	(0.024)**	(0.020)**
educ_job	0.119	0.107
	(0.027)**	(0.021)**
educ_oth	0.091	0.103
	(0.021)**	(0.020)**
contr_2_yrs	0.000	0.000
	(0.000)	(0.000)
contr1_2yrs	-0.168	-0.014
	(0.077)*	(0.078)

contr_6mns_1yr	-0.113	-0.071
	(0.036)**	(0.038)
contr_less6mns	-0.083	-0.095
	(0.040)*	(0.048)
exp_perm	0.080	0.037
	(0.037)*	(0.042)
exp_newfix	-0.002	-0.048
	(0.046)	(0.042)
Firm size	0.060	0.058
	(0.009)**	(0.008)**
NACE industry	0.012	0.002
	(0.006)	(0.005)
child1h	-0.026	0.030
	(0.033)	(0.026)
child2h	-0.030	0.039
	(0.032)	(0.022)
child3h	-0.029	0.018
	(0.049)	(0.030)
ochld0_3	0.015	0.045
	(0.040)	(0.028)
ochld4_6	0.026	0.040
	(0.041)	(0.027)
ochld6_12	-0.012	0.043
	(0.035)	(0.023)
ochld12_16	0.031	0.075
	(0.037)	(0.029)**
CHLDOUTa	0.028	0.034
	(0.032)	(0.023)
children part	0.017	0.060
	(0.028)	(0.021)**
Constant	2.164	2.255
	(0.042)**	(0.039)**
Observations	2564	3178
R-squared	0.29	0.36

Key:

* = For a description of these variables please refer to Table I.

♣ = too few observations.

Robust standard errors in parentheses; * significant at 5%; ** significant at 1%
We exclude Poland and Finland form this table for reason of break information, working part-time and the reasons for it not to have sufficient data to do this analysis.
Unfortunately this information was not included continuously in Finland and Poland.

Appendix Tables: Policies on Combining Paid Work and Parenthood

Appendix Table A.1. *Maternity and Paternity leave arrangements in Finland, Netherlands and Poland (2003)*

	Prenatal duration	Postnatal duration	Total duration	Employment period to qualify for maternity leave	Indemnification rate or level	Paternity leave	Indemnification rate or level
	weeks	Weeks	weeks	days	% of earnings	days	% of earnings
FI	30-50 days compulsory	free choice	17.5 (105 days excluding Sundays)	0	70% max. (income-tested, on average 66%)	18 (can be extended by 1 to 12 weekdays if father takes last 1 to 12 weekdays at the end of the parental leave)	100%
NL	4-6 compulsory	10-12	16	0	100%	2	100%
PL	2 weeks compulsory	14-16 for 1st child 16-18 for 2nd child	16 for 1st child;18 for second child		100%	Maternity leave can be used by fathers only in case of death or illness of mother	

Source: MISSOC (2003); via voce Michon P.
Note: FI: Finland; NL: Netherlands; PL: Poland;

Appendix Table A.2. *Parental Leave arrangements in Finland, Netherlands and Poland (2003)*

	Parental leave duration	Transferability	Compulsory duration and fractionability	Part-time leave arrangements	Child age limit	Qualification conditions	Job and pension guarantees	Monthly benefit level
FI	158 weekdays (excl. Sundays) at a max. of 70% of earnings; afterwards, long leave up child's 3d birthday with flat-rate home care allowance	Family right (transferable), take-up only possible one after the other, min. take-up of 12 days for 1st leave. Childcare leave also transferable but taken up one after the other with a min. of 1 month per child	Fractionable (see transferability)	the long childcare leave can be taken up on a part-time basis (with proportional allowance)	3	being employed	Job security during both leaves and both are considered as time in employment (pensions, seniority, etc.)	Max. 70% of earnings (income-related, average 66%) for 158 days; flat-rate allowance of around 252.28 euros monthly during child-rearing leave; 70 euros/month if part-time leave
NL	13 times the amount of hours regularly worked per week	Individual right for each parent and for each child	Possible to split leave in 3 periods of at least 1 month; parents can go on leave together or one after the other; legally, leave can be taken over a max. period of 6 months but if there is an agreement with the employer, leave can be spread over a period >6 months	the length of leave and the number of leave days per week (with a max. of half the number of weekly working hours) are fixed in advance in agreement with employer; full-time leave is possible if employer agrees	8	private and public sector (regular waged workers employed for at least 1 full year by the same employer)	contract, seniority and pension guaranteed by some collective agreements only, especially in the social services sector	Civil servants: 70-75% paid; Private sector: only 6% of collective agreements (in 2000) pay the leave (up to 30%)
PL	3 yrs		Possible to interrupt the leave 3 times	Leave can be used partly	4			Flat rate and income tested benefit (400 zl: 103 euros 2006 exchange rate) Maximum period of benefit is 2 yrs.

Source: Info on PL: via voce Michon P.
Note: FI: Finland; NL: Netherlands; PL: Poland;

Table A.3. *Take-up rates of Parental leaves by sex according to different sources in the Finland, Netherlands and Poland*

	Female take-up	Male take-up	Average female duration of leave	Average male duration of leave	Source
NL	40%	9%			Lourie (1999); http://www.childpolicyintl.org/
	25% of all parents (50% of women and 75% of men get paid while on leave)		8 months	11months (but women more hours per week)	Knijn (2003)
		take-up rates average 13% for part-time leave	The Netherlands is the only country in the EU where fathers do not take shorter leaves than mothers		Stancanelli (2003) (data 1998)
	44%	12%			NIDI (2003) (data 2000)
	49% (public sector)	12% (public sector)			
		1%			Stancanelli (2003) (data 1998)
		2% (2002)			The Clearinghouse (2002)
FI	99%	2%	N.a.	N.a.	Lourie (1999)
	99%	64% (par leave)			http://www.childpolicyintl.org/
		67.6% (pat leave) and 2.6% for parental leave			Ministry of Social Affairs and Health (2003), p111
	47000 take the 158-day leave	2500 take the 158-day leave			Ministry of Social Affairs and Health (2002)
	107060 children (69640 families) receive a home care allowance (57% of children under 3),				Ministry of Social Affairs and Health (2003), p113
	35% (estimated in 1999) of eligible women	2% (estimated in 1999) of eligible men			Lourie (1999)
PL					

Source: Info on PL: via voce Michon P. No information available.
Note: FI: Finland; NL: Netherlands; PL: Poland;

Appendix Table A.4 *Share of costs covered by public funds and child/staff ratio according to different sources Finland, Netherlands and Poland*

Country	Share of cost covered by public funds		Nbr of children per staff member	
	0-2 year olds	3-5 year olds	0-2 year olds	3-5 year olds
Finland	85% in Ministry of Social Affairs and Health (2004)	85% in Ministry of Social Affairs and Health (2004)	4 in Ministry of Social Affairs and Health (2004)	7 in Ministry of Social Affairs and Health (2004)
Netherlands	64.5% in Berg-Le Clercq et al. (2002)	100% in (d) (*basisonderwijs*)	5 in (c) and (j)	20 in (j) (*basisschool*)
Poland	*	*	*	*

***Sources*: (a)** *TSFEPS (2002); (b) OECD (2001a); (c) The Clearinghouse on International Developments in Child, Youth and Family Policies (2003).*

** No information available. Childcare costs for parents per month range from 200 PLN (equivalent 52 euros (2006 exchange rate) in public child care facilities (140 zl+(food rate x number of days)) to 700 PLN (equivalent 180 euros) in private childcare facilities. The role of grandmothers and babysitting (informal market) is considered substantial)*

Appendix Table A.5. Coverage and opening hours of childcare according to different sources in Finland, Netherlands and Poland

Country	Coverage		Hours	
	0-2 year olds	3-5 year olds	0-2 year olds	3-5 year olds
Finland	22% in Ministry of Social Affairs and Health (2004)	63% in Ministry of Social Affairs and Health (2004)	10 in (a)	10 in (a)
Netherlands	2.3% in Berg-Le Clercq et al. (2002)	66% in (a) and Berg-Le Clercq et al. (2002) (100% from age of 4 at school and 1.7% of 3y in DC)	10.5 in Berg-Le Clercq et al. (2002)	5.5 in Berg-Le Clercq et al. (2002) (8h30-16h30 – 1h at lunch)
Poland	2% (2001) for 0,5-3 yrs	38% (2004) (54% for children 3-6) (2004). For age 6 obligatory 98%. School starts at 7.	Public child care facilities are open from 6.30 am-4.30-5 pm	Public child care facilities are open from 6.30 am-4.30-5 pm

Sources: (a) Adema (2001); via voce P. Michon

Appendix Tables: Background Statistics on Employment and Parenthood

Table A.6. Employment rates of women aged 20-49 by number of children aged under 12. Finland, Netherlands and Poland

	EU-25	FI	NL	PL
0	75	78	82	70
1-2	62	75	71	61
3+	41	56	59	45

Data: Labour Force Survey, 2003 (Aliaga, 2005:4)

Table A.7 Organisation of employment of couples aged 20-49: Finland, Netherlands and Poland

♂ / ♀	EU-25	FI	NL	PL
(1) FT / FT	45	63	27	49
(2) FT / -	29	21	21	29
(3) FT / PT	19	7	44	8
(4) Other	7	9	8	14

Combinations refer to (1) both partners working in a full-time job, (2) the male partner being employed only, (3) the male partner working full-time and the female partner with a part-time job and (4) other combinations (mostly the female partner being employed only).
Data: Labour Force Survey, 2003 (Aliaga, 2005:5)

Appendix Table A.8 Comparable educational levels:

Two conditions apply to question A12 about education. Firstly, it must cover the major national educational categories, including previous educational categories (i.e. a 50-yr employee who has performed an education that today is replaced by another education still must be able to tick the appropriate button in the question). Secondly, the nation list must allow for a recoding of the national data into one of the 6 categories used in the European-wide ISCED classification. Table A.8 shows the national educational systems in Finland, the Netherlands and Poland recoded into the ISCED classification.

ISCED	FI	NL	PO
0: no schooling		Lagere school niet afgemaakt	niepełne podstawowe
1: primary school	kansakoulu, kansalaiskoulu tai peruskoulut (6-9 v.)	lagere school	podstwowe
2			gimnazjalne (niższe średnie)
2: lower level secondary	ammattikoulu, ammattiopisto (2-4 vuotta edellisen lisäksi)	MAVO/VBO/ LLW	zasadnicze zawodowe
3: upper secondary		HAVO	
4: post secondary non-tertiary	lukio (12 v.)	VWO	średnie ogólnokształcące
4	toisen asteen ammatillinen koulutus (opistot yms. 13-15 vuotta)	MBO	średnie zawodowe
4			policealne
5: 1st stage tertiary: includes up to Master degree	ammattikorkeakoulu (15 vuotta)	HBO	wyższe niepełne (licencjat)
5		Universiteit	wyższe (magister)
5			
6: PdD		PhD	PhD

Table A.9: Women's Wages: Data and Measurement of Employment Experience

	Country	Data	Measure of Experience
Waldfogel (1995)	UK	NCDS in 1981 & 1991	Actual: working at a job or on paid leave from a job; Sum of ft and pt
Joshi, Paci & Waldfogel (1999)	UK, US	MRC 1978 and NCDS 1991	Actual
Waldfogel (1994)	UK, US		Actual
Waldfogel (1998)	UK, US	NCDS 1991; NLSY in 1991	Actual NCDS: pre 1981 from 1981 survey 1981-1991 from the 1991 survey NLSY: sum of actual exp. from 1978 as recorded plus potential exp. for pre 1978 period for those who left school before 1978
Avellar (2001)	US	NLS-YW (age 14-24 in 1968) NLSY (age 14-21 in 1979). 1968-1985 and 1986-1998	Actual Work exp is dummy var.1=if worked>=26 weeks a year; 0=otherwise; in the pooled models these dummies are summed across the waves; in ft and pt***
Budig & England (2001)	US	NLSY 1982-1993	Actual + tenure in ft and pt (in yrs)
Korenman & Neumark (1992)	US	NLS-YW 1980-1982	Actual + tenure
Lundberg & Rose (2000)	US	PSID 1980-1992	Not included.
Neumark & Korenman (1994)	US	NLS-YW 1982 (earlier if data are missing in 1982)	Actual
Waldfogel (1997)	US	NLS-YW 1968-1988	Actual
Phipps, Burton & Lethbridge (2001)	Can	Statistics: General Social Survey 1995& Retrospective work history info	For each career interruption of >=6 weeks: reason, duration in weeks, Ft or PT before and after interruption. Both Actual and potential exp..
Datta Gupta & Smith (2002)	DK	1980-1995 Only individuals with an annual employment of > 1,000 hours .	Actual: Accumulated. For cohorts born after 1960 split into: before 1st birth, during the child birth period & after last childbirth
Albrecht, Edin, Sundstrom & Vroman (1999)	S	Family & Work 1992 1993, matched with wage data Statistics Sweden	Individual's main activity from age 17 up to the date of the interview; Employment exp.measured in ft equiv.yrs excl.activity of ≤ three months duration; Only persons working ≥ 15 hours pw.
Dekker, Muffels & Stancianelli (2000)	NL	SEP 1985-1994	Actual Experience not available in most waves, therefore not included
Gustafsson, Kenjoh &Wetzels (2003)	NL, G, GB, S	OSA 1998; GSOEP 1998 BHPS 1998; HUS 1998	Not included
Zorlu (2002)	NL	CBS-LSO 1997:employed	Potential experience included
Wetzels (2002a,b)	NL	WWI 2001	Actual
Wetzels&Zorlu (2003)	NL	Work&IT survey 2001	Actual
Harkness & Waldfogel (2003)	Aus, Can, UK, US, G, F, S	LIS and LNU for S: most 1994, UK 1995; F.& S 1991.	Not included

Source: Wetzels 2002b: AUS=Australia; CAN=Canada; DK=Denmark; F=Finland; G=Germany; N=

Netherlands; S=Swe-den; UK=UK; US=United States;

Data sets: NCDS: National Child Development Study every child born in UK during the first week of March 1958 with surveys conducted at birth age 7, age 11, age 16, age 23, and age 33 in 1991; MRC: Medical Research Council's National survey of Health and Development a cohort born in a week in March 1946; NLSY: National Longitudinal Survey of Youth a national probability sample of individuals ages 14-21 in 1979 followed annually, Blacks and Latinos over sampled; PSID: Panel Study of Income Dynamics; SEP: Socio-Economic panel; OSA rganisatie voor Strategisch Arbeidsmarkt-onderzoek; CBS-LSO: Central Bureau of Statistics-Loon structuur onderzoek; LIS: Luxembourg Income Study. WWI-Women's wage indicator survey 2001.

Table A.10. Review of "Exogenous Wage Effect of Children" in European countries

Research	European Country*	Age distribution of women	Wage gap By children		Wage gap by children after control for actual experience
Harkness & Waldfogel (2003)	G Fin S UK	25-44	First child:: G: n.s.; Fin: 42%. S: n.s. UK: 8.2%C Corrected for sample selectivity: G: n.s. Fin: 4.4% S: n.s.; UK: 9.3%;	Second child: 11.2% n.s. n.s 24.3% 10.7% n.s n.s 25.5%.	Not available
Waldfogel (1995)	UK	23 &33	1 child: 10%; >=2 children: 20%.		Lowered but remained.
Waldfogel (1998)	UK	33	20%		Lowered, but majority remained
Gustafsson, Kenjoh and Wetzels (2003)	G NL S UK	16-64	N.s. in G, NL, S and UK		Not available
Datta Gupta & Smith (2002)	DK	18-40			Disappears after controll for time constant unobserved heterogeneity
Albrecht et al (1999)	S	24-44	Not available		N.s.
Dekker, Muffels & Stancianelli (2000)	NL	16-64	in ft jobs: 17%; in short pt jobs: 23%; in long pt jobs:n.s.		Not available
Wetzels & Zorlu (2003)**	Nl	18-64	8.7		Disappears
Wetzels (2002a)**	Nl	18-64	8.2		Disappears

** some studies include comparisons with the US or other countries..*

*** These results come from OLS estimations without correction for selection.*

n.s.=not significant.

Table A.11: *Examples of Testing for Bias from Unobserved Heterogeneity in Wage Models*

Research	Bias 1: Unobserved Heterogeneity
Albrecht, Edin, Sundstrom & Vroman (1999)	• Wages and time out both correlated with omitted var.:wages positively, time out negatively. This could cause a negative coefficient on time out. • Fixed Effects (FE) panel estimates attempt to correct for the omitted variable problem. (assumed that the omitted var is individual specific and constant over time). No support is found for an omitted variable explanation. • Substantially more negative coefficients on the components of time out especially parental leave suggest a positive correlation between the omitted individual FE and the time out vars. The FE panel estimates the coefficients on all time out variables for women more negative. • The absence of any significant change in the coefficients on experience in Cross Section (CS) to FE panel suggests that there is no omitted variable bias in the CS estimates in returns to experience.
Neumark & Korenman (1994)	• Analysis of how differences in sisters' wages are related to fertility differences assuming that the relevant sources of heterogeneity that bias models seeking to estimate child penalties are held constant within pairs of siblings. They estimate the wage penalty to motherhood in the United States to be 7%, which decreases to 4 to 5% when job experience was controlled for.
Budig & England (2001)	• Person specific FE models • Only children in model: child gap is 7% per child (pch) in FE and 8% in Ordinary Least Squares (OLS) (only slight negative selectivity into having (more) children on unmeasured pay relevant characteristics.) • Controlling for reduced experience: • lowers the child gap from 7 to 5% under FE; in OLS the reduction is from 8 to 2%; • Including corrections for job characteristics reduces the childgap to 4% in FE and in OLS the further reduction is even smaller.

Table A..12 : *Findings from Testing for Bias from Endogeneity in Wage Models*

Research	Bias 2:Endogeneity: Experience and wage; Children and HC/wage
Albrecht, Edin, Sundstrom & Vroman (1999)	• Refer to Gronau 1988 US data; Edin and Nynabb 1992 Swedish data: neither study found support for the hypothesis that low wages cause individuals to take (future) time out of their careers.
Datta Gupta & Smith (2002)	• Number and age of children are endogenous to the model (Browning 1992 and Joshi et al 1999) • Problem handle by IV the child variables or by estimating separate wage functions and controlling for the selection into the group of mothers and non-mothers (Joshi et al 1999, Wetzels&Zorlu 2003). Data used by DG&S do not give possibility to use valid IV (affecting the choice of having children but not the HC and earnings capacity of women).
Waldfogel (1995)	• IV. Hausman test did not reject exogeneity of experience. • Instruments: having a working partner and partner's pay • Hausman did not reject exogeneity of children (number of children) • Instrument: marital status. • If they were endogenous, the correction for this would result in larger child penalties.

Appendix A.13 QI Questions as regards net and gross wages and allowances.

Question on wages:

Do you know your GROSS and your NET wage?
_ 1 Yes, my gross and my net wage
_ 2 Only my g ross wage
_ 3 Only m y net wage
If ticked gross and net wage, then a screen pops up:
E12 What was your last wage?
E13a Gross wage -> wagegr
E14b Net wage -> wagene
If ticked gross wage, then a screen pops up:
What was your last gross wage?
Gross wage -> wagegr
If ticked net wage, then a screen pops up:
E15 What was your last net wage?
Net wage -> wagene

The questionon allowances runs as follows.

Not if self-employed/family worker (country specific phrasing):
E29 Did your last wage include allowances and if so, how much?
E29a □ Shift / unsocial hours / weekend allowance _ _ _ _ _ _ _ _ , _ _
E29b □ Overtime bonus _ _ _ _ _ _ _ _ , _ _
E29c □ Overtime premium _ _ _ _ _ _ _ _ , _ _
E29d □ Dirty/dangerous work allowance _ _ _ _ _ _ _ _ , _ _
E29e □ Inconvenience or hardship allowance _ _ _ _ _ _ _ _ , _ _
E29f □ Tips _ _ _ _ _ _ _ _ , _ _
E29g □ Seniority bonus _ _ _ _ _ _ _ _ , _ _
E29h □ Skill bonus _ _ _ _ _ _ _ _ , _ _
E29i □ Skill premium _ _ _ _ _ _ _ _ , _ _
E29j □ Target-related incentive bonus _ _ _ _ _ _ _ _ , _ _
E29k □ Function bonus _ _ _ _ _ _ _ _ , _ _
E29l □ Performance allowance or commission _ _ _ _ _ _ _ _ , _ _
E29m □ Attainability or consignment allowance _ _ _ _ _ _ _ _ , _ _
E29n □ Christmas bonus _ _ _ _ _ _ _ _ , _ _
E29o □ End-of-year bonus _ _ _ _ _ _ _ _ , _ _
E29p □ End-of-year bonus, Christmas bonus _ _ _ _ _ _ _ _ , _ _
E29q □ Annual bonus (13th, 14th, or 15th 'month')_ _ _ _ _ _ _ _ , _ _
E29r □ 13th 'month' _ _ _ _ _ _ _ _ , _ _
E29s □ Annual bonus _ _ _ _ _ _ _ _ , _ _
E29t □ Holiday allowance _ _ _ _ _ _ _ _ , _ _
E29u □ Group performance allowance _ _ _ _ _ _ _ _ , _ _
E29v □ Team/departmental bonus _ _ _ _ _ _ _ _ , _ _
E29w □ Personal performance allowance _ _ _ _ _ _ _ _ , _ _
E29x □ Personal allowance _ _ _ _ _ _ _ _ , _ _
E29y □ Labour market supplement _ _ _ _ _ _ _ _ , _ _
E29z □ Market value allowance _ _ _ _ _ _ _ _ , _ _
E29z □ Commuting / public transport allowance _ _ _ _ _ _ _ _ , _ _
E29z □ Profit sharing _ _ _ _ _ _ _ _ , _ _
E29z □ Payments from balance surplus in cooperatives _ _ _ _ _ _ _ _ , _ _
E29zd □ Stock options _ _ _ _ _ _ _ _ , _ _
E29ze □ Attendance allowance _ _ _ _ _ _ _ _ , _ _
E29zf □ Other _ _ _ _ _ _ _ _ , _ _

The question runs as follows:

E31 D you receive any of the following annual bonuses?
E31a □ Holiday allowance
E31b □ End-of-year bonus
E31c □ Christmas bonus
E31d □ 12.5 th 'month'
E31e□ 13th 'month'
E31f □ 14th 'month'
E31g □ 15th 'month'
E31h □ Profit share
E31i□ Payments from balance surplus in cooperatives
E31j □ Other annual bonus

Table: Descriptive statistics of additions to pay in Finland, the Netherlands and Poland by gender

Have you received any other additions to pay from your employer over the past 12 months?	Finland		NL		Poland	
In %	women	men	women	men	women	men
Leased car, company car	1.22	5.65	1.62	6.35	3.37	11.17
Expense allowance	19.66	31.79	2.84	6.26	2.91	5.75
contribution to medical insurance	1.49	1.19	6.62	8.42	8.28	11.41
Contribution to pension scheme	1.14	1.10	4.89	7.95	3.75	6.81
Contribution to a savings scheme	0.28	0.71	3.89	5.50	x	x
Contribution to home telephone charges / use	1.06	2.08	1.08	3.54	1.07	1.81
Public transport pass	0.63	0.49	3.38	1.90	2.22	4.02
PC at home / laptop	4.05	9.36	1.66	4.30	4.75	16.17
Goods or wages in kind (perquisites)	22.57	28.65	0.61	1.17	12.49	14.78
Organization has been privatized	6.22	11.28	7.66	9.42	x	x
Organization announced redundancies	25.80	36.28	35.23	30.64	x	x
Org. offered training	41.05	45.02	x	x	x	x
Org. faced reorganization	42.06	47.68	x	x	x	x
In workplace cooperative committee	49.42	58.45	x	x	x	x
Org. faced merger	15.78	20.02	16.62	16.75	x	x
Org. renewed computer equipment	74.66	80.64	53.98	61.02	x	x
Org. has competent strategy	28.76	34.66	34.26	39.39	x	x
Org. under threat of bankruptcy	2.35	4.20	6.84	6.43	x	x
Skill bonus	2.98	2.80	x	x	x	x
Overtime bonus	4.20	8.41	x	x	x	x
Total sum of bonus	21.00	21.94	x	x	x	x

The gender pattern in this Table is reinforced for parents.

Appendix A.14: The Wage Indicator Survey and Gross Hourly Wages

This appendix explains how in the WI dataset the hourly wages are calculated. The calculation is based on three variables, notably a variable indicating the waged hours (see Section 2), a variable indicating the payment period (see Section 3) and a variable indicating the gross and net pay (see Section 4). For more information about the project see www.WI.org/, particularly the links to the questionnaires. The section Research Lab has downloadable information related to the survey.

2. IDENTIFYING THE WAGED HOURS

The WI questionnaire measures working hours in four ways:

• contractual working hours, in case the respondent has an employment contract in which weekly working hours are agreed; in case flexible, on call or annualized hours are agreed, the minimum and maximum weekly hours or the annual hours are asked;

• usual working hours, registered for those individuals not having agreed hours or not having an employment contract and for those individuals whose usual hours differ from the contractual hours;

• standard working week at the workplace, asked for workers in part-time jobs only;

• waged hours per week for the last wage. In case of discrepancies across the reported hours, the syntax X38 first calculates the weekly waged hours based on contractual hours. In case paid overtime is reported and included in the reported wage, the usual hours are considered the weekly waged hours. This is particularly checked for part-time workers with paid overtime hours. In case of missing data on contractual or usual hours, the waged hours are considered the weekly waged hours.

3. THE PAY PERIOD

For the individuals in dependent employment, the payment period is asked. This is an obligatory question, so the respondent can't proceed without having ticked an answer. A text box allows respondents to specify their pay period, used by a small percentage of the respondents, particularly individuals in atypical shift work are using the textbox, for example those working in the offshore industry with its 12 hours shifts or in marine transport.

For the self-employed and family workers, the annual income is asked and a next question asks "Was this income earned in 12 months or less?". If the answer is less then 12 months, it is asked how many months. The pay period variable is checked thoroughly. In order to do so, the wages for all countries are converted into euros. For Release 1 – 8, the exchange rates of 1-10- 2006 have been used. Next, pay period in relation to euro is checked for reliability:

• earnings euro > 150000 are considered annual earnings.

• earnings euro < 10 are considered hourly earnings.

• earnings euro >1000 and <=5000 and working hours > 30 are considered monthly if pay period is missing

• earnings euro >15000 and <=45000 and working hours > 30 are considered 3- monthly if pay period is missing or <7

• earnings euro >45000 and working hours > 30 are considered annual if pay period is missing or <7

• earnings euro 50 >< 600 are considered weekly when reported hourly.
• earnings euro 600 ><1200 are considered 2 weeks when reported <=weekly.
• earnings euro > 1200 are considered 4 weeks when reported <=weekly.

4. THE REPORTED GROSS AND NET WAGES

Individuals in dependent employment are asked “Do you know your GROSS and your NET wage?”. Depending on the answer, questions follow for the last gross and net wages. The data is checked for the following cases:

• Persons that accidentally report their net wage in the gross wage box and vice versa. This is assumed to be the case if the reported net wage is larger than the reported gross wages.
• Gross wages more than 3 times net wages are controlled for.

The question about gross and net wage is followed by a question whether their last wage included allowances and bonuses. Initially, until September 2006, a long country-specific list of allowances was presented on the screen, using per allowance a tick button and a box for the amount. As this was considered user-unfriendly, since September 2006 a question asks whether the last wage included allowances and bonuses, yes or no. If yes, a list of allowances is presented, and if one or more allowances are ticked, a question asks for the amount of the particular allowance. Following definitions of statistical agencies, allowances should not be included in the wages. Therefore, the total amount of the allowances is subtracted if the bonus is at most 2/3 of the gross wage. If the total amount of allowances is higher, it is considered unreliable.

5. GROSS HOURLY WAGES

The gross hourly wages is calculated by dividing the gross wages, controlled for allowances, by the pay period. In case only net wages and no gross wages are reported, the gross hourly wages are estimated from the net hourly wages, based on the country’s average gross/net ratio of hourly wages. Finally, extreme values are removed. Initially, we aimed for deleting the highest and lowest <.5% and >99.5%. However, across releases these groups may vary considerably. For one release the 99.5% level may be reached for 75 Euro and another release at 100 Euro. Therefore, it seemed better to use a fixed ceiling. The ceiling is taken at 1 Euro and 200 Euro. For non-Euro countries, the ceiling is tested using exchange rates. The upper ceiling is equal for all countries, the lower ceiling is set at 1 Euro for the Euro-countries and at 1 currency unit for PL..

6. DERIVING DATA FROM THE HOURLY WAGES

Based on the calculated hourly wages, variables are derived, such as the logarithm of the hourly wages, and the weekly, monthly and annual wages. The latter are NOT standardised for working hours.[22]

---

[22] compute
WAGEGRHL = LN(WAGEGRHR) . var lab WAGEGRHL 'Log hourly gross wage in national currency'.
compute WAGEGRWE = (WAGEGRHR*HRSWAG1).
var lab WAGEGRWE "Weekly gross wage in national cur (NOT standardised for hrs)".

7. CURRENCIES, PPP'S AND WAGE INDEXES

As for the currency, the gross and net wages are reported in the national currency, with the exception of Poland, where respondents are offered a choice between four currencies. Apart from Polish Zloties, they may receive their earnings in GB Pound, Euro or US Dollar. In the dataset, a variable WAGECUR is created, indicating the currency of each country in the dataset and for Poland the reported currencies. As for purchasing power parities (PPP), these are not available in the dataset. Wage Indexes over time are available for the Netherlands.

********** NETHERLANDS ANNUAL INCREASE 2004 - 2006.

comp WAGE06NL=sysmis.

var lab WAGE06NL 'Hourly gross wage NL at the level of 206'.

if (country=528 and surveyy = 2004) WAGE06NL= wagegrhr* 1.037366548 .

if (country=528 and surveyy = 2005) WAGE06NL= wagegrhr* 1.012152778 .

if (country=528 and surveyy = 2006) WAGE06NL= wagegrhr* 1 .

execute.

****

X38 COMPUTE WAGED HOURS.

```
compute HRSWAG1= SYSMIS.
var lab HRSWAG1 'Working hours a week used for calculating hourly wages'.
format HRSWAG1 (f4.2).
mis val HRSWAG1 (-9 thru -1).
if (HRSCON>(0.9* HRSWAG) and HRSCON<(1.1* HRSWAG) and HRSWAG>0) HRSWAG1= HRSWAG.
execute.
if ((missing(HRSWAG1) or sysmis(HRSWAG1)) and missing(HRSCON) and HRSCON>(0.9* HRSREA) and
HRSCON<(1.1* HRSREA) and HRSREA>0) HRSWAG1= HRSREA.
execute.
*** CONTROLING FOR PAID OVERTIME HOURS.
if ((wageotim=1 or wageotim=2) and hrsreal0=3 and HRSCON=HRSWAG and HRSREA>(1.1*HRSCON) and
HRSWAG>0) HRSWAG1=HRSREA.
execute.
*** CONTROLING FOR FULLTIMERS REPORTING DAY HOURS INSTEAD OF WEEK HOURS.
if (hrshisto=1 and hrscont4=1 and HRSCON<12 and HRSREA <12 and HRSWAG<12)
HRSWAG1=5*HRSWAG.
execute.
*** CONTROLING FOR PARTTIMERS REPORTING CONTRACTUAL HOURS.
if (hrshisto=0 and hrscont4=2 and (wageotim=1 or wageotim=2) and hrsreal0=3 and HRSREA>0)
HRSWAG1=HRSREA.
execute.
```

---

compute WAGEGRMO = (WAGEGRHR*HRSWAG1*4.33).
var lab WAGEGRMO "Monthly gross wage in national currency (NOT standardised for hrs)".
compute WAGEGRAN = (WAGEGRWE*52).
var lab WAGEGRAN "Annual gross wage in national cur (NOT standardised for hrs)".

```
if (missing(HRSWAG1) or sysmis(HRSWAG1)) HRSWAG1= HRSWAG.
execute.
if (missing(HRSWAG1) or sysmis(HRSWAG1)) HRSWAG1= HRSCON.
execute.
if (missing(HRSWAG1) or sysmis(HRSWAG1)) HRSWAG1= HRSREA.
execute.
*** DELETE EXTREME VALUES.
if (HRSWAG1=0 OR HRSWAG1>100) HRSWAG1=SYSMIS.
des HRSWAG1.
```

X39 CHECK PAY PERIOD AND COMPUTE GROSS AND NET WAGE.

```
comp SYSMIS=1.
recode SYSMIS (0=0)(else=sysmis).
execute.
comp WAGEGR1= SYSMIS .
comp WAGENE1=SYSMIS .
execute.
*** COMPUTE GROSS and NET WAGE, USED FOR CHECK PAY PERIOD.
comp WAGEGR1= WAGEGR.
comp WAGENE1=WAGENE .
var lab WAGEGR1 'Last gross wages in national currency NOT CONTROLLED FOR PAYPERIOD'.
var lab WAGENE1 'Last nett wages in national currency NOT CONTROLLED FOR PAYPERIOD'.
format WAGEGR1 WAGENE1 (f14.2).
missing val WAGEGR1 WAGENE1 (-9 thru -1).
*** CHECK FOR WAGEGR1 < WAGENE1.
comp SYSMISA=SYSMIS.
comp SYSMISB=SYSMIS.
execute.
if (WAGEGR1 < WAGENE1) SYSMISA = WAGEGR1.
if (WAGEGR1 < WAGENE1) SYSMISB = WAGENE1.
execute.
if (SYSMISA > 0) WAGENE1 = SYSMISA.
if (SYSMISB > 0) WAGEGR1 = SYSMISB.
execute.
*** TEMPORARY ASSIGN GROSS WAGE = NETT WAGE WHEN GROSS WAGE IS MISSING/tijdelijk bruto
loon vullen als dat ontbreekt.
if (missing(WAGEGR) and WAGENE > 0) WAGEGR1 = WAGENE.
execute.
*** TEMPORARY ASSIGN GROSS WAGE = EURO LEVEL FOR NON-EURO COUNTRIES BASED ON EXCHANGE
RATE 1-10-2006 TO CHECK .
if (WAGECUR =2) WAGEGR1= 1 * WAGEGR1.
if (WAGECUR = 1) WAGEGR1= 0.25185 * WAGEGR1.
*** TEMPORARY ASSIGN NETT WAGE = EURO LEVEL FOR NON-EURO COUNTRIES.
if (WAGECUR =2) WAGENE1= 1 * WAGENE1.
if (WAGECUR = 1) WAGENE1= 0.25185 * WAGENE1.
*** COMPUTE WAGEPER3, USED FOR CALCULATING HOURLY WAGE.
comp WAGEPER3=wageperi.
var lab WAGEPER3 'Wage period CHECKED'.
for WAGEPER3 (F2).
mis val WAGEPER3 (-9 thru -1).
```

```
val lab WAGEPER3
1 '1 calendar month'
2 '4 weeks'
3 '2 weeks'
4 '1 week'
5 '1 day'
6 '1 hour'
7 '1 year'
10 '2 calendar months'
11 '3 calendar months'
-1 ' Not (contst > 9)'
-9 'User missing'.
add val lab WAGEPER3
12 '4 calendar months'
13 '5 calendar months'
14 '6 calendar months'
15 '7 calendar months'
16 '8 calendar months'
17 '9 calendar months'
18 '10 calendar months'
19 '11 calendar months'.
if (contst<10 and WAGEMO2=1) WAGEPER3=1.
if (contst<10 and WAGEMO2=2) WAGEPER3=10.
if (contst<10 and WAGEMO2=3) WAGEPER3=11.
if (contst<10 and WAGEMO2=4) WAGEPER3=12.
if (contst<10 and WAGEMO2=5) WAGEPER3=13.
if (contst<10 and WAGEMO2=6) WAGEPER3=14.
if (contst<10 and WAGEMO2=7) WAGEPER3=15.
if (contst<10 and WAGEMO2=8) WAGEPER3=16.
if (contst<10 and WAGEMO2=9) WAGEPER3=17.
if (contst<10 and WAGEMO2=10) WAGEPER3=18.
if (contst<10 and WAGEMO2=11) WAGEPER3=19.
if (contst<10 and WAGEMO2=12) WAGEPER3=7.
execute.
****** CHECK FOR RELIABLE GROSS EARNINGS RELATED TO WAGEPERIOD.
*** EARNINGS EURO > 150000 ARE CONSIDERED ANNUAL EARNINGS.
if (WAGEGR1 > 150000 ) WAGEPER3=7.
execute.
*** EARNINGS EURO < 10 ARE CONSIDERED HOURLY EARNINGS.
if (WAGEGR1 <=10 ) WAGEPER3=6.
execute.
*** EARNINGS ARE CONSIDERED MONTHLY IF WAGEPER3 IS MISSING.
if (missing (WAGEPER3) and HRSWAG1>30 and HRSWAG1<=45 and WAGEGR1>1000 and
WAGEGR1<=5000) WAGEPER3=1.
execute.
*** EARNINGS ARE CONSIDERED 3-MONTHLY IF WAGEPER3 IS MISSING OR <7.
if ((missing (WAGEPER3) or WAGEPER3<7) and HRSWAG1>30 and HRSWAG1<=45 and WAGEGR1>15000
and WAGEGR1<=45000) WAGEPER3=11.
execute.
*** EARNINGS ARE CONSIDERED ANNUAL IF WAGEPER3 IS MISSING OR <7.
```

```
if ((missing (WAGEPER3) or WAGEPER3<7) and HRSWAG1>30 and HRSWAG1<=45 and
WAGEGR1>45000) WAGEPER3=7.
execute.
*** EARNINGS EURO 50 >< 600 ARE CONSIDERED WEEKLY WHEN REPORTED HOURLY.
if (WAGEGR1>50 and WAGEGR1<=600 and WAGEPER3 = 6) WAGEPER3=4.
execute.
*** EARNINGS EURO 600 ><1200 ARE CONSIDERED 2 WEEKs WHEN REPORTED <=WEEKLY.
if (WAGEGR1>600 and WAGEGR1<=1200 and (WAGEPER3 = 5 or WAGEPER3 = 6)) WAGEPER3=3.
execute.
*** EARNINGS EURO > 1200 ARE CONSIDERED 4 WEEKs WHEN REPORTED <=WEEKLY.
if (WAGEGR1>1200 and (WAGEPER3 = 5 or WAGEPER3 = 6)) WAGEPER3=2.
execute.
*** COMPUTE AGAIN GROSS and NET WAGE, NOW IN NATIONAL CURRENCY/opnieuw bruto en netto loon
berekenen.
comp WAGEGR1= WAGEGR.
comp WAGENE1=WAGENE .
*** CHECK FOR WAGEGR1 < WAGENE1.
comp SYSMISA=SYSMIS.
comp SYSMISB=SYSMIS.
execute.
if (WAGEGR1 < WAGENE1) SYSMISA = WAGEGR1.
if (WAGEGR1 < WAGENE1) SYSMISB = WAGENE1.
execute.
if (SYSMISA > 0) WAGENE1 = SYSMISA.
if (SYSMISB > 0) WAGEGR1 = SYSMISB.
execute.
*** COMPUTE WASUM1 - BENEFITS & ALLOWANCES, BASED ON WASUM.
comp WASUM1= WASUM.
var lab WASUM1 'Sum benefits, used for calculating hourly wages'.
form WASUM1 (f12.2).
execute.
*** CHECK FOR EXTREME VALUES OF WAGESUM AND CHECK FOR MORE THAN 2/3 OF GROSS WAGE.
if (WASUM < 0) WASUM1=SYSMIS .
if (WASUM > (0.66 * WAGEGR1)) WASUM1=SYSMIS .
execute.
*** DEDUCT WASUM1 FROM GROSS and NET WAGE.
do if (WASUM1>0 and WAGEGR1> WASUM1).
comp WAGEGR1=WAGEGR1-WASUM1.
comp WAGENE1=WAGENE1-WASUM1.
if (WAGENE1<0) WAGENE1=0.
end if.
execute.
des WAGEGR1 WAGENE1 WAGEPER3/STATISTICS=MEAN STDDEV MIN MAX.
```

X41 COMPUTE HOURLY WAGES 1ST TIME.

```
compute WAGEGRHR=SYSMIS .
compute WAGENEHR= SYSMIS .
format WAGEGRHR WAGENEHR (f8.2).
var lab WAGEGRHR 'Hourly gross wage in national currency'.
var lab WAGENEHR 'Hourly nett wage in national currency'.
```

```
mis val WAGEGRHR WAGENEHR (-1,-9).
do if (HRSWAG1 > 0 and WAGEGR1 >0 ).
if (WAGEPER3 = 1 ) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1).
if (WAGEPER3 = 2 ) WAGEGRHR=WAGEGR1/(4*HRSWAG1).
if (WAGEPER3 = 3 ) WAGEGRHR=WAGEGR1/(2*HRSWAG1).
if (WAGEPER3 = 4 ) WAGEGRHR=WAGEGR1/(HRSWAG1).
if (WAGEPER3 = 6 ) WAGEGRHR=WAGEGR1.
if (WAGEPER3 = 7 ) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*12).
if (WAGEPER3 = 10) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*2).
if (WAGEPER3 = 11) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*3).
if (WAGEPER3 = 12) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*4).
if (WAGEPER3 = 13) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*5).
if (WAGEPER3 = 14) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*6).
if (WAGEPER3 = 15) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*7).
if (WAGEPER3 = 16) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*8).
if (WAGEPER3 = 17) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*9).
if (WAGEPER3 = 18) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*10).
if (WAGEPER3 = 19) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*12).
end if.
execute.
do if (HRSWAG1 > 0 and WAGENE1 > 0 ).
if (WAGEPER3 = 1 ) WAGENEHR=WAGENE1/(4.33*HRSWAG1).
if (WAGEPER3 = 2 ) WAGENEHR=WAGENE1/(4*HRSWAG1).
if (WAGEPER3 = 3 ) WAGENEHR=WAGENE1/(2*HRSWAG1).
if (WAGEPER3 = 4 ) WAGENEHR=WAGENE1/(HRSWAG1).
if (WAGEPER3 = 6 ) WAGENEHR=WAGENE1.
if (WAGEPER3 = 7 ) WAGENEHR=WAGENE1/(4.33*HRSWAG1*12).
if (WAGEPER3 = 10) WAGENEHR=WAGENE1/(4.33*HRSWAG1*2).
if (WAGEPER3 = 11) WAGENEHR=WAGENE1/(4.33*HRSWAG1*3).
if (WAGEPER3 = 12) WAGENEHR=WAGENE1/(4.33*HRSWAG1*4).
if (WAGEPER3 = 13) WAGENEHR=WAGENE1/(4.33*HRSWAG1*5).
if (WAGEPER3 = 14) WAGENEHR=WAGENE1/(4.33*HRSWAG1*6).
if (WAGEPER3 = 15) WAGENEHR=WAGENE1/(4.33*HRSWAG1*7).
if (WAGEPER3 = 16) WAGENEHR=WAGENE1/(4.33*HRSWAG1*8).
if (WAGEPER3 = 17) WAGENEHR=WAGENE1/(4.33*HRSWAG1*9).
if (WAGEPER3 = 18) WAGENEHR=WAGENE1/(4.33*HRSWAG1*10).
if (WAGEPER3 = 19) WAGENEHR=WAGENE1/(4.33*HRSWAG1*12).
end if.
execute.
do if (HRSWAG1 > 0 and WAGEGR1 >0 and hrsdayp2 >0).
if (WAGEPER3 = 5 ) WAGEGRHR=WAGEGR1/(HRSWAG1/hrsdayp2).
if (WAGEPER3 = 5 ) WAGENEHR=WAGENE1/(HRSWAG1/hrsdayp2).
end if.
execute.
*** CHECK FOR GROSS WAGE >3 * NET WAGE.
if (WAGEGR1 >= 3*WAGENE1 and WAGENE1 > 0 and WAGENEHR>10 and (WAGEGR1/10)>=WAGENE1
and (WAGEGR1/100)<WAGENE1) WAGEGR1=WAGEGR1/10.
execute.
if (WAGEGR1 >= 3*WAGENE1 and WAGENE1 > 0 and WAGENEHR>10 and (WAGEGR1/100)>=WAGENE1 )
WAGEGR1=WAGEGR1/100.
```

```
execute.
if (WAGEGR1 >= 3*WAGENE1 and WAGENE1 > 0 and WAGENEHR<=10 and (WAGEGR1/10)>=WAGENE1
and (WAGEGR1/100)<WAGENE1) WAGENE1=WAGENE1*10.
execute.
if (WAGEGR1 >= 3*WAGENE1 and WAGENE1 > 0 and WAGENEHR<=10 and
(WAGEGR1/100)>=WAGENE1) WAGENE1=WAGENE1*100.
execute.
if (WAGEGR1 >= 3*WAGENE1 ) WAGEGR1=sysmis.
*** COMPUTE HOURLY WAGES FINAL.
compute WAGEGRHR=SYSMIS .
compute WAGENEHR= SYSMIS .
format WAGEGRHR WAGENEHR (f8.2).
var lab WAGEGRHR 'Hourly gross wage in national currency'.
var lab WAGENEHR 'Hourly nett wage in national currency'.
mis val WAGEGRHR WAGENEHR (-1,-9).
do if (HRSWAG1 > 0 and WAGEGR1 >0 ).
if (WAGEPER3 = 1 ) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1).
if (WAGEPER3 = 2 ) WAGEGRHR=WAGEGR1/(4*HRSWAG1).
if (WAGEPER3 = 3 ) WAGEGRHR=WAGEGR1/(2*HRSWAG1).
if (WAGEPER3 = 4 ) WAGEGRHR=WAGEGR1/(HRSWAG1).
if (WAGEPER3 = 6 ) WAGEGRHR=WAGEGR1.
if (WAGEPER3 = 7 ) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*12).
if (WAGEPER3 = 10) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*2).
if (WAGEPER3 = 11) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*3).
if (WAGEPER3 = 12) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*4).
if (WAGEPER3 = 13) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*5).
if (WAGEPER3 = 14) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*6).
if (WAGEPER3 = 15) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*7).
if (WAGEPER3 = 16) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*8).
if (WAGEPER3 = 17) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*9).
if (WAGEPER3 = 18) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*10).
if (WAGEPER3 = 19) WAGEGRHR=WAGEGR1/(4.33*HRSWAG1*12).
end if.
execute.
do if (HRSWAG1 > 0 and WAGENE1 > 0 ).
if (WAGEPER3 = 1 ) WAGENEHR=WAGENE1/(4.33*HRSWAG1).
if (WAGEPER3 = 2 ) WAGENEHR=WAGENE1/(4*HRSWAG1).
if (WAGEPER3 = 3 ) WAGENEHR=WAGENE1/(2*HRSWAG1).
if (WAGEPER3 = 4 ) WAGENEHR=WAGENE1/(HRSWAG1).
if (WAGEPER3 = 6 ) WAGENEHR=WAGENE1.
if (WAGEPER3 = 7 ) WAGENEHR=WAGENE1/(4.33*HRSWAG1*12).
if (WAGEPER3 = 10) WAGENEHR=WAGENE1/(4.33*HRSWAG1*2).
if (WAGEPER3 = 11) WAGENEHR=WAGENE1/(4.33*HRSWAG1*3).
if (WAGEPER3 = 12) WAGENEHR=WAGENE1/(4.33*HRSWAG1*4).
if (WAGEPER3 = 13) WAGENEHR=WAGENE1/(4.33*HRSWAG1*5).
if (WAGEPER3 = 14) WAGENEHR=WAGENE1/(4.33*HRSWAG1*6).
if (WAGEPER3 = 15) WAGENEHR=WAGENE1/(4.33*HRSWAG1*7).
if (WAGEPER3 = 16) WAGENEHR=WAGENE1/(4.33*HRSWAG1*8).
if (WAGEPER3 = 17) WAGENEHR=WAGENE1/(4.33*HRSWAG1*9).
if (WAGEPER3 = 18) WAGENEHR=WAGENE1/(4.33*HRSWAG1*10).
```

```
if (WAGEPER3 = 19) WAGENEHR=WAGENE1/(4.33*HRSWAG1*12).
end if.
execute.
do if (HRSWAG1 > 0 and WAGEGR1 >0 and hrsdayp2 >0).
if (WAGEPER3 = 5 ) WAGEGRHR=WAGEGR1/(HRSWAG1/hrsdayp2).
if (WAGEPER3 = 5 ) WAGENEHR=WAGENE1/(HRSWAG1/hrsdayp2).
end if.
execute.
*** TEMPORARY CHECK FOR EXTREME VALUES GROSS HOURLY WAGES >EURO 200 AND <1 EURO FOR
EUR, GBP, USD, DKK, AND <1 UNIT FOR PL, BR, AR, IN, SA, HU, KR, MX, based on currency rates 1-10-
2006.
if (WAGECUR =1 and WAGEGRHR > 794.12 ) WAGENEHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR > 200.00 ) WAGENEHR=SYSMIS.
if (WAGECUR =1 and WAGEGRHR > 794.12 ) WAGEGRHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR > 200.00 ) WAGEGRHR=SYSMIS.
execute.
if (WAGECUR =1 and WAGEGRHR< 1 ) WAGENEHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR< 1.00 ) WAGENEHR=SYSMIS.
if (WAGECUR =1 and WAGEGRHR< 1 ) WAGEGRHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR< 1.00 ) WAGEGRHR=SYSMIS.
execute.
DES WAGEGRHR WAGENEHR.
```

X41A COMPUTE GROSS WAGES FOR OBS WITH NET WAGES ONLY.

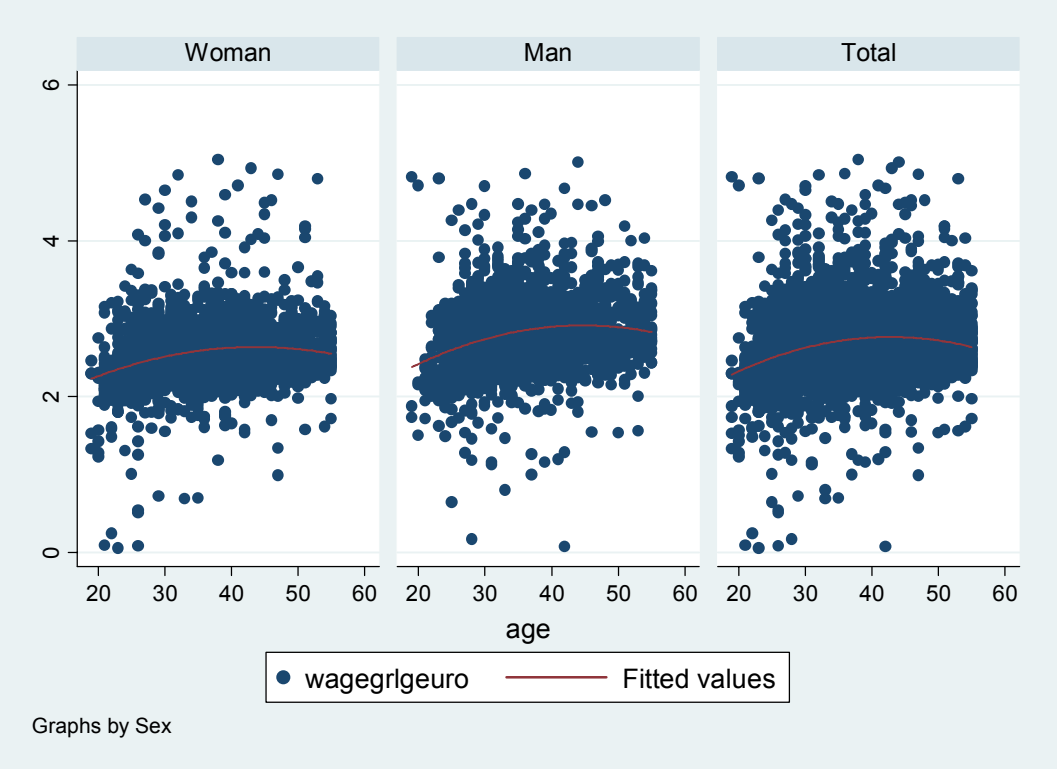
```
*** ASSIGN THE MEAN WAGE DIFFERENCE PER COUNTRY, FOR CALCULATING GROSS WAGE.
comp WAGEDIFF= SYSMIS .
var lab WAGEDIFF 'WAGEGRHR / WAGENEHR '.
form WAGEDIFF (f4.2).
if (WAGEGRHR>0 and WAGENEHR>0) WAGEDIFF=WAGEGRHR / WAGENEHR .
means WAGEDIFF by country.
if (SYSMIS (WAGEGRHR) and WAGENEHR>0 and country= 246 )WAGEGRHR=WAGENEHR * 1.478416 .
if (SYSMIS (WAGEGRHR) and WAGENEHR>0 and country= 528 )WAGEGRHR=WAGENEHR * 1.456928 .
if (SYSMIS (WAGEGRHR) and WAGENEHR>0 and country= 616 and WAGECUR=1)WAGEGRHR=WAGENEHR* 1.538589 .
execute.
```

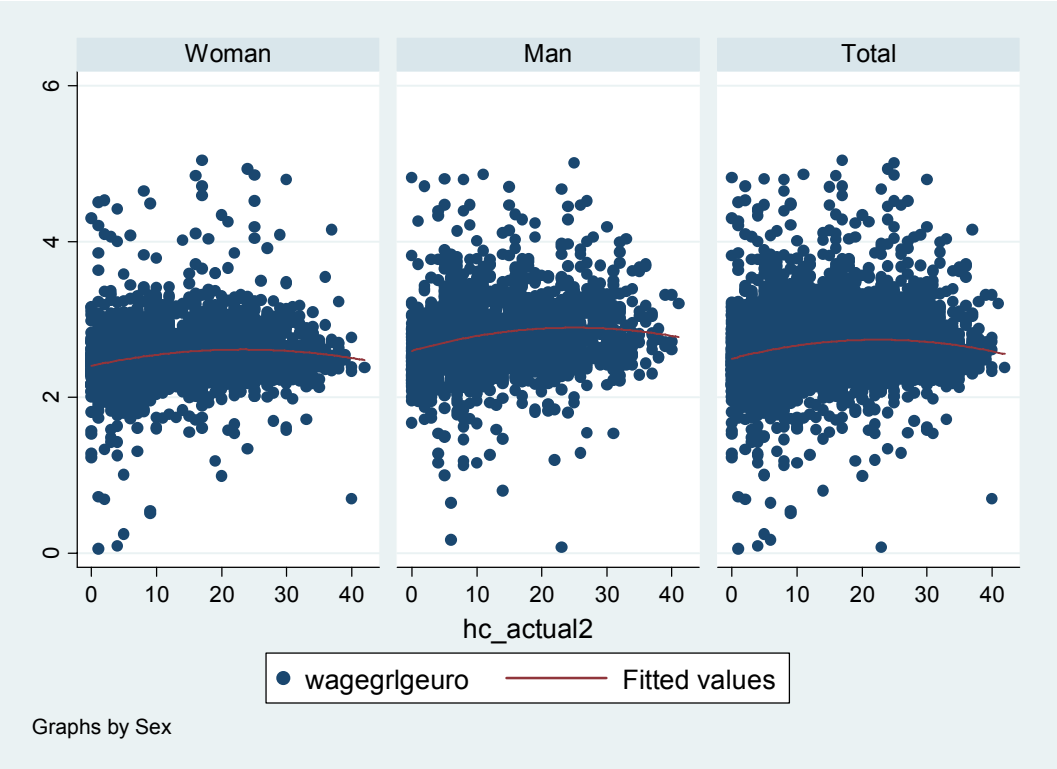
X41B DELETE EXTREME HOURLY WAGES.

```
*** FINAL CHECK FOR EXTREME VALUES GROSS HOURLY WAGES >EURO 200 AND <1 EURO FOR EUR AND <1 UNIT FOR
PL, based on currency rates 1-10-2006.
if (WAGECUR =1 and WAGEGRHR > 794.12 ) WAGENEHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR > 200.00 ) WAGENEHR=SYSMIS.
if (WAGECUR =1 and WAGEGRHR > 794.12 ) WAGEGRHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR > 200.00 ) WAGEGRHR=SYSMIS.
execute.
if (WAGECUR =1 and WAGEGRHR< 1 ) WAGENEHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR< 1.00 ) WAGENEHR=SYSMIS.
if (WAGECUR =1 and WAGEGRHR< 1 ) WAGEGRHR=SYSMIS.
if (WAGECUR =2 and WAGEGRHR< 1.00 ) WAGEGRHR=SYSMIS.
execute.
** adapt EUR/USD/GBP hourly wages in Poland to zloties, currency rates 1-10-2006.
if (COUNTRY=616 and WAGECUR = 2) WAGEGRHR=3.97064*WAGEGRHR.
```

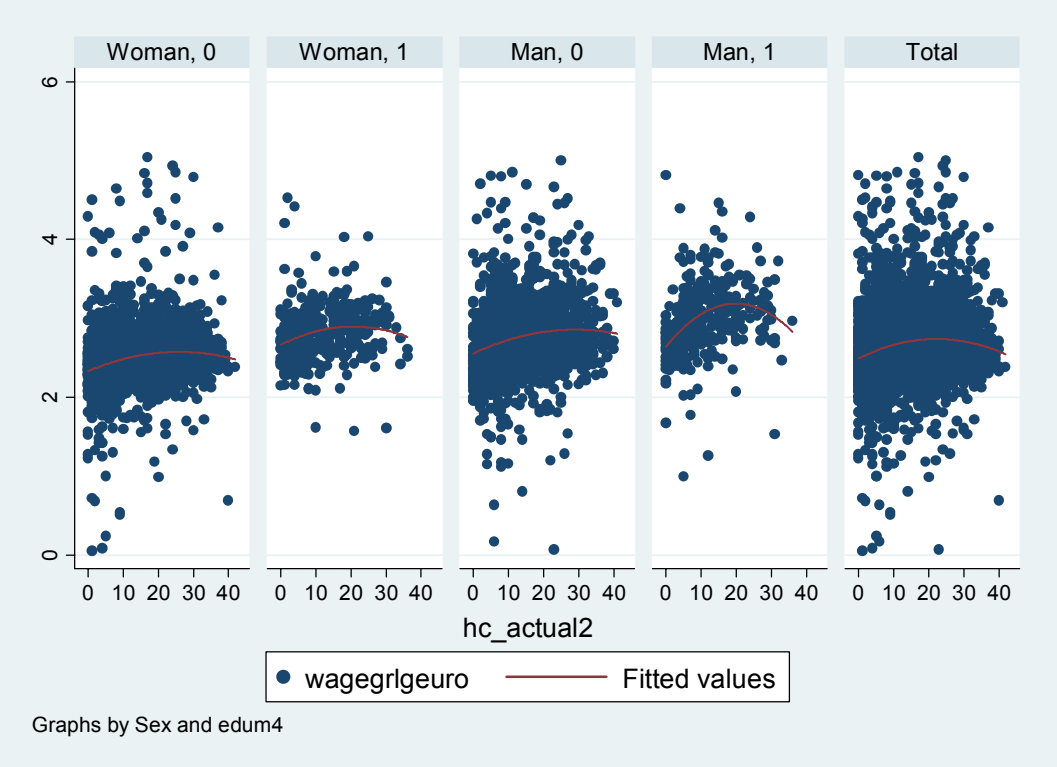
```
if (COUNTRY=616 and WAGECUR = 2) WAGENEHR=3.97064*WAGEGRHR.
if (COUNTRY=616 and WAGECUR = 3) WAGEGRHR=5.88701*WAGEGRHR.
if (COUNTRY=616 and WAGECUR = 3) WAGENEHR=5.88701*WAGEGRHR.
if (COUNTRY=616 and WAGECUR = 4) WAGEGRHR=3.11864*WAGEGRHR.
if (COUNTRY=616 and WAGECUR = 4) WAGENEHR=3.11864*WAGEGRHR.
execute.
means WAGEGRHR WAGENEHR by country.
```

Figure 1: **Finland:** wage age curve by sex

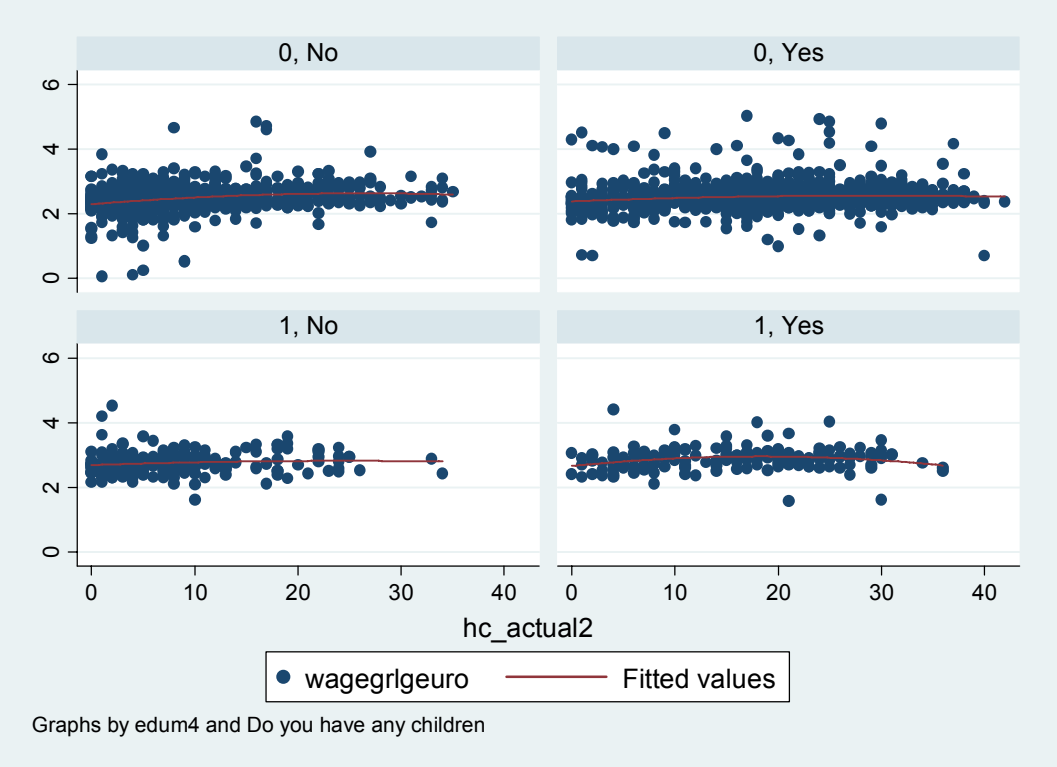




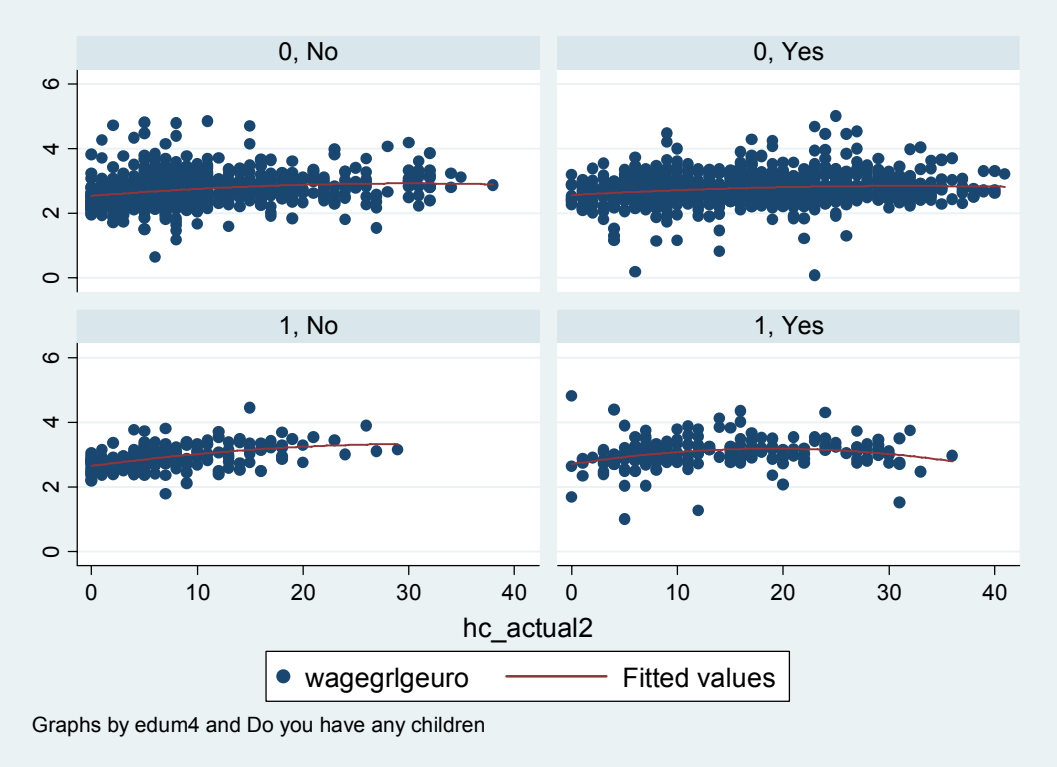
Finland: wage actual experience curve by sex.



Finland: wage-human capital curve by sex and having more than ISCED4 education or not.

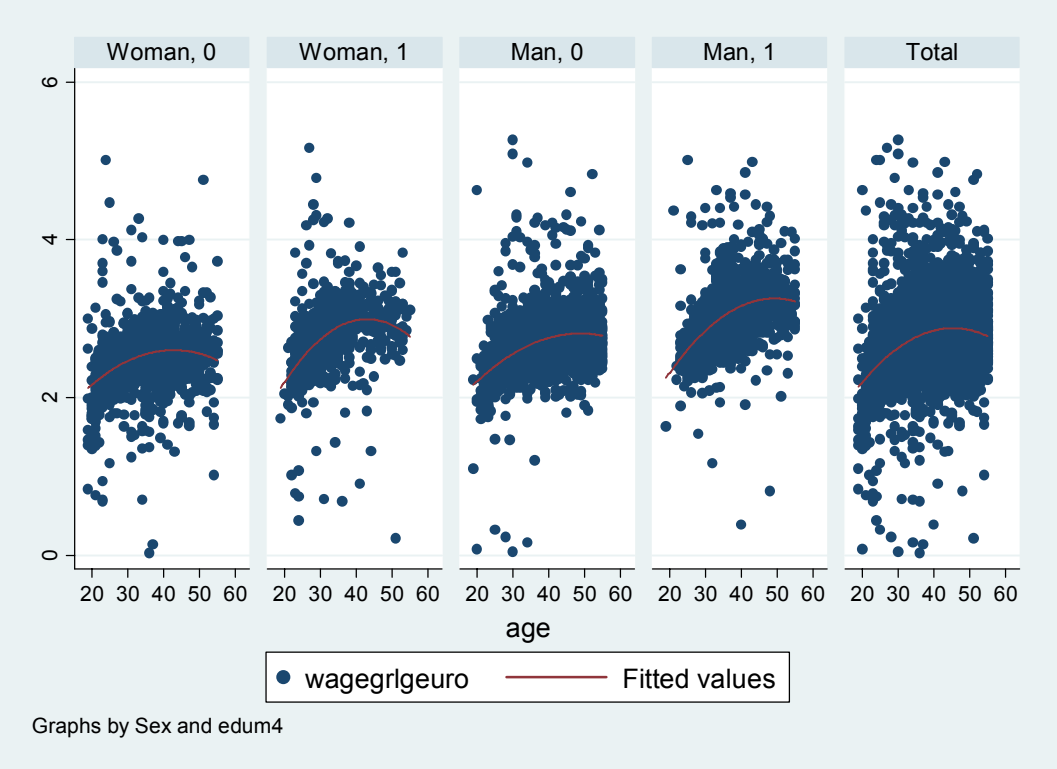


Finland: Women : Wage human capital curves by having ISCED4 level education or not (0,1) and having children (NO/YES)

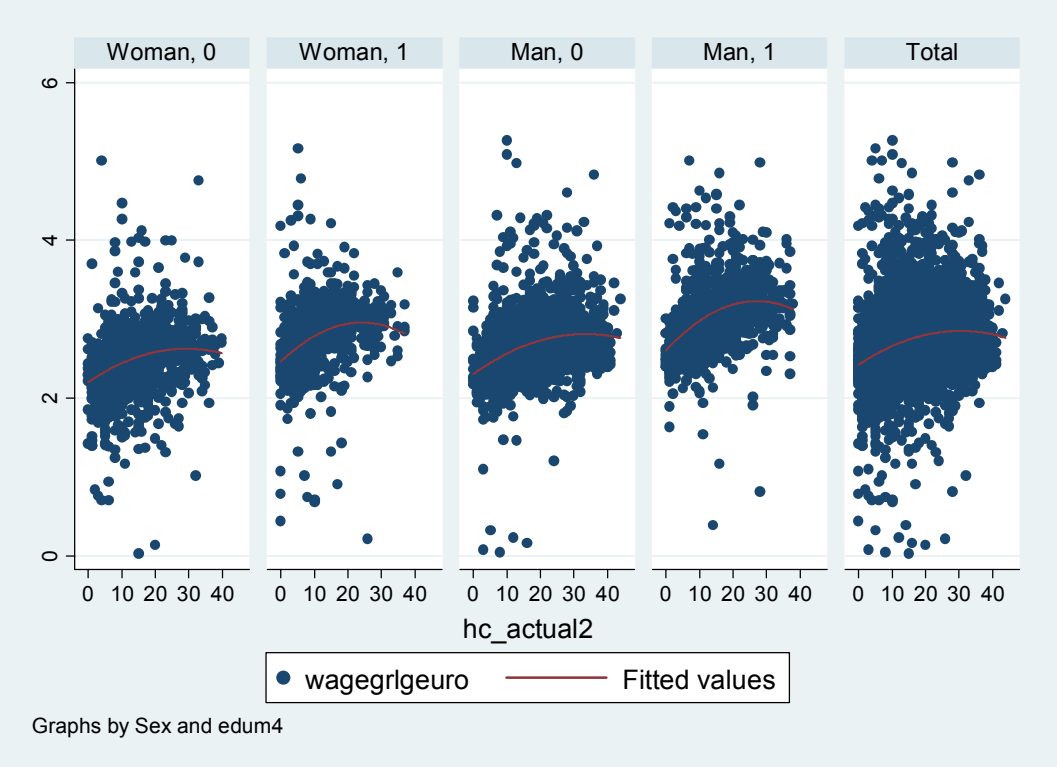


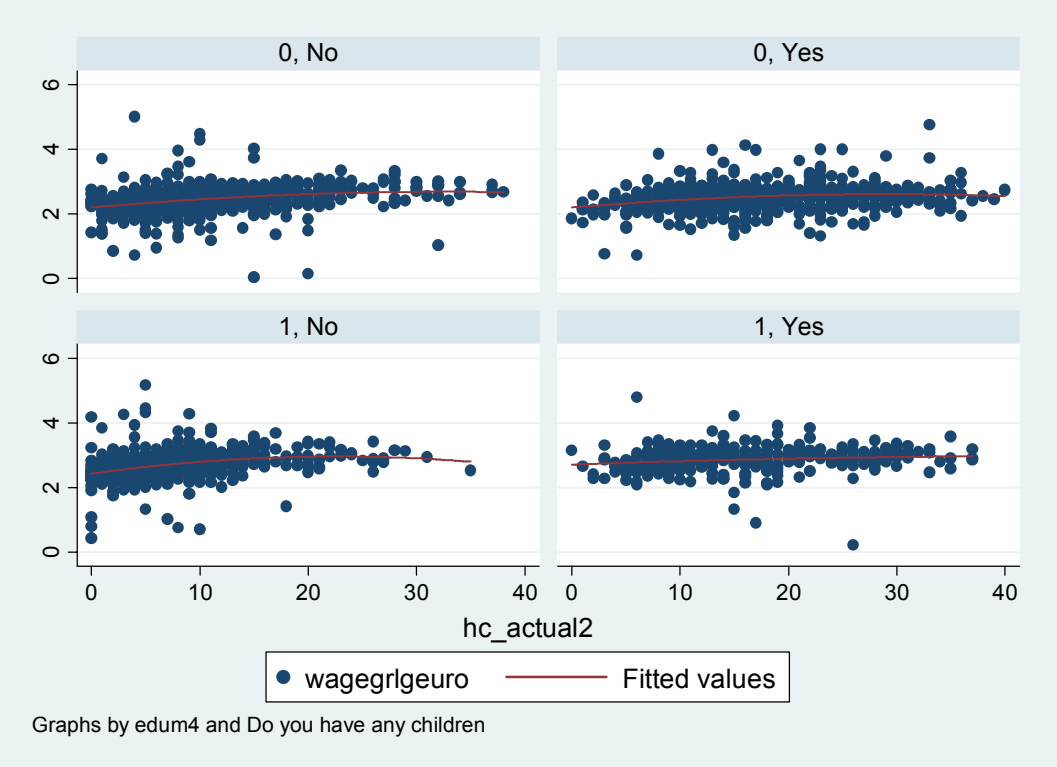
Finland: Men Wage human capital curves by having ISCED4 level education or not (0,1) and having children (NO/YES)

Figure 2: the **Netherlands:** wage age curve by sex

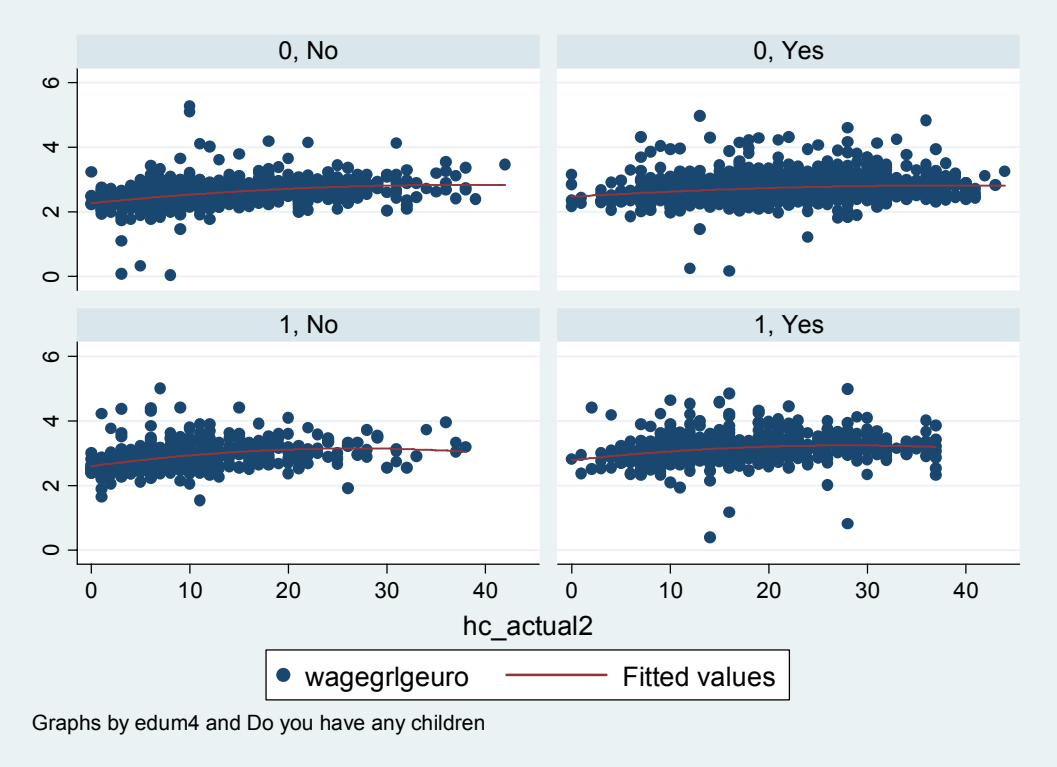


Netherlands: wage hc-actual curve by sex



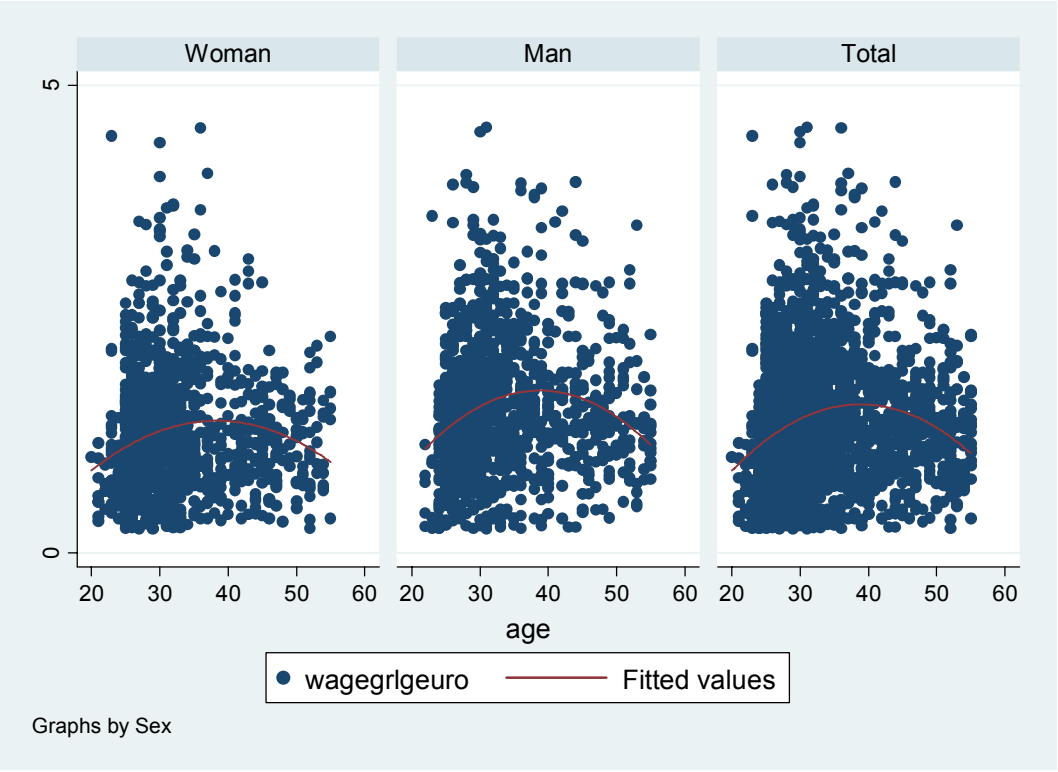


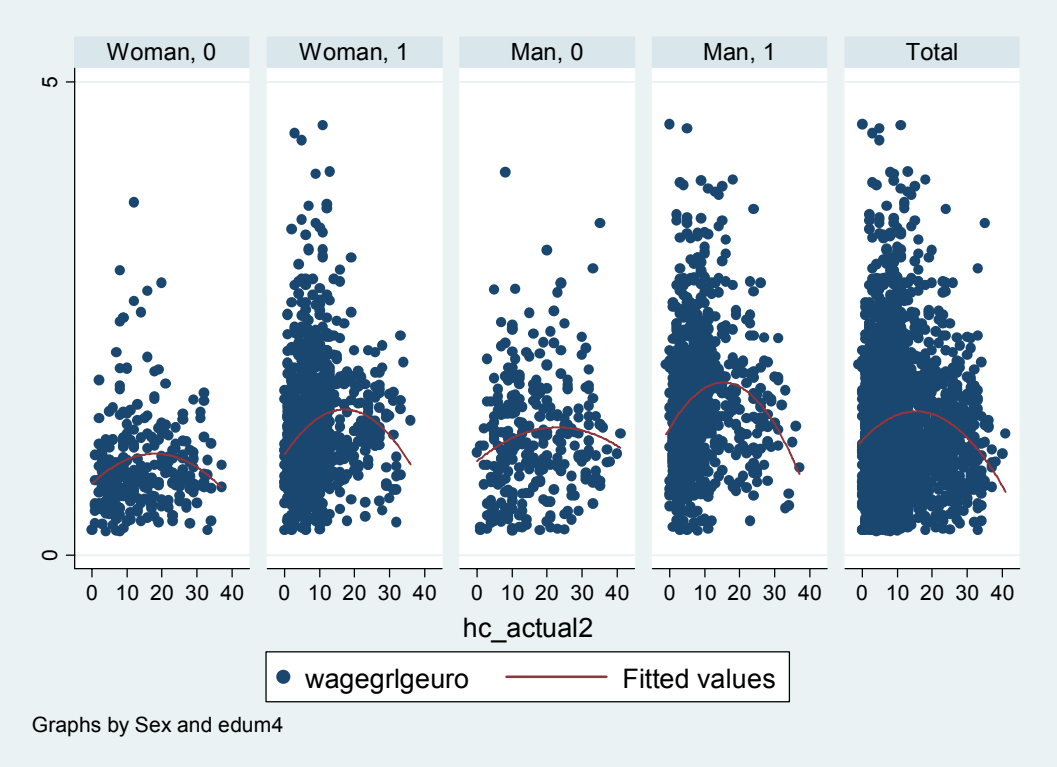
Netherlands: Women Wage human capital curves by having ISCED4 level education or not (0,1) and having children (NO/YES)



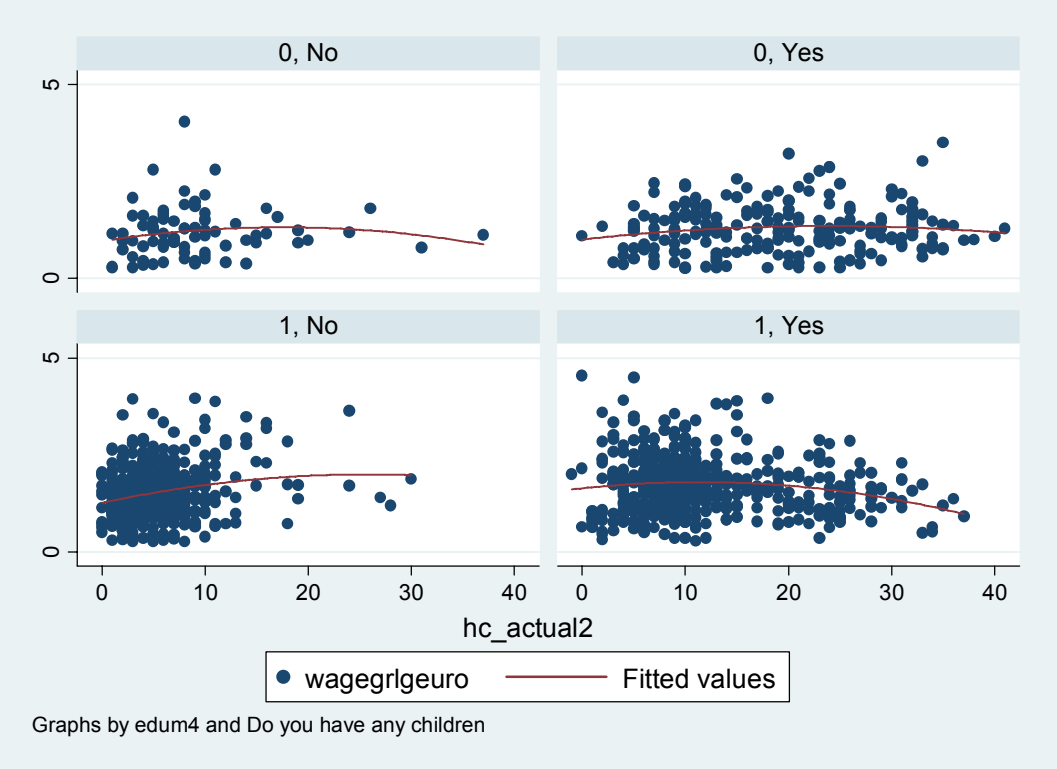
Netherlands: Men Wage human capital curves by having ISCED4 level education or not (0,1) and having children (NO/YES)

Figure 3: Poland: wage age curve by sex

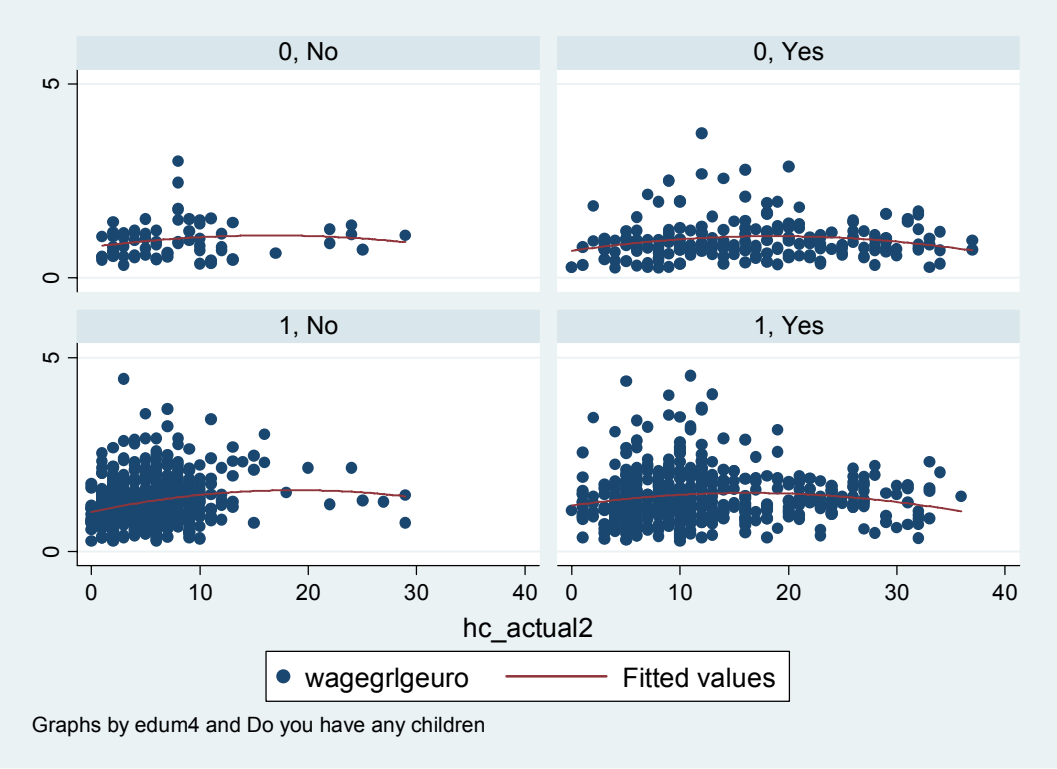




Poland: wage-human capital curve by sex and having more than ISCED4 education or not.



Poland: Women Wage human capital curves by having ISCED4 level education or not (0,1) and having children (NO/YES)



Poland: Men Wage human capital curves by having ISCED4 level education or not (0,1) and having children (NO/YES)