Working Papers in Economics

Maternal employment and female labor force participation:

A case study from Turkey

Değer Eryar[1]

Department of Economics, İzmir University of Economics

HasanTekgüç[2]

Department of Economics, Mardin Artuklu University

İzmir University of Economics

Working Paper #15/01

July 2015

İzmir University of Economics
Department of Economics
Sakarya Cad. No: 156 35330 Balçova
İzmir Turkey

[1] Deger.eryar@gmail.com

[2]htekguc@gmail.com

Maternal employment and female labor force participation:

A case study from Turkey

Abstract: The focus of this paper is to examine the impact of having a working mother on their daughter's labor force participation rate for the first time in Turkey by using a representative sample from the third largest city İzmir. Our findings indicate that the gender role attitude is one of the most important determinants of women's initial entry into the labor force, especially for those women with lower education levels. However, the same effect loses its significance as a factor in women's decision to remain in the labor force. This result suggests that although the gender role attitude can induce low-educated women to participate in the labor market initially, the lack of adequate work-family reconciliation policies in Turkey seem to adversely affect their decision to stay in the labor force as wives and mothers.

Keywords: Female labor force participation rate, work-family reconciliation, labor force attachment, gender role attitude, Turkey.

JEL Classification:
J16; J21; Z13

Introduction

Low female labor force participation rate constitutes a major impediment to full utilization of resources in an economy and, more importantly, to the empowerment of women. However, the issue of participation should not be the sole focus of economic policies without being integrated with another aspect of the problem, the low female labor force attachment rate. Although the socio-economic determinants of female labor force participation rate in Turkey have been analyzed in the literature (Kasnakoğlu, and Dayıoğlu, 1997; Tansel, 2001; Başlevent and Onaran, 2003; Gündüz-Hoşgör and Smits, 2008; Uraz et al., 2010; Dayıoğlu and Kırdar, 2010), weak labor force attachment rate has not been a major focus of research other than the recent work by İlkkaracan (2012), who shows that in 2008, at some point during their life-cycle half of the urban women in Turkey entered the labor market without staying there for more than a few years. Our initial findings based on a novel representative household survey from İzmir region in the summer of 2010 indicate a similar problem. While the urban women's labor force participation rate is only 28 %, almost 57 % of women in the active working age have entered the labor market at least once over their life-cycles. In this context, a comprehensive investigation of the reasons behind the low female labor force attachment rate in Turkey appears to be great importance for the formulation of gender equity policies.

The purpose of this paper is threefold. Firstly, we examine whether the key determinants of female labor force participation rate, such as education level, marital status and the presence of children, have a similar impact on women's decision to *enter* the labor market and their decision to *stay* in the market. Notwithstanding the limitations of the cross-sectional data this paper relies on, we introduce a testing strategy to distinguish between two different stages in women's labor supply behavior. Our assumption is that the importance of the abovementioned determinants of the labor force participation can vary depending on the interactions of social

and institutional factors, such as workplace conditions, childcare policies, or cultural constraints (Crompton and Harris, 1998; Himmelweit and Sigala, 2004; Uunk et al., 2005, Kan, 2007; Steiber and Haas 2009; Budig et al., 2012).

Our second purpose is to shed light on the importance of intergenerational links women's labor supply behavior. Therefore, we investigate the role of the maternal employment as another key factor accounting for female labor force participation rate. This paper will be the first attempt to discuss the importance of maternal employment for daughters' labor supply behavior in a representative sample from Turkey due to novel questions about mothers' past job experience and occupational position in the survey questionnaire.

The effect of maternal employment can exert its influence via two different channels. On the one hand, there have been studies showing the key role played by mothers as agents of socialization in their children development, especially in their daughters' gender role attitude, including their attitude toward working women (Moen et al.,, 1997; Harris and Firestone, 1998; Del Boca et al, 2000; Farré and Vella, 2013; Morill and Morill, 2013). Additionally, one of the primary findings of a different but related set of studies has been a strong statistical association between women's attitudes to gender roles and their labor market behavior (Fortin, 2005; Crompton and Lyonette, 2005, Gündüz-Hoşgör and Smits, 2008; Uraz et al. 2010; O'Sullivan, 2012; Göksel, 2013). In other words, mothers with job market experience tend to hold non-traditional gender attitudes toward working women and their daughters are expected to have similar gender role attitudes, which make them more likely to participate in the labor force. One important shortcoming of our paper is that there is no explicit information about neither mothers' nor daughters' gender role attitude. Therefore we rely on what mothers do (their work experience) rather than what they say (their attitude toward gender equality in the labor market) while conducting our empirical analysis by assuming mothers must have presented themselves as role models.

On the other hand, Dedeoğlu (2010), in her study on the garment production in Turkey, where the workers consist of mostly women with low levels of education, emphasizes "word of mouth" as a key labor recruitment process in order to keep kin/familiar relations at the center of garment production. This recruitment channel seems to be much more crucial especially for those women, who do not have the necessary educational attainment enabling them to search for better jobs through their own means or formal channels. Additionally, as stated in the same study by Dedeoğlu, "word of mouth" recruitment system can result in a more familiar atmosphere (mostly associated with kinship relations) and, therefore, it can help women participate in the job market in the presence of cultural constraints/traditional norms that do not support a friendly environment for working women Although the question about the various channels utilized for the job search was asked only those people who found a job in the last two years in our sample, the response to that question made us believe that the "word of mouth" channel may have played an important role for labor market participation especially for low educated women. While the percentage of women who found a job through "word of mouth" is 51 percent in the last two years, the same indicator jumps to 67 percent for those women with lower than high school degree based on our sample. Therefore, we assume that the maternal employment can have a significant effect on daughters' labor force participation particularly for women with lower educational attainment.

Lastly, we repeat the same analysis for two subgroups according to education levels. We believe that treating better educated women as a separate group can be justified theoretically both by sociological and economic insights. Royalty (1998) argues that disaggregating women employees according to education level can better account for labor supply decisions of women. Accordingly, better educated women tend to move more between jobs as a result of facing a wider wage variance due to more lucrative alternatives rather than less educated women who are constrained by low paid alternatives and therefore more likely to stay home.

Moreover, Royalty adds that there can be some unobservable characteristics such as "career-mindedness" that can differ between better and less educated women, and justify the utilization of different estimation equations for women by their education level. At the same time, jobs for women with higher education consists of mostly high-paid full-time and more positions in the formal sector, which are considered more prestigious and provide women with more resources to deal with work-family balance in the presence of inadequate legal and institutional mechanisms (İlkkaracan, 2010).

Our primary findings show that having a working mother raises the probability of women's initial entry to the labor force; however, the same variable loses its statistical significance and is not important for women's probability of staying in the labor market. The impact of having a working mother turns out to be much more crucial in terms of statistical significance and magnitude for low educated women in their initial entry to the labor force. These results suggest that coming from a household where the mother works can help women overcome problems such as traditional norms, which make it harder for women to work outside their homes, by presenting working mothers as role models for their daughters. Another finding of this paper is that it is not only mothers' employment, however, their occupational status that raises their daughters' probability of entering the labor force. This link is particularly strong for low educated women along with mothers who are unskilled workers. The same result tends to indicate the importance of having working mothers not only as role models but also as important facilitators of job recruitment given the lack of formal job search methods especially for women along with low educational attainment and limited job opportunities.

By analyzing women's entry and stay behavior separately, we can also provide some evidence of statistically significant and negative effects of conventional factors such as being married and having young children on women's probability of staying in the labor force rather than on entering the labor force. These empirical findings also support the previous research done in

Turkish context about the limits of work-family reconciliation policies regarding women's labor market behavior (İlkkaracan 2010; Dedeoğlu 2012). According to İlkkaracan, the existing legal and institutional mechanisms, such as the lack of formal childcare support especially for younger children or inadequate working hours, constitute major barriers for women at work. Moreover, women with low education levels are supposed to be affected more intensively by the same legal and institutional barriers because they do not have access to market-based childcare options or standard parental leave opportunities as long as they are trapped in low paid and less secure jobs.

The rest of the paper is organized as follows: The next section describes the data set and the variables used in the analysis. Third section provides the methodological framework of the econometric analysis. The estimation results are reported in section 4, and section 5 discusses the main findings of the paper.

Model and the Variables

Empirical Method

Our aim is to examine the effect of mothers' employment on not only on their daughters' labor force participation, but particularly on their labor force attachment in order to shed light on how institutional and cultural constraints can interact with the effects of mother's employment on women's labor supply behavior after women's initial entry into the labor force. Notwithstanding the limitations of the cross-sectional data this paper relies on, we introduce a new testing strategy to distinguish between two different stages in women's life-cycle, namely, the decision to *enter* the labor market, and the decision to *stay* in the labor market.

We estimate three separate probit models in the empirical analysis. The first is the conventional labor force participation equation, where the dependent variable is one for those who participate in the labor force before the reference period and zero for those who do not[3]. Accordingly, the coefficients of the first model show the effects of different socio-economic factors on the probability of *currently* participating in the labor force. In order to distinguish between the decisions to enter the labor force, and then, to stay in the labor force after the initial entry, we estimate two more models. In the second equation ('entry'), we estimate the probability of *ever* entering the labor force, where the dependent variable is one for all women who ever participated in the labor force and zero for those who did not. In this case, the coefficients of the second equation indicate the probability of *ever* participating in the labor force. Lastly, we estimate labor force attachment equation ('stay') where the dependent variable consists of all women who ever entered the labor force at some point during their life. The coefficients in this equation show how different socio-economic factors affect the probability of staying in the labor force.

We also run separate regressions for each subgroup after dividing the sample into two groups according to education levels following the empirical evidence for dissimilar labor market behavior between less than high school (low-educated) versus high school or higher education graduates (high-educated women) (Ioannis Theodossiou and Alexandros Zangelidis, 2009).

$$Z_i = \mathbf{X'}_i \boldsymbol{\beta}_\mathbf{i} + \varepsilon_i \qquad (1)$$

For the whole sample as well as each sub-group, $\mathbf{Z_i}$ are dependent variables (whether the individual is participating in the labor force; whether she has ever participated; and whether she has stayed in the labor force or not), $\mathbf{X}_i$ will consist of all explanatory variables. β is the

[3] The reference period is July-August 2010 and an individual is defined a participant in the labor market only if she was searching for job or employed one month before the reference period.

vector of coefficient estimates and ε are the error terms. First group of control variables consists of individual characteristics such as age, education level, marital status, the presence of young children and elderly dependents, being a household head, and being a migrant. Another group of control variables provides information about the economic position of the individual, such as total wages of all other household members' income, presence of any household member with health insurance, and the house ownership. Lastly, there are dummy variables for occupational categories accounting for mother's job experience associated with their daughters'positive attitude toward working women and the presence of family networks during job rectruitment.

We are primarily interested in the influence of mothers' employment on the labor market behavior of their daughters. This intergenerational links seems to exert its influence through two channels. On the one hand, mothers with job market experience tend to hold non-traditional gender attitudes toward working women and their daughters are expected to have similar gender role attitudes, which make them more likely to participate in the labor force. On the other hand, having a working mother can also result in creating informal networks as effective channels, particularly for those women along with low educational attainment and inadequate skills. These informal networks can also help women participate in the job market in the presence of cultural constraints/traditional norms by providing them with a more familiar workplace atmosphere (mostly associated with kinship/close relations). Our primary motivation is to examine whether the expected effects of having a working mother can be important for their daughters' entry into the labor force as well as their stay in the labor force once they face the institutional and cultural constraints women face through their personal experience in the labor market. In other words, we aim to investigate the effectiveness of having working mothers on women's labor force attachment. If having a working mother turns out to be important not only at the initial entry into the labor market but also during the

later stages of women's life, then the coefficient of that variable is expected to be similar in both 'entry' and 'stay' equations. Moreover, we expect that mother's job market experience to be more important for women with lower educational attainment, because less educated women are more likely to expect to earn wages, which are barely enough to cover their basic expenses associated with work, such as child care and transportation.

On the contrary, high educated women will come across better and more job opportunities providing them with higher income and better access to adequate childcare services. The resulting mobility of better educated women also enables them to deal with the prevalent traditional social norms that have a negative view of women working outside their home. As a result, having a working mother is more likely to tip the balance for less educated women in labor market entry.

Additionally, the same econometric strategy can help us partially deal with some endogeneity problems relevant to the studies on the labor market. Young women may decide that their expected earnings in the labor market are lower than their reservation wage, due to unobservable personal characteristics and/or long-standing institutional factors that discriminate against women. In such cases women are unlikely to invest in their education and higher education will be pursued mainly by those who expect to enter the labor force, which will result in positively biased coefficients (the expected sign of education is positive even in the absence of endogeneity due to human capital effect). In contrast the women who anticipate low earnings in the labor market will be more likely to marry early, and hence the expected coefficient in a regression equation will have a larger (in absolute value) negative coefficient than the true coefficient due to endogeneity (we expect a negative sign for marriage even in the absence of children because marriage increases the unpaid household demand on women). Similar to the case of marriage, the coefficient for the number of children will have a larger (in absolute value) negative coefficient than the true coefficient due to

endogeneity.Nevertheless, investigating the labor force participation decision in two steps do not solve the endogeneity problems satisfactorily, so we discuss only association between marriage and number of children on the one hand, and labor force entry and stay decisions on the other hand, rather than considering a one directional causation.

Description of Data and Variables

Data Set

The data utilized in this paper comes from İzmir Labor Market Household Survey conducted in İzmir during the summer of 2010 (Ogus-Binatli et al. 2011).[4] The questionnaire is jointly prepared by researchers from Turkish Statistical Institute (TurkStat) and Izmir University of Economics. İzmir is the third largest city in Turkey and hosts almost 6 percent of the Turkish labor force. 3,162 randomly selected households were used to create a representative sample of the province of İzmir. These households cover 9,756 persons, of whom 6,859 are between the ages of 15 and 65. Accordingly, the labor force participation rate is 28 % for the whole women sample. It falls to 27.5 % when we exclude rural areas from our sample. The same ratio is 19 and 47 % for low- and high-education groups, respectively.

We further restrict our sample to urban women between the ages of 20 and 55 and exclude students from our sample. On the one hand, Turkey is urbanizing very rapidly (urbanization rate is around 75 % in recent years, TurkStat (2012)) and rural population and employment are declining not only proportionately but also in absolute numbers (between 1990s and 2000s rural employment has declined more than 3 million despite overall increase in population (TurkStat, 2012)). Hence, most of the future job creation in Turkey will happen in urban

[4] The survey is an extended version of the standard questionnaire used by TurkStat for National Labor Force Surveys. The survey covers the whole city of İzmir and only private households are surveyed. All household members 15 years of age and over are included. The sampling frame is the National Address Database which is based on the 2007 Address Based Population Registry System. The sampling design is a two stage stratified (urban and rural) cluster sampling. Results of the household Labor Force Survey have been weighted by the most recent population projections adjusted for non-response. The data are collected using Computer Assisted Personal Interviewing (CAPI). Overall response rate is 90.3%.

areas, which are the focus of this research. On the other hand, rural women are predominantly employed as unpaid farm workers in Turkey and their mothers most probably were also employed in the same position. Mother's work history is one of the primary explanatory variables in our analysis, and to include rural women in our sample is akin to adding a large group of women who are active in labor market whose mothers were also active in the labor market. This would clearly inflate the size and significance of the coefficient of mothers' work history.

We also limit our sample to women between the ages of 20 and 55 in order to focus on prime working age women and exclude students from the sample. Meltem Dayıoğlu and Cem Başlevent (2012), in a recent analysis of female labor force participation in Turkey, limit their sample to the ages 25 to 55, in order to exclude both those who have retired (the majority of women give up working in their early 50's due to retirement laws), and students in higher education. Labor force participation changes significantly for very young and old due to institutional issues such as retirement age and support for tertiary education (free tuition, scholarships, etc.). Focusing on prime working age avoids many of the confounding institutional issues and makes our study comparable to other countries. However, there is a substantial number of women whose level of education does not reach high school, and who drop out of employment in their early 20's. In order to account for those people, we extend the definition of prime age women by including 20-year olds and excluding women pursuing higher education.

Table 1 compares the female labor force participation rates for urban prime age women for Turkey and İzmir by education levels. Urban women in İzmir are not substantially better educated than the rest of the country, however, they have higher labor force participation rates at each education level and the difference is most pronounced in the levels below tertiary education. The substantial difference in labor force participation rates in the presence of

similar education levels may indicate more progressive attitudes toward female labor force participation in İzmir vis-à-vis the rest of Turkey. This may mean that our findings from İzmir sample can be overly optimistic for the rest of Turkey. Nevertheless, even for the İzmir sample, female labor force participation is very low compared to both men in Turkey and women in European countries except for those with tertiary education.

TABLE 1: Female labor force participation rate 2010 by education (20-55 yrs. old urban women)

	Turkey		**İzmir**	
Education	LFP	Frequency	LFP	Frequency
no formal schooling	12%	15%	20%	11%
primary school (5 yrs)	19%	41%	27%	40%
middle school	26%	10%	33%	12%
high school	37%	20%	47%	21%
Tertiary education	75%	14%	78%	15%
Total	30%		39%	

Note: Turkey data is obtained from TurkStat website (http://tuikapp.tuik.gov.tr/isgucuapp/isgucu.zul?dil=2) and the source of İzmir data is our sample. Authors' own calculations.

Theodossiou and Zangelidis (2009), who analyze female labor force participation for 6 European countries, argue that better educated women behave more like men in the labor market, and therefore the true models of labor force participation for less educated and better educated women are different. Labor force participation of women with tertiary education is closer to male levels than those for less educated women in our sample suggesting that we should analyze them as a distinct group. However, sample size of women with tertiary education in our İzmir sample is too small for subsequent empirical analysis. We follow Theodossiou and Zangelidis (2009) and separate women into two groups, those educated to middle school or lower levels (LowEd women) and those educated beyond middle school (HighEd women).

Figures 1 and 2 show female labor force participation and drop-out from labor force by age for LowEd and HighEd women, respectively. Our data set is not a longitudinal study, so

figures 1 and 2 are not actual life-cycle observations over a long period of time, but rather an artificial life cycle constructed from observed states for a cross-section of subjects at different ages. According to Figure 1, HighEd women consistently have higher labor force participation at every age. However, the difference narrows considerably after the age of 45. This narrowing can be explained by a decline in HighEd women labor force participation due to retirement. Figure 2 shows the percentage of exits from the labor force at every age is higher for LowEd women. Exits initially peak at around the age of 30 for LowEd women and then increase significantly after the age of 45. There is no corollary peak for HighEd women at the age of 30.

Figure 1: Female labor force participation percentage by age (20-55 yrs. old urban women)

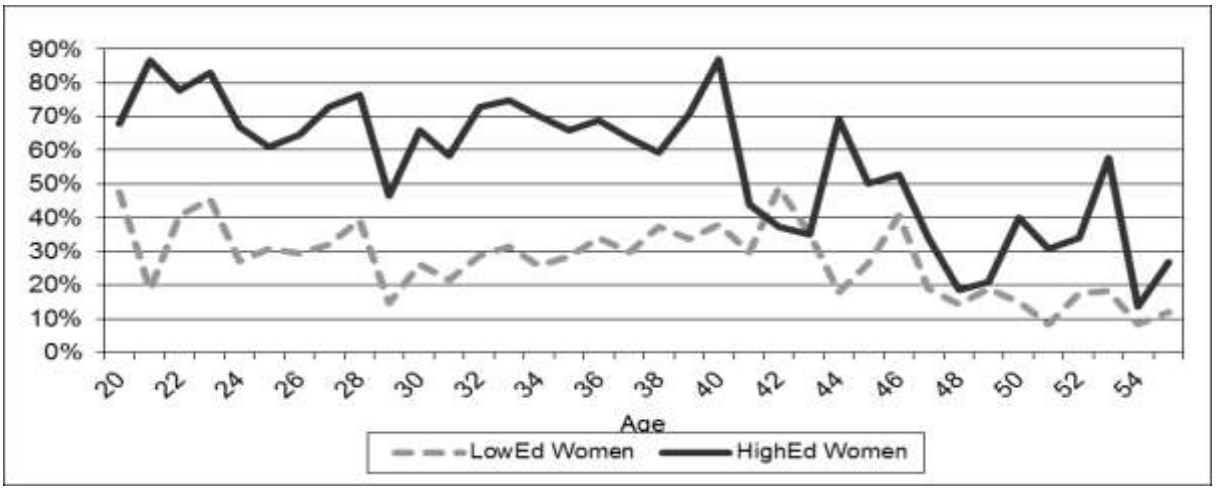
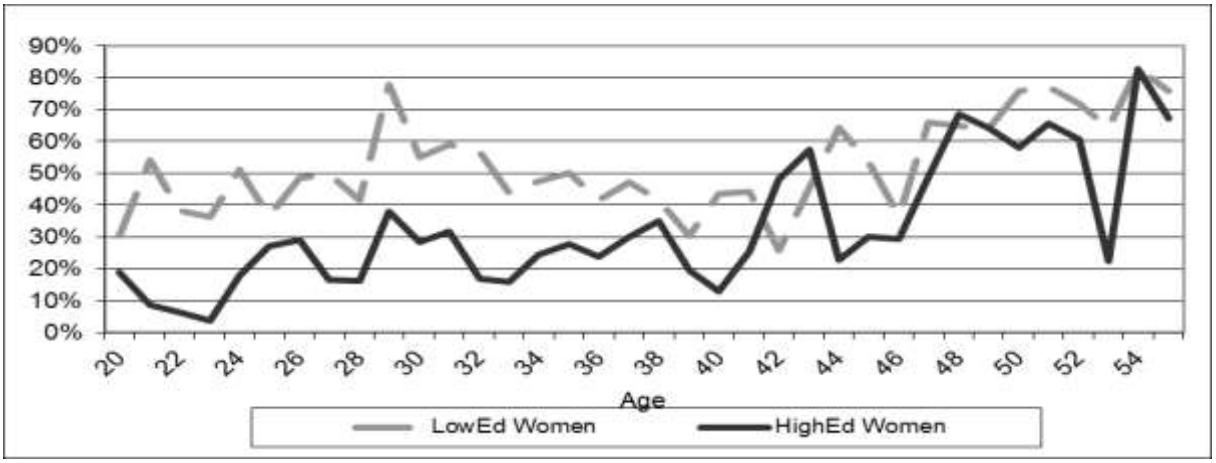


Figure 2: Share of drop-outs among ever worked by age (20-55 yrs. old urban women)



Explanatory Variables[5]

Mothers' occupation variable is used in order to analyze the importance of women's attitudes toward working women and the effectiveness of family networks in the labor markets. In the absence of explicit information about the gender attitude of individuals toward working women, we rely on information from one of the key variables that is found to be most important determinants of women's attitude toward working mother outside home in the related literature.[6]. We utilize 6 occupational dummies based on survey information according to International Standard Classification of Occupations (ISCO-88).

First group of controlvariables consists of individual demographic characteristics such as age, education level, marital status, the presence of young children and elderly dependents, being a household head, and being a migrant. We expect positive effect of education on labor supply. We include the number of very young children (0-4 years old) and school-aged young children (5-11) as separate variables in order to investigate the impact of pre-school childcare needs on mother's labor supply decisions. We expect that both variables will adversely affect women's labor market decisions; however, given the lack of formal pre-school childcare arrangements, the negative impact of very young children may be stronger. The number of elderly people is also added as a separate variable because elderly people may be similar to that of young children as long as most of the elderly people are cared for by women, or the same elderly people can also raise women's labor force participation by providing them with informal childcare. Marital status is another independent variable that may account for the effects of socially imposed gender roles on a woman's decision regarding the labor force. [7]

[5] We do not discuss the summary statistics in the main text for space considerations. Detailed summary statistics for explanatory variables for all women as well as LowEd and HighEd women are presented in the Appendix.

[6] We considered father's education level and work experience but dropped it given the high correlation with mothers' employment history. See footnote 2 for more details.

[7] Memiş, *et al* (2012) use the first nationally representative time-use data set for Turkey from 2006 to show that both marriage and every additional child statistically significantly increases the average time spent on unpaid household duties both for working and non-working women.

Being a household head implies full responsibility for the other members of the household. However, given that there is another variable to account for the responsibilities associated with the household members, the independent effect of this variable is ambiguous. Another potentially important demographic variable affecting women's labor force participation is migration. Particularly, women from rural areas who worked previously as unpaid family workers tend to become unemployed or leave the labor force after migrating to cities (Uraz et al., 2010). Hence we expect migrants to be less likely to participate in the labor force. The interviewee is defined as a migrant if s/he migrated to İzmir after 1989.

In order to account for any effect of economic hardship on labor force participation of women, we employ three different variables. The first is the self-reported earnings of all household members other than the interviewee. The second is to have someone else with access to health insurance (associated with employment in formal sector) in the household that can reduce women's need to join the labor force. The final variable is home ownership, which can be considered a proxy for wealth.

Results

Table 2 presents the results for the whole sample.[8] For the whole sample, only having a working mother as an unskilled worker raises the probability of labor force participation of their daughters. However, after running two separate regressions for entry and stay decisions, having a working mother either as a skilled and unskilled worker turns out to be significant, whereas neither of them keep their significant effect on women's probability of staying in the labor force. One of the motivations of this paper is that women with lower education levels are supposed to get larger benefits from having a working mother against women with higher education levels. The first group of women tend to suffer most from traditional norms that are

[8] All the reported results are the marginal effects predicted at the mean values of all independent variables.

not supportive of working women outside home and a lack of job search opportunities for better jobs through their own means or formal channels given that they do not have the necessary educational attainment enabling them to search Our results for the sample of lower educated women (Table 3) indicate that having a working mother has a large and statistically significant effect on women's probability of entering the labor force whereas the same variable does not have a significant effect on the same probability for women with higher education (Table 4). On the one hand, this result points to indicates the importance of non-traditional attitudes for women in overcoming traditional norms against working women associated with women's own family, her spouse or other peer groups as long as non-traditional attitudes are assumed to be transmitted from working mothers to their daughters. The same finding also support one other channel for explaining the effect of working mothers' impact on their daughter's entry to the labor force by providing them with appropriate informal job search methods.

The impact of having a working mother is not only statistically significant but also important in terms of the magnitude. Having a working mother either as a skilled or unskilled worker enhances the daughter's probability of joining the labor force (evaluated at the means of their group) by 28 and 30 percentage points, respectively. These coefficients show that the benefits as a result of having a working mother are even higher than the positive effects of highest degree of education (finishing 8 years in school) for lower educated women. Moreover, the lower and statistically insignificant coefficients of occupation dummies for the second group (table 4) suggest that women in this group do not seem to be constrained by traditional norms against working women outside home and/or are able to have access to better job opportunities through formal job search channels and their own means. This finding is compatible with the observation that better educated women tend to be more mobile and have

a greater bargaining power both inside and outside home as a result of having access to good jobs.

Another important result of this paper is the lack of statistical significance of mother's occupation dummies for daughters' decision to stay in the labor force. This finding can be indicative of structural constraints, such as workplace conditions for women (e.g. harassment, discrimination, timing of the shifts,), social policies toward work-family balance (e.g. parental leave, public provision of childcare), and the interaction of these factors with traditional norms. There is only one question in the survey about the reasons for quitting the last job during last eight years prior to the survey date, which consists of almost half of the working sample. Around one third of women answering the question indicate -that getting married/lack of husband's consent or the presence of dependents at home are the main reasons for leaving their last job. However, given the lack of data about the detailed job market history of participants, therefore their reasons for leaving the job and the labor force at different stages of their life cycle, we are not in a positon to unambiguously rely on one or more of the above explanations.

Being married and having children have the expected adverse impact on women's labor force participation. For both less and better educated women, marriage seems to have a more significant effect on reducing the probability of staying in the labor force, compared to the probability of entering into the labor force (Tables 3 and 4). Given that there are other variables accounting for the impact of children, the independent negative effect of marriage can be associated with both household responsibilities and traditional attitude toward working women held by spouses and their families (İlkkaracan, 2012)[9]. Although being married has a

[9] Women who have left the labor force are also asked why they have left in this data set. One of the potential answers was to take care of children/elderly in the household and another was because of husband's wish. When we exclude women answered those options from the regression analysis, married dummy variable is no more

larger negative marginal effect for lower educated women, yet, across-the-board significance of the same variable also presents the pervasiveness of traditional household division of labor among higher educated women.

Interestingly, while the presence of small and young children has no or little statistical significance for labor market entry decisions, these variables effect women's decisions to stay in the labor force both for lower and higher educated women. These results seem to indicate that most of the women start to come across structural constraints associated with being a wife and a mother only after entering the labor force rather than at the initial entry stage. These constraints can have an institutional and/or a cultural character, such as the inadequate level of formal childcare support or discriminatory workplace policies that exert their adverse impact on women's labor supply decisions through the job experience of each individual woman. Moreover, the higher marginal effects for both children categories in the sample of lower educated women can be indicative of difficulties in accessing formal and/or private childcare options, which are mostly limited to people who are employed in more established workplaces offering childcare facilities or are paid enough to cover for private childcare.

The age variable has the expected quadratic properties for all equations in the table, suggesting that experience has a positive effect on the probability of both entering the labor force and staying there. All education dummies turn out to be statistically significant in the conventional and entry regressions, whereas only the university dummy keeps its significant effect on the probability of staying in the labor force. While these results confirm the importance of education as an indicator of potential earnings in the labor market, and support women's initial entry, for the majority of women, a higher level of education, apart from having a university degree, is not in itself responsible for preventing a withdrawal from the

significant and other variables turned out to be roughly similar. In other words, married dummy variable looks like to function as a good proxy for conservative and/or traditional roles for women.

labor force after initial entry. Having a university diploma raises the probability of staying in the labor force, because better paid and more secure jobs provide the women with a better work-family balance in the presence of inadequate legal and institutional mechanisms (İlkkaracan, 2010).

We note that marriage and childbearing are very important turning points in women's lives with respect to labor market outcomes. One group of women never enters labor force either because they marry very early or because have very low expectations from labor market participation. Another group drop out of the labor force after marriage either because of cultural constraints due to the role of the spouse's family in altering women's attitude (a point stressed by İlkkaracan (2012)), or extra household responsibilities traditionally expected from women. A third group of women continues to work after the marriage but drop out after the childbirth, most probably due to demands of childcare and inadequate work-family reconciliation policies.

Widow and divorced women behave very differently from each other in the labor market even though both groups have 'exited' from marriage. Widows behave more like married women whereas divorced women behave more like single women. Widows (both less and better educated) exhibit very low attachment to the labor market whereas (especially less educated) divorced women are much more likely to enter the labor force (even compared to single women). We believe that this result is due to widows' access to widowers' pension whereas legal support for divorced women is very weak in Turkey, increasing the need for employment in order to support themselves and their children. Women are rarely household heads (16 %) in this sample, reflecting the fact that a great majority are married (75 %) and men are listed as default household head of the family, reflecting patriarchal norms. Being a household head has some negative effects, mostly on the initial entry of less educated women. Being a migrant increases higher educated women's decision to stay in the labor force. This

can suggest that women, who come to İzmir for university degree, and then settle down in İzmir after graduation.

Having some family member with health insurance (both for less and better educated women) and, also owning a house (only for less educated women) reduce the probability of both entry and stay decisions in the labor force, and therefore support the link between financial hardship and the decision to enter the labor market. On the contrary, there is a positive relationship between other household members' income and labor force participation rate (both for entry and stay). One explanation can be that greater income allows better access to childcare and therefore, women can easily participate in the labor force. Another possibility is the fact that highly educated women tend to marry the man from similar education background.

TABLE 2: Probit estimations for all Women

ALL	LFP		ENTRY		STAY	
age	0.042	***	0.018	*	0.04	***
	(0.012)		(0.010)		(0.014)	
age squared	-0.001	***	0	**	-0.001	***
	0		0		0	
primary school	0.079	*	0.092	***	0.004	
	(0.045)		(0.035)		(0.057)	
middle school	0.112	**	0.143	***	0.012	
	(0.054)		(0.044)		(0.067)	
high school	0.208	***	0.266	***	0.054	
	-0.047		-0.039		-0.059	
university	0.469	***	0.523	***	0.251	***
	-0.053		-0.05		-0.063	
hh head	-0.051		-0.075	**	0.001	
	(0.038)		(0.033)		(0.046)	
migrant post 1990	0.016		-0.023		0.032	
	(0.028)		(0.024)		(0.033)	
married	-0.297	***	-0.148	***	-0.314	***
	(0.043)		(0.041)		(0.053)	
widow	-0.16	*	0.07		-0.288	***
	(0.085)		(0.076)		(0.099)	
divorced	-0.023		0.195	***	-0.184	**

	(0.064)		(0.067)		(0.074)	
home owner	-0.117	***	-0.098	***	-0.102	***
	(0.026)		(0.023)		(0.031)	
# of elderly	-0.03		0.042		-0.036	
	(0.077)		(0.067)		(0.098)	
# of child aged 0-4	-0.158	***	-0.048	**	-0.175	***
	(0.030)		(0.024)		(0.035)	
# of child aged 5-11	-0.081	***	-0.03		-0.085	***
	(0.022)		(0.019)		(0.027)	
other hh member's wage (logs)	0.042	***	0.026	***	0.037	***
	(0.005)		(0.005)		(0.006)	
other hh member's insurance	-0.452	***	-0.193	***	-0.471	***
	(0.032)		(0.029)		(0.038)	
mothers' occupation dummies						
managers	-0.17		0.229		-0.292	*
	(0.162)		(0.190)		(0.168)	
professionals	-0.002		0.032		-0.032	
	(0.086)		(0.090)		(0.098)	
clerks	0.048		-0.006		0.081	
	(0.120)		(0.119)		(0.146)	
sales staff	0.012		.		-0.164	
	(0.128)		.		(0.128)	
skilled worker	0.073		0.146	**	0.007	
	(0.064)		(0.062)		(0.071)	
unskilled worker	0.139	**	0.223	***	0.063	
	(0.056)		(0.055)		(0.062)	
N	2101		2081		1386	

Notes: *, **, and *** indicate significance for the coefficients at 10 percent, 5 percent, and 1 percent level, respectively. Standard deviations are reported in parentheses. All the reported results are the marginal effects predicted at the mean values of all independent variables.

TABLE 3: Probit Estimations for lower educated women

ALL	LFP		ENTRY		STAY	
age	0.037	***	0.021		0.057	***
	(0.012)		(0.014)		(0.020)	
age squared	-0.001	***	0	*	-0.001	***
	0		0		0	
primary school	0.044		0.098	**	-0.013	
	(0.035)		(0.041)		(0.062)	
middle school	0.095	**	0.164	***	0.039	

	(0.042)		(0.051)		(0.073)	
hh head	-0.062		-0.086	*	-0.028	
	(0.039)		(0.045)		(0.068)	
migrant post 1990	-0.004		-0.026		0.003	
	(0.028)		(0.034)		(0.047)	
married	-0.195	***	-0.126	**	-0.331	***
	(0.046)		(0.060)		(0.082)	
widow	-0.043		0.206	**	-0.286	**
	(0.082)		(0.103)		(0.136)	
divorced	0.044		0.36	***	-0.202	*
	(0.066)		(0.097)		(0.108)	
home owner	-0.129	***	-0.14	***	-0.159	***
	(0.026)		(0.031)		(0.043)	
# of elderly	-0.005		0.031		0.001	
	(0.067)		(0.084)		(0.118)	
# of child aged 0-4	-0.124	***	-0.064	*	-0.182	***
	(0.032)		(0.034)		(0.053)	
# of child aged 5-11	-0.053	**	-0.039		-0.062	*
	(0.021)		(0.024)		(0.037)	
other hh member's wage (logs)	0.028	***	0.027	***	0.032	***
	(0.005)		(0.007)		(0.009)	
other hh member's insurance	-0.291	***	-0.199	***	-0.414	***
	(0.032)		(0.041)		(0.054)	
Mothers' occupation dummies						
managers	-0.052		.		-0.281	
	(0.242)		.		(0.341)	
professionals	-0.167		0.155		-0.337	
	(0.170)		(0.205)		(0.248)	
clerks	0.062		-0.022		0.208	
	(0.196)		(0.244)		(0.344)	
sales staff	0.062		.		-0.138	
	(0.140)		.		(0.194)	
skilled worker	0.106		0.281	***	0.043	
	(0.073)		(0.097)		(0.111)	
unskilled worker	0.128	**	0.302	***	0.068	
	(0.051)		(0.072)		(0.078)	
N	1266		1253		684	

Notes: *, **, and *** indicate significance for the coefficients at 10 percent, 5 percent, and 1 percent level, respectively. Standard deviations are reported in parentheses. All the reported results are the marginal effects predicted at the mean values of all independent variables.

TABLE 4: Probit estimations for higher educated women

ALL	LFP		ENTRY		STAY	
age	0.034	*	0.012		0.017	
	(0.018)		(0.011)		(0.016)	
age squared	-0.001	***	0		0	**
	0		0		0	
university	0.241	***	0.161	***	0.138	***
	(0.043)		(0.027)		(0.037)	
hh head	-0.004		-0.046		0.022	
	(0.060)		(0.035)		(0.052)	
migrant post 1990	0.061		-0.018		0.068	*
	-0.044		-0.025		-0.038	
married	-0.283	***	-0.073	*	-0.198	***
	-0.065		-0.04		-0.056	
widow	-0.306	**	-0.134		-0.216	*
	(0.152)		(0.089)		(0.126)	
divorced	-0.037		-0.007		-0.058	
	(0.102)		(0.068)		(0.086)	
home owner	-0.018		-0.03		-0.004	
	(0.043)		(0.026)		(0.037)	
# of elderly	-0.087		0.071		-0.127	
	(0.189)		(0.115)		(0.157)	
# of child aged 0-4	-0.134	***	-0.016		-0.114	***
	(0.047)		(0.028)		(0.039)	
# of child aged 5-11	-0.088	**	-0.002		-0.084	**
	(0.043)		(0.025)		(0.035)	
other hh member's wage (logs)	0.05	***			0.036	***
	(0.008)				(0.007)	
other hh member's insurance	-0.582	***	-0.085	***	-0.449	***
	(0.051)		(0.025)		(0.044)	
Mothers' occupation dummies						
managers	(0.205)		0.060		(0.232)	
	-0.183		-0.126		-0.141	
professionals	0.032		(0.005)		0.018	
	-0.101		-0.061		-0.089	
clerks	0.020		0.003		0.018	
	-0.138		-0.085		-0.124	
sales staff	-0.109		.		-0.189	
	(0.168)		.		(0.125)	
skilled worker	0.025		0.019		-0.023	
	(0.088)		(0.052)		(0.073)	

unskilled worker	0.067	0.056	0.02
	(0.104)	(0.066)	(0.087)
N	835	825	702

Notes: *, **, and *** indicate significance for the coefficients at 10 percent, 5 percent, and 1 percent level, respectively. Standard deviations are reported in parentheses. All the reported results are the marginal effects predicted at the mean values of all independent variables.

Conclusion

The reasons for the low labor force attachment in Turkey have received relatively little attention compared to the reasons for low labor force participation. In investigating low labor force attachment for Turkey, we take into account the effect of having a working mother in addition to usual demographic and socio-economic variables. We also introduce a novel testing strategy which considers labor force participation decision as two distinct steps: entry and stay decisions. This testing strategy allows us i) to test labor force attachment directly in the second step and ii) to partially deal with endogeneity problems in labor force studies with cross-section data sets. We find that marriage and number of children are negatively associated with labor force entry and stay in Turkey both for less and better educated women in Turkey.

What are the implications of the above results? First of all, we simply do not know whether women's exit from the labor force is a reflection of a more traditional gender attitude given the lack of explicit data about her gender attitude. Women who entered the labor force based on their non-traditional gender attitude associated with their mother's prior job experience can hold the same attitude, but still be constrained by other processes experienced only after joining the labor force. This may lead to the creation of a group of women whose behavior may be at odds with their attitude. On the other hand, women may also adapt their attitudes to new circumstances, and start embracing more traditional gender norms. This classification may correspond to the distinction used by İlkkaracan (2012), between "discontent" and "content" nonparticipant homemakers. In both cases, it is important to understand how and

why women's own job experience may adversely affect the relationship between attitude and job market behavior, resulting in low labor force attachment.

In this context, women's decision to exit the job market may be the result of discriminatory social policies in the areas such as childcare support and maternity leave that would reinforce traditional gender roles regarding childbearing and childrearing. However, in addition to these discriminatory effects, there may be other factors such as mobbing, the lack of adequate facilities, regulations of labor hours, gender wage gap, and feminization of jobs, which will exert their influences only through women's individual work experiences. Therefore, although women may escape from traditional gender norms during their initial labor force entry based on their non-traditional gender attitudes related to their mother's work experience, traditional gender norms seem to reinforce their influence on the job market behavior of the same women, through institutional arrangements in the labor market and social policies.

Reference

Başlevent, Cem and Özlem Onaran. 2003. "Are Married Women in Turkey are More Likely to Become Added or Discouraged Workers?" *Labour* 27 (3): 439-458.

Budig, Michelle, Joya Misra, and Irene Boeckmann. 2012. "The Motherhood Penalty in Cross-National Perspective: The Importance of Work–Family Policies and Cultural Attitudes." *Social Politics* 19 (2): 163-193.

Corrigall, Elizabeth. A. and Alison M. Konrad. 2007. "Gender Role Attitudes and Careers: A Longitudinal Study." *Sex Roles* 56(): 847-855.

Crompton, Rosemary and Fiona Harris. 1998. "Explaining Women's Employment Patterns: Orientation to Work Revisited." *British Journal of Sociology* 49 (1): 117–136.

Crompton, Rosemary and Clare Lyonette. 2005. "The New Gender Essentialism: Domestic and Family Choices" and Their Relation to Attitudes." *British Journal of Sociology* 56 (4): 601–620.

Dayıoğlu, Meltem and Murat Kırdar. 2010. "Türkiye'de Kadınların İşgücüne Katılımında Belirleyici Etkenler ve Eğilimler (Determining Factors and Trends in Female Labor Force Participation in Turkey)." Welfare and Social Policies Analytical Working Group Working Paper 5, Turkish Planning Agency and the World Bank.

Dayıoğlu, Meltem and Cem Başlevent. 2012. "Türkiye'de Gelir Dağılımının ve Yoksulluğun Toplumsal Cinsiyet Boyutları (Gender Dimension of Income Distribution and Poverty in

Turkey).” in Saniye Dedeoğlu and Adem Yavuz Elveren, eds.Türkiye’de Refah Devleti ve Kadın (Welfare State in Turkey and Women), pp.127-158. Ankara: İletişim Yayınları.

Dedeoğlu, Saniye. 2012. “Equality, Protection or Discrimination: Gender Equality Policies in Turkey.” *Social Politics: International Studies in Gender, State and Society* 19 (2): 269-290.

Farré, Lídia and Francis Vella. 2013. “The Intergenerational Transmission of Gender Role Attitudes and its Implications for Female Labor Force Participation.” *Economica* 80 (318): 219-247.

Fortin, Nicole. M. 2005. “Gender Role Attitudes and the Labour Market Outcomes of Women Across Countries.” *Oxford Review of Economic Policy*,21 (3): 416–438.

Goksel, İdil. 2013. “Female Labor Force Participation in Turkey: The Role of Conservatism”, *Women's Studies International Forum,* http://dx.doi.org/10.1016/j.wsif.2013.04.006.

Gündüz-Hoşgör, Ayşe and Jeroen Smits. 2008. “Variation in Labor Market Participation of Married Women in Turkey.” *Women's Studies International Forum* 31 (2): 104–117.

Harris, Richard and JuanitaFirestone. 1998. “Changes in Predictors of Gender Role Ideologies Among Women: A Multivariate Analysis.” *Sex Roles* 38 (3-4): 239-252.

Himmelweit, Susan and Maria Sigala. 2004. “Choice and the Relationship between Identities and Behaviour for Mothers With Pre-School Children: Some Implications for Policy From a UK Study.” *Journal of Social Policy* 33(3): 455–478.

İlkkaracan, İpek. 2010. “Uzlaştırma Politikalarının Yokluğunda Türkiye Emek Piyasasında Toplumsal Cinsiyet Eşitsizlikleri (Gender Inequalities in Turkish Labor Markets in the absence of Reconciliation Policies) in İpek İlkaracan, ed.Emek Piyasasında Toplumsal Cinsiyet Eşitliğine doğru: İş ve Aile Yaşamını Uzlaştırma Politikaları (Towards Gender Equality in the Labor Markets: Work-Family Reconciliation Policies, pp. 21-58. İstanbul: Kadının İnsan Hakları Yeni Çözümler Derneği ve İTÜ Bilim, Mühendislik ve Teknolojide Kadın Araştırmaları ve Uygulamaları Merkezi.

İlkkaracan, İpek. 2012. “Why so few Women in the Labor Market in Turkey?” *Feminist Economics* 18(1): 1-37.

Kan, Man Yee. 2007. “Work Orientation and Wives’ Employment Careers: an Evaluation of Hakim’s Preference Theory.” *Work and Occupations* 34 (4):430–462.

Kasnakoğlu, Zehra and Meltem Dayıoğlu. 1997. “Female Labor Force Participation and Earnings Differentials between Genders in Turkey,” in Janet Rives and Mahmood Yousefi, eds. Economic Dimensions of Gender Inequality, pp.95-117.Westport, Connecticut: Praeger.

Memiş, Emel, Umut Öneş, and Burça Kızılırmak. 2012. “Kadınların Ev-Kadınlaştırılması: Ücretli ve Karşılıksız Emeğin Toplumsal Cinsiyet Temelli bir Analizi (Making of Housewife: A Gender Based Analysis of Paid and Unpaid Labor).” in Saniye Dedeoğlu and Adem Yavuz Elveren, eds.Türkiye’de Refah Devleti ve Kadın (Welfare State in Turkey and Women), pp.159-182. Ankara: İletişim Yayınları.

Moen, Phyllis, Mary Ann Erickson, and Donna Dempster-McClain. 1997 “Their Mother's Daughters? The Intergenerational Transmission of Gender Attitudes in aWorld of Changing Roles.” *Journal of Marriage and Family* 59 (2):281-293.

Oğuş Binatlı, Ayla, Alper Duman, Değer Eryar, Oğuz Esen, Burak Dindaroğlu, Efe Postalcı, İdil Göksel, Müge Karacal, İlker Daştan, Gül Ertan Özgüzer, and Hasan Tekgüç. 2011. İzmir

İşgücü Piyasası Araştırması (İzmir Labor Market Research). İzmir: İzmir Ekonomi Üniversitesi Yayınları, Yayınları

O'Sullivan, Sara. 2012. "'All Changed, Changed Utterly'? Gender Role Attitudes and the Feminisation of the Irish Labour Force." *Women's Studies International Forum* 35 (4): 223-232.

Seguino, Stephanie. 2007. "PlusÇa Change? Evidence on Global Trends in Gender Norms and Stereotypes." *Feminist Economics* 13 (2): 1-28.

Steiber, Nadia and Barbara Haas. 2009. "Ideals or Compromises? The Attitude-Behaviour Relationship in Mothers' Employment." *Socio-Economic Review* 7(4):639–668.

Steiber, Nadia and Barbara Haas. 2012. "Advances in Explaining Women's Employment Patterns." *Socio-Economic Review* 10(2): 343-367.

Tansel, Aysıt. 2001. ''Economic Development and Female Labor Force Participation in Turkey: Time-Series Evidence and Cross-Province Estimates.'' Working Paper 0124, Economic Research Forum, Cairo, Egypt.

Theodossiou, Ioannis and Alexandros Zangelidis. 2009. "Should I stay or should I go? The effect of Gender, Education and Unemployment on Labour Market Transitions." *Labour Economics* 16 (5):566–577

Uraz, Arzu, Meltem Aran, Sinem Çapar, Müşerref Hüsamoğlu, and Dilek Okkalı Şanalmış. 2010. "Recent Trends in Female Labor Force Participation in Turkey." Welfare and Social Policies Analytical Working Group Working Paper 2, Turkish Planning Agency and the World Bank.

Uunk,Wilfred, Matthijs Kalmijn and Ruud Muffels. 2005. "The Impact of Young Children onWomen's Labour Supply. A Reassessment of Institutional Effects in Europe." *Acta Sociologica* 48(1): 41–62.

Appendix

Table A1: Descriptive statistics for Table 2 explanatory variables

	never	active + once	never + once	active	once	active
age	39.61	36.88	39.66	34.84	39.72	34.84
years of education	5.71	9.12	6.52	10.28	7.50	10.28
hh head	0.17	0.15	0.17	0.13	0.17	0.13
migrant post 1990	0.36	0.33	0.34	0.33	0.33	0.33
married	0.88	0.69	0.86	0.60	0.83	0.60
widow	0.03	0.03	0.04	0.02	0.05	0.02
divorced	0.02	0.08	0.04	0.08	0.06	0.08
home owner	0.65	0.58	0.63	0.58	0.59	0.58
# of elderly	0.02	0.02	0.02	0.02	0.02	0.02
# of child aged 0-4	0.25	0.21	0.27	0.16	0.29	0.16
# of child aged 5-11	0.44	0.33	0.42	0.28	0.40	0.28
other hh member's insurance	0.57	0.42	0.59	0.27	0.63	0.27
other hh member's wage (logs)	4.80	5.03	4.98	4.90	5.20	4.90
mother worked	0.16	0.28	0.21	0.28	0.28	0.28
# of sample	801	1582	1463	920	662	920

Table A2: Descriptive statistics for Table 3 explanatory variables

	never	active + once	never + once	active	once	active
age	40.14	39.19	40.24	37.84	40.40	37.84
years of education	4.32	4.91	4.53	5.01	4.83	5.01
hh head	0.17	0.16	0.17	0.13	0.18	0.13
migrant post 1990	0.36	0.34	0.35	0.33	0.34	0.33
married	0.90	0.78	0.87	0.73	0.82	0.73
widow	0.03	0.05	0.04	0.03	0.06	0.03
divorced	0.02	0.08	0.04	0.09	0.07	0.09
home owner	0.66	0.55	0.63	0.51	0.59	0.51
# of elderly	0.02	0.03	0.02	0.03	0.02	0.03
# of child aged 0-4	0.25	0.20	0.25	0.13	0.26	0.13
# of child aged 5-11	0.46	0.40	0.44	0.38	0.42	0.38
other hh member's insurance	0.56	0.48	0.58	0.35	0.60	0.35
other hh member's wage (logs)	4.77	5.02	4.90	4.93	5.10	4.93
mother worked	0.17	0.32	0.23	0.32	0.31	0.32
# of sample	667	852	1117	402	450	402

Table A3: Descriptive statistics for Table 4 explanatory variables

	never	active + once	never + once	active	once	active
age	36.96	34.19	37.76	32.52	38.27	32.52
years of education	12.60	14.02	12.95	14.37	13.17	14.37
hh head	0.18	0.14	0.16	0.13	0.15	0.13
migrant post 1990	0.36	0.32	0.32	0.33	0.30	0.33
married	0.78	0.59	0.82	0.49	0.85	0.49
widow	0.04	0.01	0.03	0.01	0.02	0.01
divorced	0.04	0.07	0.05	0.08	0.05	0.08
home owner	0.64	0.62	0.62	0.63	0.60	0.63
# of elderly	0.01	0.02	0.01	0.02	0.02	0.02
# of child aged 0-4	0.28	0.23	0.32	0.18	0.34	0.18
# of child aged 5-11	0.32	0.25	0.35	0.20	0.36	0.20
other hh member's insurance	0.59	0.35	0.64	0.21	0.68	0.21
other hh member's wage (logs)	4.96	5.04	5.24	4.88	5.41	4.88
mother worked	0.14	0.24	0.18	0.26	0.20	0.26
# of sample	134	730	346	518	212	518