Gender Effect in Explaining the Mobility Patterns in the Labor Market: A Case Study from Turkey

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Abstract

This paper examines the importance of gender on different job mobility patterns using an extensive household survey data from İzmir, third largest city in Turkey. The determinants of job-to-job and job-to-non-employment transitions are analyzed with the help of a multinomial logit estimation method. The results indicate that there is a distinction regarding the probability of job mobility patterns based on gender. It is more likely for women to be engaged in job-to-non-employment transition, whereas men tend to switch jobs more often. Although gender plays a significant role regarding job mobility patterns, traditionally imposed social constraints associated with childcare and household duties provide us with mixed results considering the behavior of women in the job market. On the other hand, having high-paid and secure jobs decreases the probability of both patterns of job mobility.

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Gender Effect in Explaining the Mobility Patterns in the Labor Market: A Case Study of İzmir

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1. Introduction

This paper attempts to analyze the importance of gender in understanding different mobility patterns in the labor market. One of the underlying assumptions of the gendered job mobility patterns has been the societal expectation about the traditional role of woman as prime caretaker in the family. Accordingly, women, rather than men, have been associated with household responsibilities such as childrearing and therefore, their participation in the labor market has been expected to be rather irregular. Women are also found to exit the labor market disproportionally due to self-initiated reasons such as family reasons whereas men leave their jobs mostly as a result of employer's initiations (Keith and McWilliams, 1997). As long as women's diverse behavior in the labor market results in limited accumulation of human capital, lower labor market experience or more costly job searching processes, then, gendered job mobility patterns can be crucial in explaining both job segregation and gender wage gap (Royalty, 1998; Theodossiou, 2002; Theodossiou and Zangelidis, 2009)

However, in pursuing these questions, it is also important to distinguish whether women tend to leave their jobs for new job opportunities or just leave the labor force permanently. If we just focus on job quits without necessarily distinguishing between their destinations, i.e. between job-to-job and job-to-non-employment transitions, then, the particular impact of job mobility on wage gap can be ambiguous (Keith and McWilliams, 1995). Accordingly, whereas leaving a job for a better job can have wage-enhancing effects, a job-to-non-employment transition is expected to have adverse impact on wages. In a related way, job-to-job and job-to-non-employment transitions tend to have different wage implications from the perspective of human capital approach given that the returns to human capital investment depends on the overall time in the labor force rather than the duration of a particular job (Royalty, 1998; Theodossiou and Zangelidis, 2009).

The importance of gender as a determinant of job mobility patterns has been supported by a large number of empirical contributions. Bergin (2009) analyzes the socio-economic determinants of job-to-job transitions in Ireland based on a pooled data for the period between 1995 and 2001. She finds that being women whether married or not does not alter the probability of moving to a different job. On the other hand, human capital and experience tend to lower the probability of job mobility along with being employed in large firms. Other recent results about job mobility can be found by Kye (2008) based on a panel data set from Korea for the period between 1998 and 2000. Gender as a demographic variable has a significant positive effect on job mobility and increases the probability of the mobility where the mobility variable includes both job-to-job and job-to-non-employment transitions. On the other hand, the same gender effect loses both its magnitude and statistical significance once organizational characteristics of firms (e.g. tenure and wage) and structural change indicators (e.g. sector specific turnover rates) are introduced. Kye claims that the effect of gender on job mobility seems to be mediated by organizational and structural factors.

Royalty (1998) stresses the importance of distinguishing job-to-job from job-to-non-employment transitions in order to explain how low overall job separation rates found in previous empirical research tend to hide higher job-to-job mobility transitions for men and higher job-to-non-employment transitions for women. While showing statistical evidence of the effect of being married and having children on different mobility patterns of women, Royalty also discusses the importance of dividing the sample according to education levels. Particularly, the behavior of less educated women accounts for a substantial amount of the differences between different mobility patterns. In other words, highly educated women look very much like men in their job market mobility patterns. She reaches the above conclusion by utilizing multinomial logit regressions for a sample from the US divided across both gender and education levels.

Chelli and Rosti (2002) also claim that being a woman increases the probability of leaving the labor force and decreases the probability of conducting job-to-job transitions for all age groups. They reach this conclusion with the help of Markovian analysis based on 1998 Italian data without accounting for the socio-economic determinants of the above statistical finding. Another similar approach is taken by Theodossiou and Zangelidis (2009) in order to examine the effect of gender on different mobility patterns in six European countries. Similar to Royalty's results, they also provide evidence for different behavior of less educated women

from the rest of the society where the presence of children and being married turn out to be the most important variables affecting women's job mobility behavior.

Another branch of recent literature focuses on workplace characteristics along with individual characteristics to represent working conditions. Frederiksen (2008) utilizes a comprehensive employee-employer data set from Denmark for the years 1980 to 2000. Although he finds that women have higher unconditional overall job separation rates than men, the same difference fades away once the workplace characteristics such as the size of the workplace and average payroll are controlled for. In other words, there is no statistically significant difference between the overall job separation rates of men and women as long as they work in similar workplaces. However, when different transitions are taken into account, then the results indicate that women are more likely to make job-to-non-employment transition and less inclined to get new jobs. Hirsch and Schnabel (2012) reach a similar conclusion by using a large German employer-employee data and find lower job-to-job and higher job-to-non-employment transition probabilities for women than men after controlling for both individual and workplace characteristics such as the presence of collective agreement or works council. They also find that there are obvious gender differences regarding the impact of workplace conditions.

Although there is a growing number of empirical studies on social and economic determinants of female labor force participation rate in Turkey (Özar and Günlük-Şenesen, 1998; Tansel, 2002; Başlevent and Onaran, 2003; Gündüz-Hoşgör and Smits, 2008; Aran et. al., 2010; Dayıoğlu and Kırdar, 2010; İlkaracan, 2012), there have been only a few studies that examines the effect of gender on different mobility patterns in the Turkish labor market. Taşçı and Tansel (2005) use a panel data set based on 2000 and 2001 Turkish Household Labor Surveys. They analyze the transition probabilities among different labor market states such as employment, unemployment, and out-of-labor force, defined by Markov process. They run separate regressions for men and women to avoid the omitted variable problem as is defined by Royalty (1998) and further explained in the following section of this paper. Accordingly, married men are less likely to leave either their job or the labor force, whereas there is statistical evidence only for married women's lower probability of transition from being employed to unemployed. On the other hand, Taşçı and Tansel (2005) show that marriage has a statistically significant negative effect on the labor force entry of women.

Using a more recent panel data set representing Turkish labor market between 2006 and 2009, Tansel and Kan (2012) carry out an analysis of transition probabilities emphasizing the movement between formal and informal sectors. Although women are significantly under-represented in formal sector, if they find a job in this sector, they are more likely to stay in this state than men. However, women have higher probability of leaving the labor market independently of their initial positions. According to Tansel and Kan (2012), the reproductive role of women and traditional gender division of labor in family structure are considered the main reasons for women's low attachment to the labor market, yet, they do not have unambiguous statistical evidence based on the multinomial logit regressions to account for how being married and having children affect different mobility patterns of women. Although Taşçı and Tansel (2005) and Tansel and Kan (2012) investigate the impact on gender on different transition probabilities in the labor market, none of these studies focus on job-to-job transitions as a distinct mobility pattern. Taşçı (2009) is the only recent empirical work studying the determinants of job-to-job transitions in Turkey. He finds that being a married woman lowers the probability of switching the jobs based on 2004 and 2005 Turkish Household Labor Surveys.

This will be the first paper to account for both job-to-job and job-to-non-employment transition as separate mobility patterns in a regional Turkish labor market context. Our aim in this paper is to investigate whether women are more inclined to conduct job-to-non-employment transitions due to domestic responsibilities rather than to make job-to-job moves that most likely suggest wage-improving job searches. Therefore, in this paper we try to discern the socio-economic determinants of various job mobility patterns in Turkey both for men and women based on micro-level data from an expanded household survey conducted in Izmir, third largest city in Turkey during the summer of 2010 covering 9,756 individuals. Following Theodossiou and Zangelidis (2009) mobility in the labor market is divided into three categories. The first category (same job) consists of people who continued to work in the same job as the previous year. People in the second group (job-to-job) have found a new job independently of their state in the previous year in the job market. Last group (job to non-employment) contains all other people who made the transition from having a job in the previous year to being unemployed or out of the labor force in the reference period.

The raw findings indicate that the degree of mobility in the labor market seems to be already very high. Almost 31 percent of the individuals in the sample performed one type of transition in the labor market during the last 12 months prior to the survey (35 percent of women and 30

percent of men, respectively). However, regarding the mobility within the labor market a more significant issue is the different behaviors of individuals across the gender division. Although the share of people who have found a new job during the last 12 months prior to the survey does not seem to be very different between men and women (18 percent and 16 percent), gender factor plays a more important role regarding the share of individuals who have been unemployed or left the labor force at the time of the survey. Almost 1 in every 5 women turns out to have moved from job to non-employment status, whereas the share of men in the same category is only 11 percent.

After investigating descriptive statistics, we carry out multinomial logit regressions in order to single out the determinants of individuals' behavior regarding different movements in the labor market. When examining the job mobility we split the sample according to gender because we expect women to face societal constraints associated with child care and household duties whereas men are expected to work (i.e. they switch jobs for better wages or leave jobs for involuntary reasons) (Parsons, 1991; Hersch and Stratton, 1997; Keith and McWilliams, 1999; Theodossiou and Zangelidis, 2009).

The most important findings of econometric analysis suggest that gender does matter statistically in explaining different mobility patterns in the labor market. Behavior of men conforms to most of the expectations. Better educated, better paid men with job security are less likely to change or quit their jobs. Similarly, married men and men from rural areas are less likely to change their jobs, ceteris paribus.

Women are more mobile than men in the labor market but most of the mobility is due to leaving the job market altogether. For women, however, the effects of traditionally accepted social roles[1] such as household duties or child care (measured by the variables such as marital status and number of dependents) on mobility patterns provide some mixed results. Being married turns out to be statistically significant by raising the likelihood of women's transition from job to non-employment position, whereas having dependents does not affect the probability of leaving the job market. On the other hand, women with dependents tend to stay in the same job while being married does not seem to be statistically important in the same mobility pattern. The results in this paper do not underestimate the importance of the social

[1] The existence of different traditional social roles for men and women requires estimating separate models for men and women instead of gender dummy variables due to potential omitted variable bias. We discuss this issue in detail in Section 3.

roles imposed upon women in determining their mobility pattern. On the contrary, the same results pave the way for a more encompassing conceptualization of gender roles not necessarily limited to and captured by variables such as marital status and the number of dependents. Although these variables claim to represent the importance of household responsibilities and childcare for women's labor supply decision, traditional gender norms can exert their influence through other channels that cannot be picked up immediately by the above variables. It is of great importance to assess the labor supply decisions of women in a broader context where traditional gender norms are reasserted in different sites and forms such as inadequate formal childcare support by the state or discriminatory labor practices in the workplace (Buğra, 2013).

The rest of the paper is organized as follows: Next section provides the methodological framework of the analysis along with the description of the data set. The estimation results are reported in section 4, and section 5 discusses the main findings of the paper.

3. Methodological Framework and Data Description

We estimate probabilities of different mobility patterns by using a multinomial logit model where i represents the alternative outcomes. A multinomial logit model produces estimates for the odds ratio for choosing (or switching) between more than 2 categories. The ratios presented in Table 2 show either the odds of JJ or the JNE transitions where the base category is same job. In other words, we first estimate the odds of switching jobs versus staying in the same job (probability of switching divided by probability of same job). Then we estimate the odds of transitioning to non-employment (probability of JNE divided by probability of same job). If the odds ratio is less than 1, an increase in the coefficient is less likely to experience transition and vice versa. Econometric model can be represented as:

$$Z_i = \mathbf{X'}_i\boldsymbol{\beta_i} + \varepsilon_i,\ i = 1,\ldots,\mathrm{I},\ [\varepsilon_1,\varepsilon_2,\varepsilon_3] \sim \mathrm{N}[0,\Sigma]$$

where i represents alternative outcomes (1: same job; 2: job-job mobility; and 3: job-to-non-employment transition), x_i is the regressors vector used in the estimation of the mobility patterns and includes controls for personal characteristics (age, marital status, the number of dependents in the household, residency, being a migrant and education level) and economic variables (home ownership, wage, access to healthcare, and occupational status).

Women traditionally are expected to be faced with different work-family balance choices compared to men. If this is an outcome of social and cultural norms which impose constraints

on women in relation to these choices, then there should be differences between men and women regarding the labor market transitions described by the transition models above, and particularly regarding the job-to-non-employment transition (Theodossiou and Zangelidis, 2009). As Royalty (1998) argues, this implies that there have to be omitted factors (associated with women's household responsibilities and child-bearing role) that are not included in the women's turnover model, and they are not important for male samples. Thus, if women adopt different roles and responsibilities compared to men then, the estimated parameters from a disaggregated job mobility model for men and women should differ due to the omitted variable bias in the estimates in the regression for females. Therefore the whole sample needs to be divided across gender in order to account for any problems associated with omitted variable bias as explained above.

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). İzmir is the third largest city in Turkey and hosts almost 6 percent of the Turkish labor force. There are 3,162 randomly selected household making up a representative sample of the province of İzmir. These households cover 9,756 persons whom 6,859 are between the ages of 15 and 65. We construct the dependent variable as follows: In the first group (same job) there are individuals who continued to work in the same job for the last 12 months prior to the survey. They are economically active during the reference period for at least one hour as a regular employee, casual employee, employer, self employed or unpaid family worker. Additionally, they also confirmed that they were working in the same job exactly one year before the reference period. The second group (job-to-job) comprises individuals who have switched jobs or found a new job independently of their initial state in the job market exactly one year before the reference period. Lastly, the third group (job-to-non-employment) consists of all people who used to have a job one year before the reference period and are unemployed or have left the labor force at the reference period.[2]

[2] We have initially estimated multinomial model with five possible outcome variables: Same job, Switched Job, Unemployed to employed, Non-employed to employed, and Job-to-non-employment. However, especially for outcomes Unemployed to employed and Non-employed to employed, most of the estimated coefficients are not different than zero and value of standard deviations are larger than 2; tell-tale signs of 'small cells'. 'Small cells' refers to cases where there are too few observations for these outcomes for reliable estimates. Following this finding we performed likelihood ratio tests (Table A3) developed by Long and Freese (2005) in order to explore whether it is possible to combine certain outcome categories. These tests show that, especially for women, job-to-job, unemployed to employed and non-employed to employed should be combined for more efficient.

Almost 31 percent of the individuals in the sample (the sum of job-to-job and job-to-non-employment) experienced one type of transition in the labor market during the last 12 months prior to the survey (Table 1). This number is higher for women than men, 35 percent and 30 percent, respectively. However, as we mentioned before a more significant issue is of individuals' behaviors across the gender division regarding the mobility within the labor market. Although the share of people (JJ) who have found a new job during the last 12 months prior to the survey does not seem to be different between men and women (18 percent and 16 percent), gender factor plays a more important role regarding the share of individuals (JNE) who have been unemployed or left the labor force at the time of the survey. Almost 20 percent of women turn out to have moved from job to non-employment position, whereas the share of men in the same category is only 11 percent. As a result, women constitute only 30 percent of the whole sample but 43 percent of JNE category.

Table 1: Decomposition of the dependent variable

Definition	Category	Men	Share in all men	Women	Share in all women	Total	Share in Total
Same Job	SJ	1,725	71.2 %	678	64.5 %	2,403	69.2 %
Switched jobs	JJ	181	7.4 %	61	5.8 %	242	7.0 %
Unemployed to employed	JJ	164	6.7 %	49	4.6 %	213	6.1 %
Non-employed to employed	JJ	87	3.5 %	62	5.9 %	149	4.3 %
Unemployed	JNE	83	3.4 %	30	2.9 %	113	3.3 %
Quit labor force	JNE	182	7.4 %	171	16.2 %	353	10.2 %
Total		2,422		1,051		3,473	

Independent Variables

We include both age and squared values of age to capture the potential non-linear relationship between age and job mobility. Figures 1, 2, and 3 present the labor force participation for the whole sample, men and women with respect to age (raw numbers). Overall labor force participation of working age (15-65) population is above 50 percent between ages 24 and 47. However, job market participation does not rise above 50 percent for women at any age group. Figure 4 and figure 5 show job-to-job and job-to-non-employment transitions for both men and women. In comparison to Theodossiou and Zangelidis's (2009) findings, people

leave the job market at a higher rate for every age group in Turkey. Likewise, holding onto the same job (69.2 percent) is lower in Turkey, even than in the U.K. labor market which is considered very mobile. Finally job-to-job transition is higher in Turkey than any other country in their study except the U.K. Unlike European labor markets where women leave the labor force at a higher rate at every age group, at older age men tend to quit the labor force at a higher rate (possibly to retirement) in Turkey. This is probably due to the fact that most of the women have already left the labor force at a very young age.

Figure 1: Job Market Participation with respect to Age

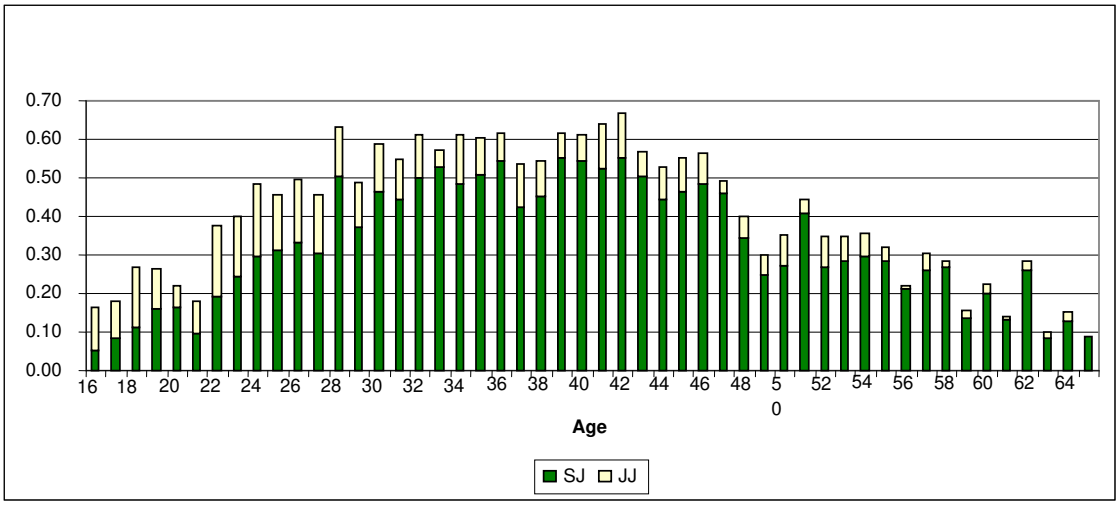


Figure 2: Job Market Participation of Women with respect to Age

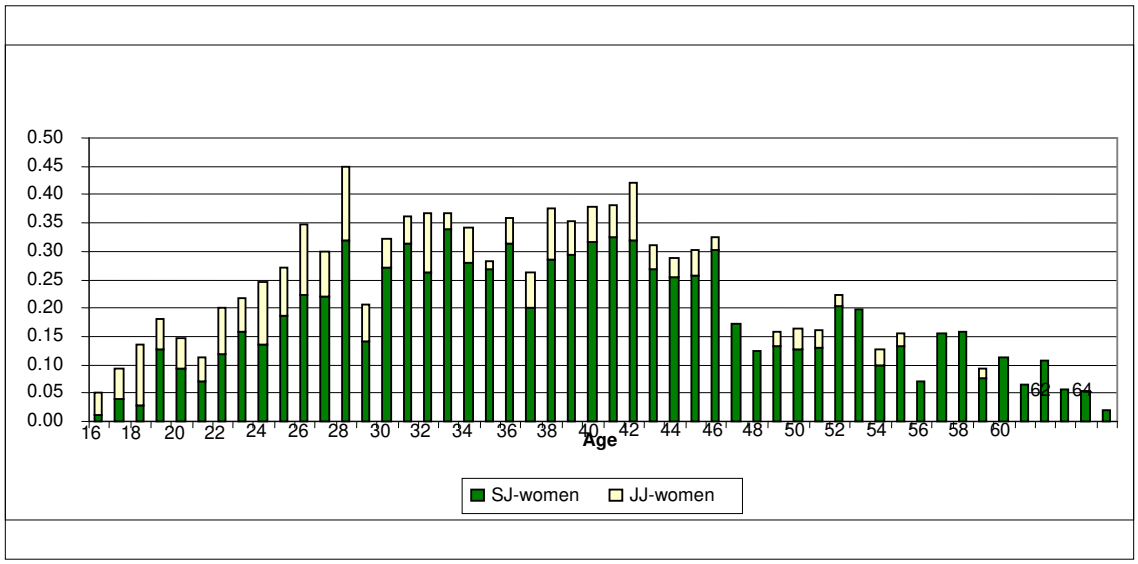


Figure 3: Market Participation of Men with respect to Age

Figure 4: Job-to-Job Transitions

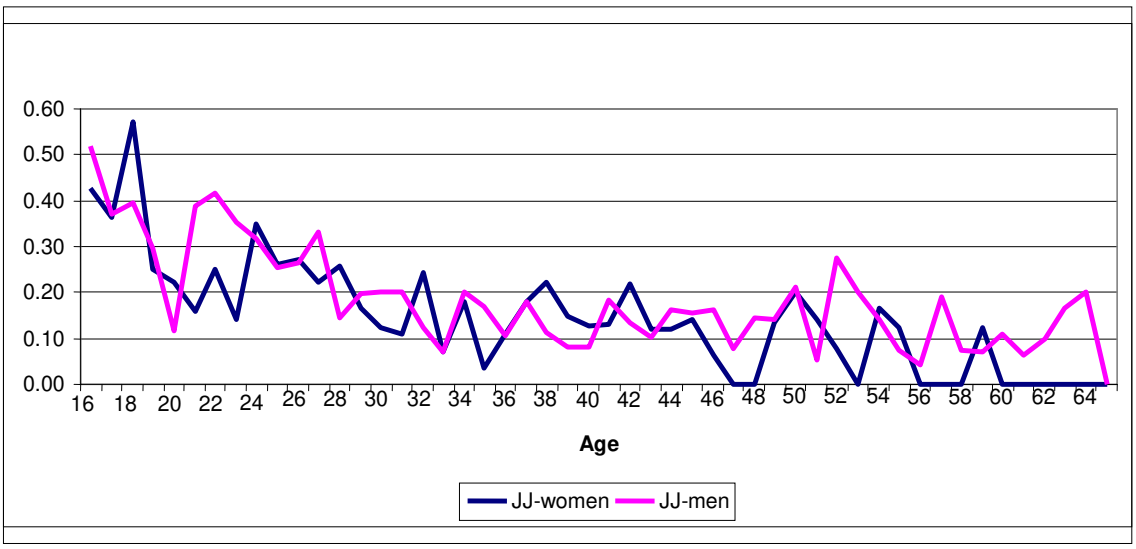
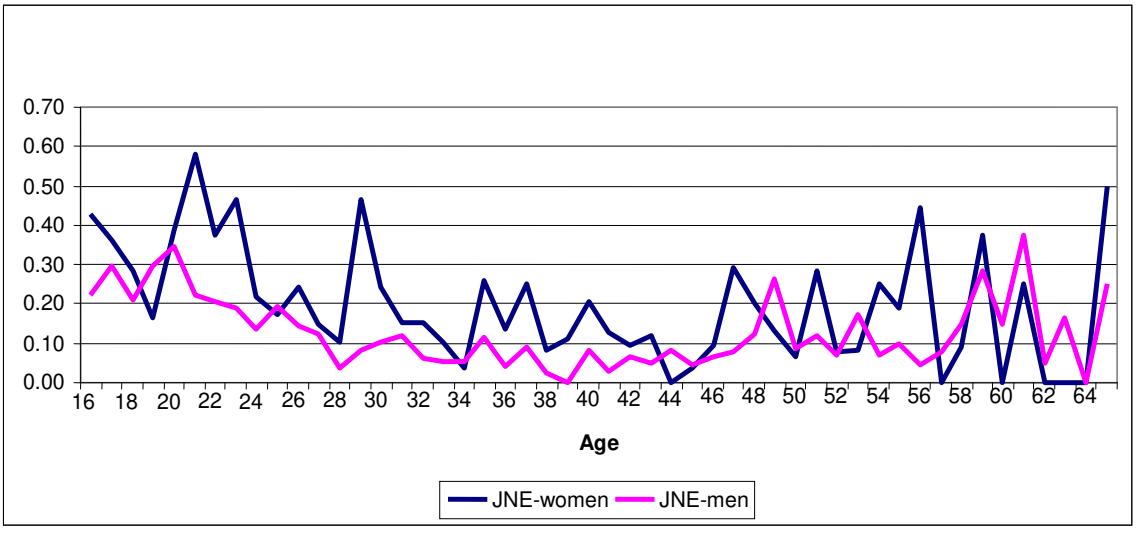


Figure 5: Job-to-Non Employment Transitions



We also include the number of very young and very old dependents (children younger than 7 years old and parents of household head older than 65 years old) as an explanatory variable. The great majority of dependents are children (average of 0.33 children and 0.03 elderly). We expect that women (but not men) in the households with more dependents leave labor force in order to take care of dependents. Marital status is another independent variable that may account for the effects of socially imposed gender roles on women's different behavior regarding mobility patterns. We expect marriage to increase JNE transition especially for women both because of traditional roles of married women and because childbirth closely correlate with marriage in Turkey (Dayıoğlu and Kırdar, 20010). Contrary to women we expect marriage to reduce JJ and JNE transitions because men with more secure and stable jobs are more likely to get married.

The level of education is found to play an important role in explaining the behavior of individuals in the job market. According to human capital approach (Becker, 1962), job-specific investment in human capital in the forms of formal education or skills that can be acquired at formal institutions or on the job, can lower mobility as long as the acquired skills are reflected in higher productivity and wages (Connoly and Gottschalk, 2006). Survey participants do not indicate how many years of schooling they have but indicate the highest degree they completed. In order to construct the education variable in our regression, we used the following convention: We input zero years for no formal education (23.4 percent), five years for primary school graduates (33.4 percent), eight years for middle school graduates (15.4 percent), twelve years for high school and vocational school graduates (17 percent), sixteen years for university graduates (10.3 percent) and 20 years for persons who have completed graduate studies (0.6 percent). Since education is a key to better paying and more secure employment we expect JJ and JNE transitions to decline with more education.

63 percent of men and 13 percent of women are self-reported household heads in our study. In practice, as long as there is an adult male in the household, he is reported as the household head. We expect being a household head to reduce JJ and JNE transitions due to the higher responsibilities arising out of the perceived "main breadwinner" role in the households. We also include rural dummy variable to account for household location. Another potentially important demographic variable affecting the mobility patterns in the labor market 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 the cities (Aran et al., 2010). The interviewee is defined as a migrant if s/he has migrated to İzmir after 1989. Hence we expect migrants (especially women) to be more likely to make a job-to-non-employment transition.

In addition to demographic variables, we also include a set of job-related economic variables to the model. Two very important job-related variables are earnings and occupational status. Self-reported wages and bonuses (converted to natural logarithm) or the self-reported earnings from the last job held if person is not working at the moment. Another job-related variable is occupational status. We defined 6 categories for occupation: managers (ISCO-88: 0 and 1); professionals and technicians (ISCO-88: 2 and 3); clerks (ISCO-88: 4); sales (ISCO-88: 5); skilled workers (ISCO-88: 6, 7, and 8); unskilled workers (ISCO-88: 9). Data on earnings from previous jobs and occupational status are only available for currently unemployed and out of labor force survey participants (i.e. JNE category). Unfortunately we cannot observe previous wages and previous occupational status of people who have switched jobs. Instead we use their current wage and occupational status as proxies which are not an ideal situation. We expect JJ and JNE transitions to decline with increasing wages. Also, we expect every occupational category to be more likely to experience JJ and JNE transition compared to professionals[3] except managers who are either self-employed or have more secure and high paid jobs.

Finally, access to public health services (and eventual retirement) depends on employment in Turkey. A great deal of jobs is in the informal sector without social security payments to the Social Security Administration. However, family members have access to health services if any of the family members is employed in the formal sector. So we construct a health insurance dummy variable by assigning one to all persons if anybody in the household has coverage by the Social Security Administration. Again, we are unable to observe whether the survey participants in the Switched Jobs category were working in the formal sector in their previous employment. However, unlike earnings and occupation status variable, we are not using survey participants' current status but instead we use his/her family's status in the formal labor market. We expect that men living in the household with health insurance to be less likely to make a transition in the labor market since they are more likely to be the

[3] Theodossiou and Zangelidis (2009) includes professionals and leaves out manager in their regression analysis, however our initial analysis shows that including professionals and leaving out managers cause significant multicolliniarity in our data set, so we employ this slight modification in this paper.

provider of access to health insurance for their family. 63 percent of all men in our sample is insured (44 percent of the sample) in comparison to 47 percent of all women who is insured (14 percent of the sample). We expect women's decision to transition to JJ and JNE to be affected less by whether the household has access to health insurance because they are more likely than men to have access to health insurance via also their spouses.

Despite our best efforts, there are limitations in our analysis. First of all, due to the cross-section character of this survey, it is not possible to assess the dynamics of the mobility probabilities over a longer period of time. Therefore we cannot account for market demand factors that could have been measured by the changes in the unemployment rate. Secondly, we expect that social security coverage (immediate access to healthcare and eventual retirement); tenure in the current job and weekly work hours to play important roles in job mobility decisions, however these questions are only directed to currently employed individuals. So these variables have no values for the last employment of JNE category and hence we cannot use them in the regression analysis. Lastly, we also tried to disaggregate our sample across education in addition to gender as is done in Theodossiou and Zangelidis (2009). However, our model did not converge due to insufficient sample size.

4. Estimation Results

The odds ratios on job-to-job and job-to-non-employment transitions are derived from the estimated multinomial logit model and are presented in Table 2. There is a statistically significant negative relationship between age and mobility in the job market, especially for women. Considering job-to-job mobility, this finding suggests that as individuals get older and gain more labor market experience, they become more successful in finding the "right" jobs. Regarding job-to-non-employment mobility, the same relationship suggests that most of the women have already left the labor force when they were younger.

The coefficient of the number of dependents turns out to be statistically significant only for JJ mobility at 10 percent significance level and suggest that women with very young and very old dependents are less likely to switch jobs. Moreover estimated coefficient for JNE is less than one, contrary to our expectations. Even if the coefficient estimate were significant, the result would have meant that women with more dependents are less likely to leave the labor force. One possible explanation for these unexpected finding is that most women may be leaving labor force even before dependents arrived (i.e. even before birth of the child or even

before marriage) anticipating the heavy workload at home associated with dependent care that society demands from women. Hence women who are in the labor force and who have dependents are already a small minority who are either able to delegate dependent care duties or who are forced to work the double shift due to insufficient income from other household members.

The coefficient of the marital status is statistically significant and larger than 1 (but only at 10 percent significance level) for women for JNE transition as we expected suggesting that socially imposed gender roles on married women seem to be important for women's behavior in the labor market. The same variable turns out to be significant for men in both types of labor market transitions. Married men tend to become less mobile with respect to both patterns of transition in the labor market.

Being the household head raises the probability of not being employed for women only. This can be the case for women who have other people in the household to be taken care of. However, the same statistical significance can also come from elderly widows in our sample. Therefore one should be cautious before concluding that the household head variable might also have captured the effects of gender roles. Table A4 shows the estimation results for prime age adults (between 25 and 55 years old). The main findings are parallel so that we do not expect the elderly widows to play any significant role in this case.

Better educated men have slightly lower odds of switching to a new job. This finding indicates that better educated men might have found the right job matching their skills. However, the lack of statistically significant coefficients for the education variable in all other categories can be the result of its potentially high correlation with the wage and occupation variables.

Living in a rural region lowers the odds of being mobile very significantly for all categories as expected because great majority of men and women in rural areas are employed in family farms as either owner operators or as unpaid family workers. The coefficient is significant especially in terms of lowering the probability of moving into non-employment position. Women who migrated to İzmir in the last two decades have higher odds of leaving the labor force. The finding may imply that women who followed their husbands to Izmir province are expected to assume more household responsibilities along the socially imposed gender roles.

Table 2: Multinomial Logit Regression Results (odds ratio)

	Women		Men	
	JJ	**JNE**	**JJ**	**JNE**
Age	0.83***	0.82***	0.91**	0.89**
Age squared	1.00*	1.00**	1.00*	1.00**
Education	1.01	1.00	0.97*	1.02
hh head	0.49*	2.96***	0.93	1.21
Migrant (post 1990)	0.82	1.58**	1.08	1.23
Rural	0.27***	0.19***	0.37***	0.13***
Married	1.33	1.64*	0.57**	0.58*
Dependents	0.66*	0.90	0.98	0.78
Wage (logs)	1.14***	0.66***	0.89***	0.63***
HH insurance	0.46***	0.31***	0.42***	0.09***
Managers	0.72	0.17***	0.62*	0.23***
Clerks	1.24	1.18	0.69	0.92
Sales	3.14***	1.11	0.96	0.65
skilled workers	2.15*	0.32**	1.00	0.64
Unskilled	3.64***	1.04	1.52*	0.43**
Pseudo R-Sq	0.2415		0.2109	
Sample Size	1040		2360	
JJ JNE	169	198	428	259
SJ	673		1674	

Notes: *, **, and *** indicate significance for the coefficients at 10 percent, 5 percent, and 1 percent level, respectively.

All three variables capturing some of the job related determinants of transition in the job market are found to be statistically significant. First, the wage variable is highly significant for all mobility patterns. The odds of switching jobs or leaving labor force decline with increasing wages for men as expected. Again women with higher wages are less likely to leave labor force as expected. However, contrary to our expectations, we find that better paid women have higher odds of switching jobs. This interesting finding needs further investigation.

Second, people with at least one family member with health insurance, have a lower probability of switching to a new job or leaving labor force. One interpretation of the last two variables can be the fact that one of the underlying motivation behind the mobility patterns in the labor market tends to be the search for higher wages and better access to healthcare which correlates with job security in Turkey. Once people find a secure job with formal benefits, they stick to it.

Lastly, the occupational positions in the job market mostly have the expected effects, i.e. being a member of manager category reduces the odds of JJ and especially JNE transition. This can be explained by the fact that most of the managers are either self-employed or have relatively more secure and better-paid jobs. Being a clerk is no different than being a professional (omitted category) for any sub-group. Women working in jobs requiring less education (sales, skilled and unskilled workers) are more likely to switch jobs compared to professional women. An interesting finding is that skilled women are less likely to leave the labor force compared to professional women. In addition to statistical significance, the magnitude occupational category effects are relatively high with the exception of the rural dummy variable among the variables in the model.

In order to emphasize the role of gender in understanding the different behavior of individuals regarding mobility patterns in the labor market, we present Figures 6 and 7. Figure 6 shows job-to-job probabilities for both men and women evaluated at their own means. This figure indicates that except for the young, men have a higher probability of changing jobs once every other variable is kept constant at its own mean. In Figure 7, we observe that the probability of moving into a non-employment position is significantly higher for women at each age level except for 55 and older cohort when all other variables are kept constant at their mean values. The same conclusion is reached when we compute the same probabilities by imputing both low-income and high-income men averages instead of own-means[4]. The last point also confirms that imputing the same wage distribution for both men and women does not take away the importance of gender in explaining different mobility patterns in the job market.

[4] Other graphs are available from authors upon request.

Figure 6: Probability of Job-to-Job Transition, evaluated at Men & Women Own-Means

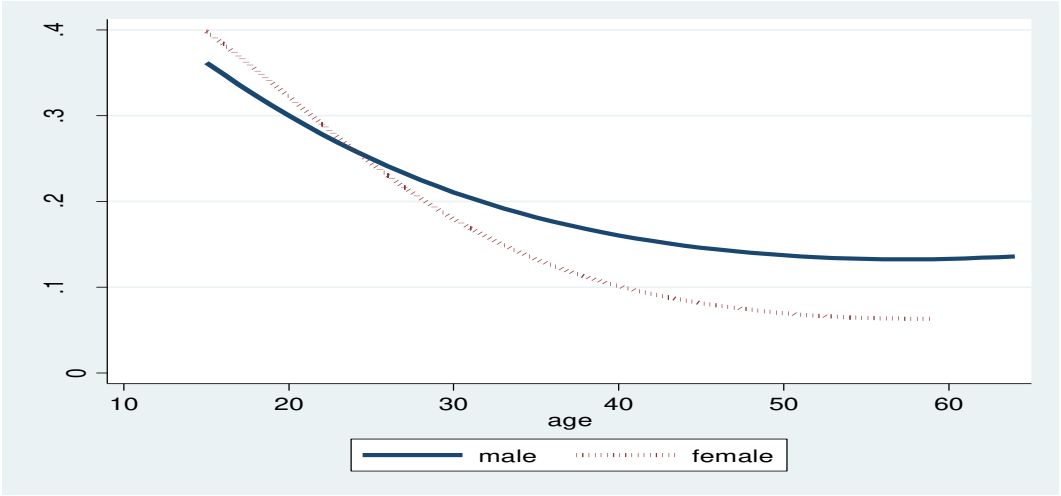
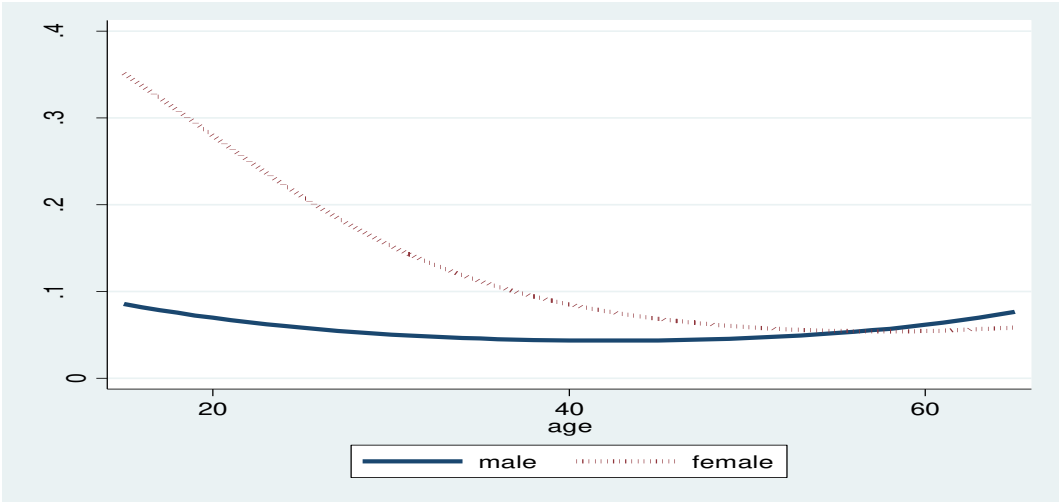


Figure 7: Probability of Job-to-Non Employment Transition, evaluated at Men & Women Own-Means



5. Conclusion

The main motivation of this paper is to find statistical evidence for the importance of gender in understanding individual behavior pertaining to mobility patterns in the labor market. Our results, based on a large sample from İzmir labor market, suggest that gender matters a lot about why actors in the labor market engage in different types of transition. After controlling for personal characteristics and job-related and other economic conditions men are found to be more likely to change jobs whereas women are more likely to exit the labor market.

Although gender seems to be important in terms of job mobility patterns, our econometric estimation results provides us with partial evidence about the importance of traditional women's role arising from being married or having dependents. We find some evidence that

married women are more likely to experience JNE transition. By presenting these results, we do not have any intention of downplaying the significance of socially imposed gender roles particularly on women's frequently observed movements into non-employment position.

A significant number of women are not in the labor market in Izmir and a cursory glance at raw averages suggest that the number of married women with dependents are significantly higher especially among women who have never participated in the labor market or participated but left the labor market earlier than 12 months prior to the survey. However, in order to investigate the socio-economic determinants of different mobility patterns rather than that of only labor market participation, we left all those individuals without any labor market activity during the last 12 months prior to the survey out of our analysis[5]. Therefore a separate analysis of labor force participation based on an expanded sample including all women in the working age population may better capture the effect of traditional gender norms associated with being married and having dependents.

Recent empirical research suggests that a significant amount of the gender differences in mobility patterns is due to the difference between less educated women and the rest the sample. For that reason, some of the gender difference may not be accounted for if the disaggregation is carried out only by gender (Royalty, 1998; Theodossiou and Zangelidis, 2009). Unfortunately, our data limitations do not allow us to disaggregate data further by education due to insufficient observation for each subgroup.

We believe that the women's transition to non-employment turns out to be the most important pattern of mobility in Turkey, and, hence, this decision should be evaluated in a more comprehensive context where traditional gender norms are reasserted in different sites and forms. Although traditional gender norms seem to exert their influence primarily via the division of labor within the household, the policies supporting women's labor force participation should also target the adverse effects of these norms in a broader institutional setting. In that context, priority should be given to new laws and regulations supporting appropriate social policies that target the disadvantaged position of women in the labor market by providing them with adequate care support and ample security in the presence of discriminatory practices both at the workplace and home.

[5] Given the cross-sectional structure of the survey, we have information about different transitions in the labor market only for the last 12 months prior to the survey.

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Appendix: Diagnostic Tests

Table A1: Wald Test results for Independent Variables in the Regression Analysis

	Women			Men		
Independent Variables	**chi2**	**df**	**P>chi2**	**chi2**	**df**	**P>chi2**
age	13.87	2	0.00	8.85	2	0.01
age squared	6.50	2	0.04	5.88	2	0.05
education	0.04	2	0.98	5.33	2	0.07
hh head	16.93	2	0.00	0.92	2	0.63
migrant (post 1990)	6.16	2	0.05	1.16	2	0.56
rural	24.91	2	0.00	33.20	2	0.00
married	3.49	2	0.18	7.82	2	0.02
dependents	3.12	2	0.21	1.75	2	0.42
wage (logs)	123.55	2	0.00	174.57	2	0.00
hh insurance	20.90	2	0.00	147.48	2	0.00
managers	10.17	2	0.01	12.58	2	0.00
clerks	0.47	2	0.79	1.40	2	0.50
sales	10.71	2	0.01	1.79	2	0.41
skilled workers	9.97	2	0.01	2.43	2	0.30
unskilled	10.37	2	0.01	10.41	2	0.01

In the Wald test the null hypothesis is that "all the coefficients associated with given variable(s) are 0." We fail to reject this null hypothesis only for 'dependents' and 'clerks' explanatory variables. However, we still keep these explanatory in the model since they are integral to our model and have been employed throughout the literature.

Table A2: Classification of Actual and Predicted Categories

Women	actual SJ	actual JJ	actual JNE	Total	**% correctly predicted**
predicted SJ	616	126	79	820	0.92
predicted JJ	27	30	14	70	0.18
predicted JNE	30	13	105	150	0.53
Total	673	169	198	1,040	**0.72**
Chance Accuracy					**0.48**

Men	actual SJ	actual JJ	actual JNE	Total	**% correctly predicted**
predicted SJ	1,607	363	127	2,098	0.96
predicted JJ	32	33	17	83	0.08
predicted JNE	34	32	115	179	0.44
Total	1,673	428	259	2,360	**0.74**
Chance Accuracy					**0.55**

Total	actual SJ	actual JJ	actual JNE	Total	**% correctly predicted**
predicted SJ	2,223	489	206	2,918	0.95
predicted JJ	59	63	31	153	0.11
predicted JNE	64	45	220	329	0.48
Total	2,346	597	457	3,400	**0.74**
Chance Accuracy					**0.52**

As can be seen from Table A2, our model predictions are significantly better than chance accuracy. For women, predicted category (SJ, JJ or JNE) is correct for 72 percent of all cases which is 50 percent more than chance accuracy (for women chance accuracy is 48 percent). A similar situation can be observed for Men and all sample.

Table A3: Likelihood Ratio Tests whether to combine outcome variables

		Women (1040 observations)			Men (2360 observations)		
Alternatives tested		**chi2**	**df**	**P>chi2**	**chi2**	**df**	**P>chi2**
Same job	Unemployed to employed	44.945	15	0	122.154	15	0
Same job	Non-Employed to employed	73.276	15	0	176.604	15	0
Same job	Job-to-non-employment	308.629	15	0	630.002	15	0
Same job	job-to-job	51.9	15	0	93.904	15	0
Unemployed to employed	Non-Employed to employed	9.889	15	**0.827**	74.383	15	0
Unemployed to employed	Job-to-non-employment	74.33	15	0	140.09	15	0
Unemployed to employed	Job-to-job	10.803	15	**0.766**	16.809	15	**0.33**
Non-Employed to employed	Job-to-non-employment	87.481	15	0	118.414	15	0
Non-Employed to employed	Job-to-job	14.082	15	**0.519**	73.641	15	0
Job-to-non-employment	Job-to-job	89.615	15	0	188.247	15	0

Table A4: Estimation Results for Prime Age Adults (between 25 and 55 years old)

	Prime-age female		**Prime-age male**	
	JJ	**JNE**	**JJ**	**JNE**
age	0.76 ***	0.76 ***	0.86 ***	0.86 **
age square	1.00 ***	1.00 **	1.00 ***	1.00 *
education	1.00	1.00	0.96 **	1.03
hh head	0.47 *	2.69 ***	0.92	1.20
migrant	0.81	1.60 **	1.07	1.30
rural	0.28 ***	0.20 ***	0.41 ***	0.14 ***
married	1.35	1.79 *	0.63 **	0.74
dependents	0.68 *	0.90	0.95	0.73
wage (logs)	1.13 **	0.65 ***	0.90 ***	0.62 ***
hh insurance	0.50 ***	0.35 ***	0.40 ***	0.08 ***
managers	0.72	0.17 ***	0.68	0.30 ***
clerks	1.21	0.98	0.68	1.02
sales	3.03 ***	1.07	0.90	0.68
skilled workers	2.12 *	0.34 **	0.98	0.70
unskilled	3.35 ***	0.96	1.34	0.38 **
constant	3.77 ***	6.96 ***	4.02 ***	5.68 ***
Chi-Square	270.369		444.147	
N	980		2183	