

# **ESAS Sosyal First Chance Program Impact Analysis Project**

## **Impact Analysis of the First Chance Program**

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### **1. Introduction**

In the Demographic study, we presented the challenges young university graduates face in Turkey when entering the labor market. In addition, we found that the graduates of the second-tier universities are disadvantageous in terms of finding a job in terms of length of time to find a job, level of the job and lower household income in the long run.

The aim of this project is to explore the employment effects of Esas Sosyal First Chance (FC) Program on the participants.

The First Chance Program aims to ease the transition of second-tier university graduates (approximate aged 23-24) to the labor market by helping them gain work experience and providing various training support. Measuring the effect of a program as such is challenging since the chosen candidates might have different characteristics than the candidates who are not chosen. Thus, we expect the characteristics of these candidates that help them be eligible for the program, also help them to be more successful in the labor market. Therefore, in order to understand how much of the performance of the First Chance participants in the labor market is due to the effect of the program, a control group needed to be created. This control group consisted of the individuals who were not selected to participate in the program but have similar features in terms of pre-program characteristics. In this project, by identifying the First Chance Program participants as a treatment group, the control group consisted of candidates who were similar to participants in terms of academic and background characteristics. For this purpose, a sample of individuals who applied to the First Chance Program in 2019, yet not selected to the program but were in the reserve list (those who meet the minimum criteria or above) were used as a control group. By using the design above, those who have similar features were compared between the ones who were accepted to the program and the ones who were not. Differences in employment status, wage, job satisfaction, use of skill and talent of participants who were accepted to the program compared to the control group were detected.

## 2. Data

One of the important steps of this project was to form a control group that consists of individuals with characteristics similar to selected First Chance participants. Within this scope, in order to create a control group, 119 individuals out of 400 candidates who are in the reserve list, i.e., passed the pre-selection by applying to the First Chance Program in 2019 were called via telephone to conduct a survey. 71 of 119 individuals were women, and 48 of them men. 60 of 119 individuals agreed to answer the survey questions. 31 of those who answered the questions were women, and 29 men. 59 of 119 individuals did not answer. 41 of those who did not answer the questions are women, 18 of them are men. Survey questions are shown in Annex 1.

The treatment group consists of individuals who participated in the First Chance Program in 2016, 2017, and 2018 (approximate age 26-28). Additional information about wage, job satisfaction, use of talents and skills are collected from the participants of the First Chance Program via an online survey. 100 percent of those who participated in the program found a job, whereas this rate for the control group is 56.7 percent (Table 1). Detailed information about the data set will be presented in section four.

## 3. Econometric Method

After the control and treatment groups are formed as described above, we estimate the following model:

$$Y_i = \beta X_i + \mu T_i + \varepsilon_i$$

The dependent variable,  $Y_i$ , is each of the outputs to be examined. These are as the following; employment, labor force participation, wage, job satisfaction, use of talents and skills. Employment status of the individual is defined as the following:

$$Y_i = \begin{cases} 1 & \text{working} \\ 0 & \text{not working} \end{cases}$$

Labor force participation of the individual is defined as the following:

$$Y_i = \begin{cases} 1 & \text{working or looking for a job} \\ 0 & \text{not working and not looking for a job} \end{cases}$$

Wage of the individual is defined as the following:

$$Y_i = \begin{cases} 1 & \text{if the wage is above the minimum wage} \\ 0 & \text{if the wage is the minimum wage or below} \end{cases}$$

Individual's use of skills at work is defined as the following:

$$Y_i = \begin{cases} 1 & \text{uses skills often or always at work} \\ 0 & \text{uses skills never or rarely/sometimes at work} \end{cases}$$

Individual's job satisfaction is defined as the following:

$$Y_i = \begin{cases} 1 & \text{likes or loves his/her job} \\ 0 & \text{prefers another job or loves his/her job very little or accepted it} \end{cases}$$

$X_i$  are the characteristics of the individual. These are year of birth, gender, graduation year and ranking of the graduated university according to University Ranking by Academic Performance (URAP)<sup>1</sup>. URAP ranking is presented in Annex 2. In some regressions, indicator of the graduated program being formal or not, GPA group fixed effects, indicators of voluntary activity, student club participation, knowledge of a foreign language are included in the analysis.

$$T_i = \begin{cases} 1 & \text{First Chance Participant (Treatment Group)} \\ 0 & \text{First Chance Reserve Candidate (Control Group)} \end{cases}$$

is defined and  $\mu$  value shows the effect of the program. If the  $\mu$  value is significantly positive, then we can deduce that it has a positive effect on the outcome of the First Chance Program participants. In the following section, the data set that is used will be described in detail and the results of the analysis will be presented.

#### 4. Impact Analysis

Table 1 is the descriptive statistics table presenting the mean value and standard deviations of all variables that we will use in the analysis for the treatment group (the FC participants) and the control group (those who applied to the FC and passed the pre-selection but did not participate in the program). There is no statistically significant difference found between the two groups in terms of academic indicators such as the URAP ranking of the graduated university, GPA's of the individuals, knowledge of a foreign language, scholarship status. This suggests that individuals in the two groups are selected from academically similar profiles. This is extremely crucial in terms of econometric design. For this design to give unbiased results,

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<sup>1</sup> URAP is a non-profit organization that regards forming university rankings for Turkey and the world as a social service.

the treatment group and control group must consist of similar individuals and the only difference should be that individuals in the treatment group have participated in the program, and those in the control group have not. An important difference between the two groups is that in the control group, the numbers of women and men are equal, whereas, in the FC group, 33 percent are men. Since there exist significant labor market differences between men and women in Turkey, the regression analyses was conducted for the whole sample and for men and women separately. When the differences between the two groups are considered in terms of social activities, student club participation is 13.3 points higher for the FC participants, whereas voluntary activity ratio is 41.7 points higher in the control group. When we conduct these analyses for men and women separately, it is seen that there is no difference between the treatment group and the control group generally in terms of academic indicators (Table 2 and Table 3). In the men's sample, the probability of participants having scholarships is 22.8 higher than those who are not selected to participate in the program. For women, student club participation and voluntary activities are higher in the control group than in the treatment group. For men, there is no significant difference in these variables.

When we consider Table 1 in terms of the results of impact analysis, participants' employment rate is 43.3 points, the probability of being in the labor force (working or looking for a job) is 11.7 points, the rate of their wages being higher than minimum wage is 29.7 points higher, and the difference between groups is statistically significant. When we conducted these analyses for men and women separately, Table 2 and Table 3, similar results are found in terms of employment. In the sample of women, the probability of participants being in employment is 32.3 points, and the probability of working women earning more than the minimum wage is 38.9 higher. However, in this sample, there is no statistically significant difference in terms of labor force participation. In the sample of men, the probability of participants being employed is 55.2 points; the probability of being in the labor market is 17.2 points higher. However, in this sample, there is no statistically significant difference found regarding wages (see Table 2 and Table 3). There is no statistically significant difference between the two groups in terms of the probability of job satisfaction and the use of skills at work.

We present graphically the proportion of individuals who are employed, in the labor force, earning a salary higher than minimum wage, satisfied with their job and who use their skills in their job separately for the FC participants and the individuals in the control group to provide visual representation. We also present these graphs separately for men and women.

In Graph 1, the average employment of the treatment group (the FC Participants) and the control group are given. The employment rate of the participants is 100 percent, whereas, in the control group, men's employment rate is 57 percent, and women's is 68 percent. In Graph 2, the probability of both groups being in the labor market is presented. The probability of FC participants being in the labor force is 100 percent, whereas, in the control group, this rate is 83 percent for men and 94 percent for women<sup>2</sup>. In Graph 3, the rates of FC participants and those in the control group earning above the minimum wage are presented. The rate of FC participants earning more than minimum wage is 91 percent for men, whereas in the control group, this rate is 77 percent. For women, 96 percent of the FC group earns above the minimum wage, while 57 percent of the control group earns more than the minimum wage. While 82 percent of men in the FC group are satisfied with their jobs, 46 percent of the men in the control group are satisfied with their jobs (Graph 4). 52 percent of women<sup>3</sup> in the FC group and 60 percent of women in the control group state that they are satisfied with their jobs. 82 percent of men in the FC group state that they always or often use their skills at work, whereas this rate for men in the control group is 62 percent (Graph 5). About 72 percent of the women in both groups stated that they always or often use their skills at work.

Even though average statistics between the treatment group and control group enable us to grasp an intuition, the regression analysis explained in the econometric method section enables us to measure the pure program effect by controlling other factors that might affect employment. If we do not control these variables, then the results we obtain will not only include the effects of the program solely but also the effects of the individuals' uncontrolled characteristics on the outcomes of the labor market.

In Table 4, the regression results that measure the impact of the FC program on employment are given for the whole sample (columns 1, 2, 3), men (columns 4, 5, 6) and women (columns 7, 8, 9). The variable of the First Chance participant is 1 if the individual participated in the FC Program and 0 if s/he passed the pre-selection but did not participate in the program. The coefficient of this variable in the table measures the effect of the program. In addition to the variables shown in Table 4, columns 1, 4 and 7 control graduation year, application year to the FC program and year of birth as fixed effect. In columns 2, 5 and 8, in addition to these, the URAP ranking of the graduated university is included. In columns 3, 6, and 9, in addition to the

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<sup>2</sup> There is no statistically significant difference. However, the mean levels are different. Sometimes, small sample size may lead to statistical insignificance as standard errors are larger in this case. Therefore, it is still important to talk about mean levels.

<sup>3</sup> Ibid

variables in other columns, whether the graduated program is formal, GPA group fixed effects, indicators of voluntary activity, student club participation, knowledge of a foreign language and having a scholarship or not are included in the analysis. In all regressions in this table, it is found that the FC Program has a positive and statistically significant effect on employment. When the URAP ranking of the graduated university is controlled, it is seen in column 2 that the employment probability of the participants of the program is 66.8 points higher than the control group. These probabilities are about 70.8 points for men (column 5) and 49.6 points for women (column 8). The magnitude and significance of these effects remained about the same when GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of a foreign language, having a scholarship or not and whether the education is formal are included in the analysis. Since the effect of FC Program remained unchanged even for important and different regression definitions, it has a robust and significant effect on employment.

In Table 5, the effect of the FC program on the labor market participation is analyzed. The analyses done for the whole sample indicates that the program has an impact of 15.3 points on the labor market participation (column 3). However, these results do not show up in the analyses conducted for men and women. When the ranking of the graduated university is controlled solely again, for the whole population, the result becomes statistically insignificant. In other words, When we take into account differences in the university quality, the significant result we found has gone, which means that the university quality explains only some of the difference in labor force participation. Therefore, these findings are not robust enough.

In Table 6, the regression results that measure the impact of the FC program on wages are given for the whole sample (columns 1, 2, 3), men (columns 4, 5, 6) and women (columns 7, 8, 9). In this table, the dependent variable is 1 if the individual gains above the minimum wage and 0 if s/he earns minimum wage or below. In the regressions where the status of participation in the program, graduation year, year of application to the First Chance Program, year of birth and URAP Ranking are controlled, for women, it is found that the program participants have a higher probability of earning above the minimum wage. On the other hand, when GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of the foreign language and having a scholarship or not are controlled, it is seen that the program does not have a statistically significant effect. In other words, when we compare similar individuals in terms of controlled variables, there is no effect on getting a higher wage. That is, observed

differences of individuals explain why participants get higher wages. For men, the program does not have any effect on the probability of earning above the minimum wage.

Table 7 indicates the impact of the program on the possibility of having a job where one applies his/her skills often or always. In the regressions where the status of participation in the program, graduation year, year of application to the FC Program, year of birth and URAP Ranking are controlled, for men it is found that the program participants have a higher probability of having a job where they apply their skills often or always. On the other hand, when GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of a foreign language and having a scholarship or not are controlled, it is seen that the program does not have a statistically significant effect. For women, the program does not have any effect on the possibility of using skills at work often or always.

Table 8 explores the effect of the program on job satisfaction. The program does not have a statistically significant effect on job satisfaction. In other words, from these analyses, we cannot tell anything about what works. For example, consider a group of very motivated students who learned a language, in an analysis that does not control their motivation but control their language ability, the language will appear as an important factor in their labor market success. However, it is their motivation, not their language knowledge. On the other hand, given the outcomes of this report, it is less likely to be the training they get in the FC program that makes the difference.

Lastly, in Table 9, the treatment group is identified as the FC program participants of 2018 and an additional robustness check is conducted. The control group is kept the same as those applied to the program but did not participate in 2019. This analysis is particularly important since the FC participants of 2018 and those who applied but did not participate in 2019 searched for jobs at the same time and under the same labor market conditions. As it is seen in Table 9, it is found that the FC program has a high and significant as 52.6 points effect on employment (column 3). As we do not know details of job characteristics and how long it took them to find a job, we cannot say much. But, given that we cannot find any effect on job satisfaction, getting higher than minimum wage, it is not possible to conclude that the participants find better jobs per se.

In sum, the program has a substantial and robust effect on employment and at the same time, it has a positive yet, not robust effect on being in the labor market and it has no effect on wage, use of skills and job satisfaction.

## 5. Results

In order to conduct an impact analysis of the FC Program, a control group was formed based on individuals with similar pre-program characteristics but were not selected to participate in the program. The treatment group are individuals who participated in the FC Program in 2016, 2017 and 2018 whereas the control group is composed of 60 randomly selected individuals who were not selected for the program among the applicants of the FC Program but who are in the reserve list (those who meet the minimum criteria or above). By using this design, the outcomes of employment status, probability of being in the labor force, wage, job satisfaction, use of skills and talents of those who have similar characteristics are compared among those who are accepted to the program and who are not.

As a result of the analysis, it is found that the FC Program has a high and robust effect on employment. When the demographic, academic and social characteristics of individuals are controlled in the analysis, the impact of the program is found as 68.1 percentage points for men and 50.9 percentage points for women. In other words, the employment probability of a man (woman) who participated in the program is 68.1 (50.9) percentage points higher than the employment probability of a man (woman) who did not participate. There is no statistically robust relationship found between the FC participants and the individuals in the control group in terms of labor force participation, earning more than minimum wage, using skills often or always and job satisfaction.

The findings support the result that the value-added of the program increases the employment rate because of job experience and the network it provides rather than the training it gives. According to the human capital theory, if the training provided increased individuals' human capital, then it would be expected to reflect on wages. Similarly, if the program increased individuals' skills effectively in accordance with the skills expected in business life then, participants would be expected to use their skills more often compared to the control group. In conclusion, the fact that there is no difference between the participants and the control group in terms of job satisfaction supports the argument that the participants do not find better jobs in contrast with the control group. As a result, the program has a limited effect on human capital, whereas it has a high and robust effect on employment.<sup>4</sup>

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<sup>4</sup> We do not have any data to tell more about time till employment, etc. The effect on time till employment is a more complex problem as some people may not accept job offers and wait longer before employment.



**Table 1. Descriptive Statistics (Whole Sample)**

VARIABLES	Control Group	FC Participant	Number of observations	Difference	P-value
In Employment	0.567 (0.0645)	1 (0)	120	-0.433*** (0.065)	0.000
In Labor Force	0.883 (0.0418)	1 (0)	120	-0.117*** (0.042)	0.006
Salary>Minimum wage	0.647 (0.0832)	0.944 (0.0387)	70	-0.297*** (0.092)	0.002
I like my job/love my job very much	0.500 (0.0870)	0.667 (0.0797)	70	-0.167 (0.118)	0.162
I often or always use my skills	0.667 (0.0833)	0.750 (0.0732)	69	-0.083 (0.111)	0.455
Men	0.483 (0.0651)	0.333 (0.0614)	120	0.150* (0.089)	0.096
Formal Education	0.733 (0.0576)	0.667 (0.0614)	120	0.067 (0.084)	0.430
Scholarship student	0.217 (0.0536)	0.267 (0.0576)	120	-0.050 (0.079)	0.526
GPA=2.5-3	0.950 (0.0284)	0.950 (0.0284)	120	0.000 (0.040)	1.000
GPA=3.5-4	0.0500 (0.0284)	0.0500 (0.0284)	120	0.000 (0.040)	1.000
Foreign Language	0.783 (0.0536)	0.833 (0.0485)	120	-0.050 (0.072)	0.491
Master	0.102 (0.0397)	0 (0)	84	0.102** (0.040)	0.012
Year of graduation	2,018 (0.0564)	2,016 (0.122)	120	1.767*** (0.135)	0.000
URAP ranking	41.25 (2.596)	36.05 (2.003)	120	5.200 (3.279)	0.115
Student club participation	0.833 (0.0485)	0.700 (0.0597)	120	0.133* (0.077)	0.086
Voluntary Activity	0.800 (0.0521)	0.383 (0.0633)	120	0.417*** (0.082)	0.000

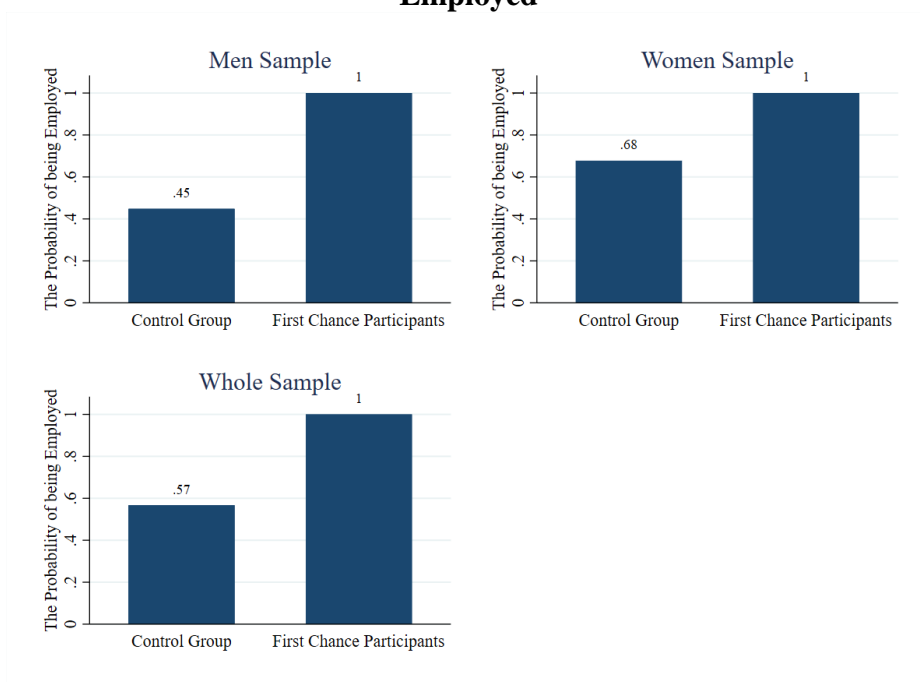
**Table 2. Descriptive Statistics (Women)**

VARIABLES	Control Group	FC Participant	Number of Observations	Difference	P-value
In Employment	0.677 (0.0853)	1 (0)	71	-0.323*** (0.085)	0.000
In Labor Force	0.935 (0.0449)	1 (0)	71	-0.065 (0.045)	0.155
Salary>Minimum wage	0.571 (0.111)	0.960 (0.0400)	46	-0.389*** (0.118)	0.002
I like my job/love my job very much	0.524 (0.112)	0.600 (0.100)	46	-0.076 (0.150)	0.614
I often or always use my skills	0.700 (0.105)	0.720 (0.0917)	45	-0.020 (0.139)	0.887
Formal Education	0.677 (0.0853)	0.675 (0.0750)	71	0.002 (0.114)	0.983
Scholarship student	0.258 (0.0799)	0.200 (0.0641)	71	0.058 (0.102)	0.572
GPA=2.5-3	0.935 (0.0449)	0.925 (0.0422)	71	0.010 (0.062)	0.865
GPA=3.5-4	0.0645 (0.0449)	0.0750 (0.0422)	71	-0.010 (0.062)	0.865
Foreign Language	0.742 (0.0799)	0.875 (0.0530)	71	-0.133 (0.096)	0.169
Master	0.0968 (0.0540)	0 (0)	47	0.097* (0.054)	0.080
Year of Graduation	2,018 (0.0874)	2,016 (0.155)	71	1.745*** (0.178)	0.000
URAP Ranking	39.45 (3.385)	36.58 (2.515)	71	2.877 (4.217)	0.497
Student Club Participation	0.839 (0.0672)	0.625 (0.0775)	71	0.214** (0.103)	0.041
Voluntary Activity	0.806 (0.0721)	0.300 (0.0734)	71	0.506*** (0.103)	0.000

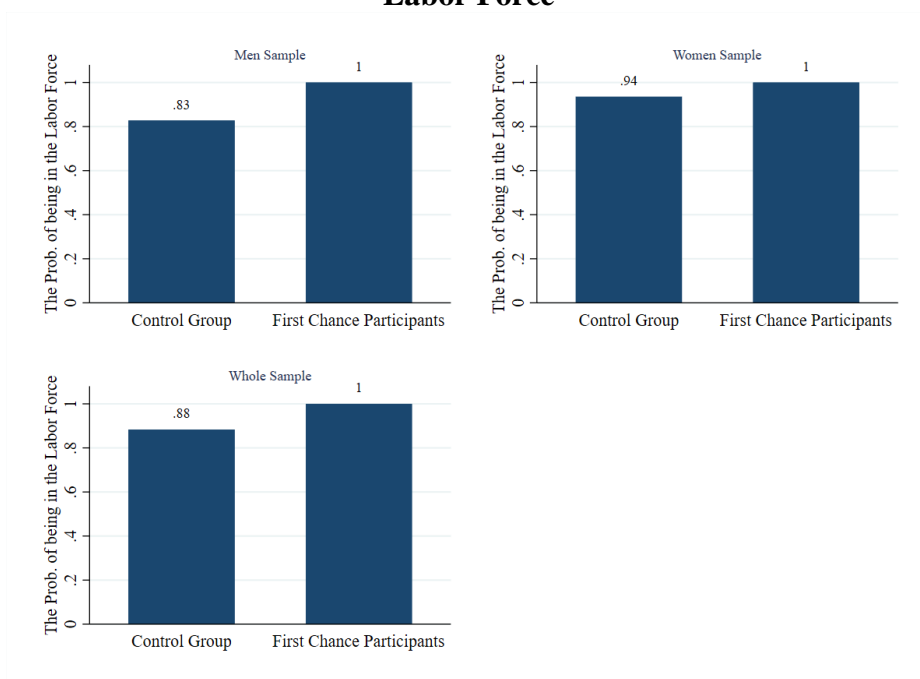
**Table 3. Descriptive Statistics (Men)**

VARIABLES	Control Group	FC Participant	Number of Observations	Difference	P-value
In Employment	0.448 (0.0940)	1 (0)	49	-0.552*** (0.094)	0.000
In Labor Force	0.828 (0.0714)	1 (0)	49	-0.172** (0.071)	0.020
Salary>Minimum wage	0.769 (0.122)	0.909 (0.0909)	24	-0.140 (0.152)	0.367
I like my job/love my job very much	0.462 (0.144)	0.818 (0.122)	24	-0.357* (0.189)	0.071
I often or always use my skills	0.615 (0.140)	0.818 (0.122)	24	-0.203 (0.186)	0.287
Formal Education	0.793 (0.0766)	0.650 (0.109)	49	0.143 (0.134)	0.289
Scholarship Student	0.172 (0.0714)	0.400 (0.112)	49	-0.228* (0.133)	0.094
GPA=2.5-3	0.966 (0.0345)	1 (0)	49	-0.034 (0.034)	0.322
GPA=3.5-4	0.0345 (0.0345)	0 (0)	49	0.034 (0.034)	0.322
Foreign Language	0.828 (0.0714)	0.750 (0.0993)	49	0.078 (0.122)	0.529
Master	0.107 (0.0595)	0 (0)	37	0.107* (0.060)	0.080
Year of Graduation	2,018 (0.0652)	2,016 (0.196)	49	1.712*** (0.206)	0.000
URAP Ranking	43.17 (4.001)	35 (3.365)	49	8.172 (5.228)	0.125
Student Club Participation	0.828 (0.0714)	0.850 (0.0819)	49	-0.022 (0.109)	0.837
Voluntary Activity	0.793 (0.0766)	0.550 (0.114)	49	0.243* (0.137)	0.083

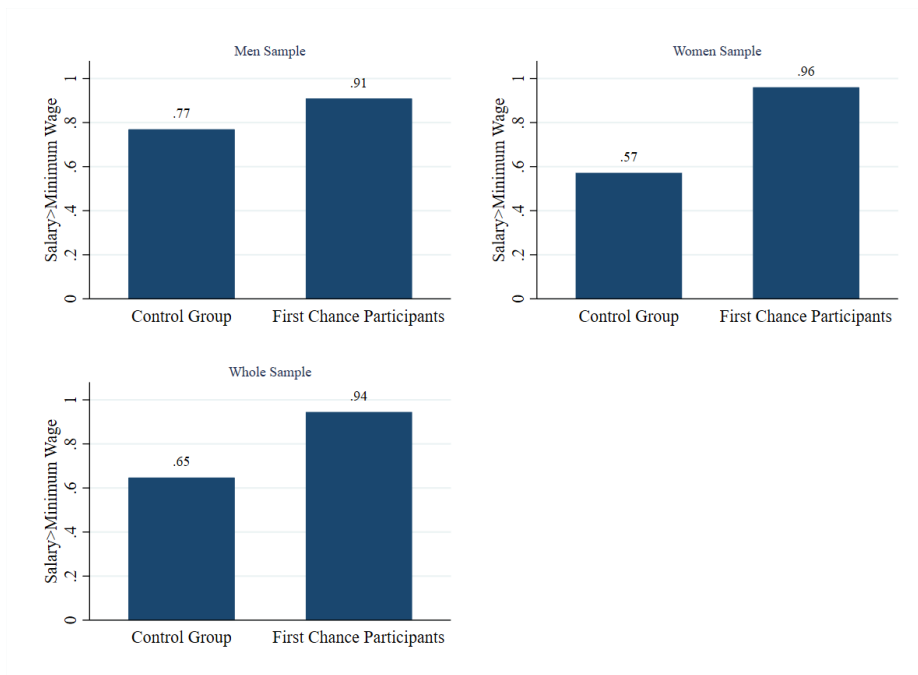
**Graph 1. The Impact of the First Chance Program on the Probability of Being Employed**



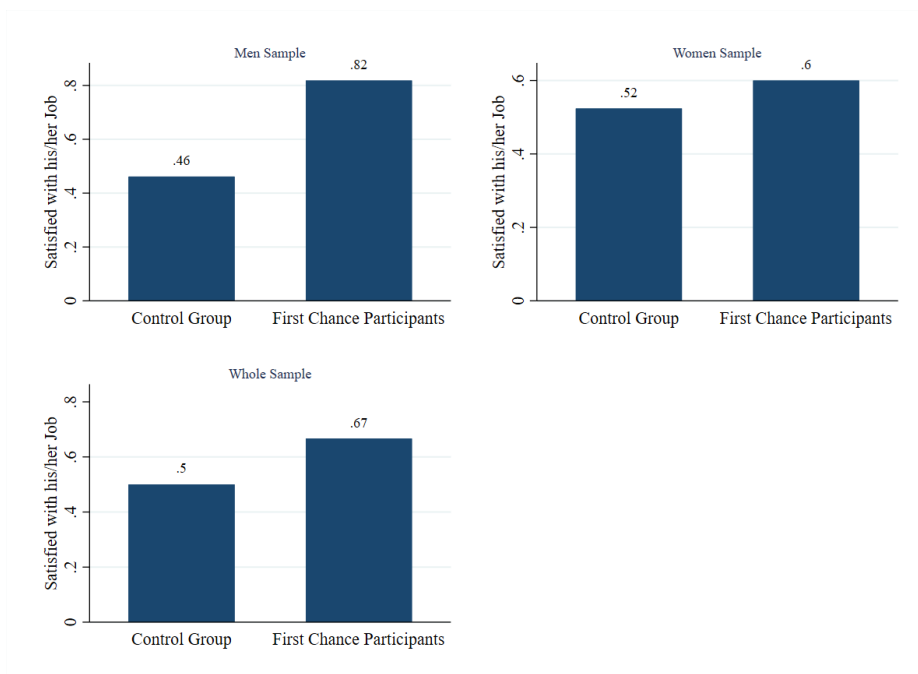
**Graph 2. The Impact of the First Chance Program on the Probability of being in the Labor Force**



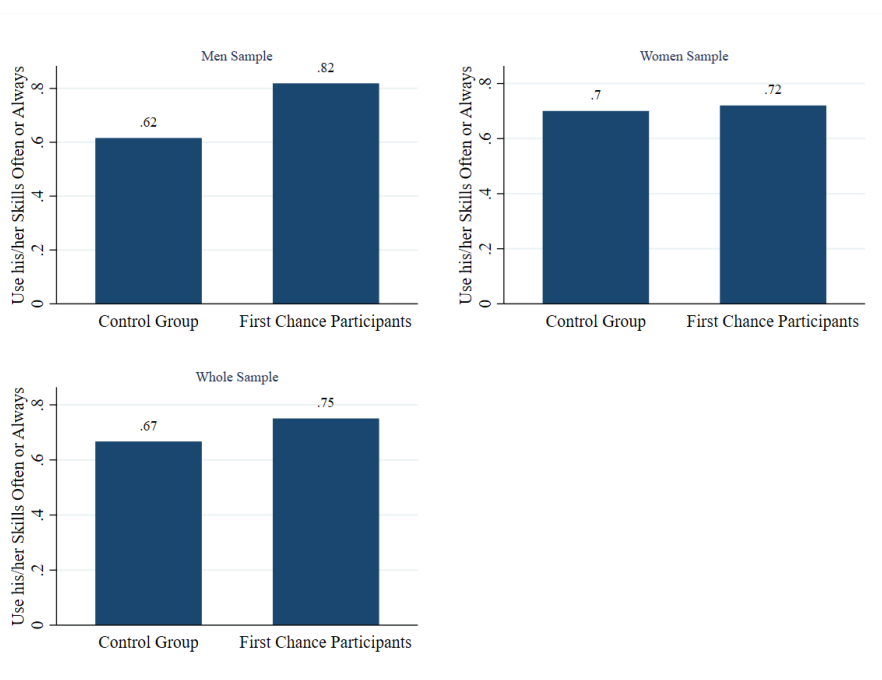
**Graph 3. The Impact of the First Chance Program on the Probability of Salary Being Higher than the Minimum Wage**



**Graph 4. The Impact of the First Chance Program on the Probability of Participants Having a Job They are Satisfied with**



**Graph 5. The Impact of the First Chance Program on the Probability of Participant Having a Job in which they use their skills often or always**



**Table 4. The Impact of the First Chance Program on the Probability of Being in Employment**

VARIABLES	Whole Sample			Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Probability of Being in Employment								
First Chance Participant	0.683*** (0.137)	0.668*** (0.143)	0.632*** (0.166)	0.819*** (0.148)	0.708*** (0.170)	0.681* (0.311)	0.514** (0.180)	0.496** (0.166)	0.509** (0.161)
Gender	-0.136** (0.055)	-0.128** (0.051)	-0.146** (0.046)						
Constant	0.316* (0.145)	0.424** (0.151)	0.205 (0.233)	0.181 (0.148)	0.458* (0.197)	0.059 (0.623)	0.483** (0.181)	0.569** (0.205)	0.336 (0.198)
Number of Observations	120	120	120	49	49	49	71	71	71

Note: Column 1, 4 and 7 only control the status of participation in the program, gender, graduation year, application year to First Chance and year of birth. In columns 2, 5 and 8, in addition to these, URAP ranking of the graduated university is included. In columns 3, 6, and 9, whether the graduated program is formal, GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of foreign language and having scholarship or not are included in the analysis.

**Table 5. The Impact of the First Chance Program on the Probability of being in the Labor Force**

VARIABLES	Whole Sample			Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
The Probability of Being in the Labor Force									
First Chance Participant	0.150*	0.143	0.153*	0.229**	0.091	0.196	0.079	0.081	0.131
	(0.072)	(0.085)	(0.077)	(0.085)	(0.088)	(0.195)	(0.129)	(0.127)	(0.176)
Gender	-0.073	-0.069	-0.070						
	(0.062)	(0.062)	(0.062)						
Constant	0.850***	0.911***	0.833***	0.771***	1.116***	0.417	0.921***	0.916***	0.928***
	(0.072)	(0.058)	(0.085)	(0.085)	(0.204)	(0.566)	(0.129)	(0.122)	(0.159)
Number of Observations	120	120	120	49	49	49	71	71	71

Note: Column 1, 4 and 7 only control the status of participation in the program, gender, graduation year, application year to First Chance and year of birth. In columns 2, 5 and 8, in addition to these, URAP ranking of the graduated university is included. In columns 3, 6, and 9, whether the graduated program is formal, GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of foreign language and having scholarship or not are included in the analysis.

**Table 6. The Impact of the First Chance Program on the Probability of Salary Being Higher than the Minimum Wage**

VARIABLES	Whole Sample			Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Salary > Minimum Wage									
First Chance Participant	0.053	0.051	0.015	0.029	0.187	-0.458	0.169**	0.156***	0.029
	(0.159)	(0.174)	(0.241)	(0.215)	(0.161)	(0.764)	(0.043)	(0.025)	(0.145)
Gender	0.126	0.127	0.146						
	(0.109)	(0.113)	(0.107)						
Constant	0.974***	0.995***	0.887***	0.971***	0.728**	2.582	0.831***	0.933***	0.666***
	(0.187)	(0.232)	(0.085)	(0.215)	(0.226)	(1.835)	(0.043)	(0.135)	(0.144)
Number of Observations	70	70	70	24	24	24	46	46	46

Note: Column 1, 4 and 7 only control the status of participation in the program, gender, graduation year, application year to First Chance and year of birth. In columns 2, 5 and 8, in addition to these, URAP ranking of the graduated university is included. In columns 3, 6, and 9, whether the graduated program is formal, GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of foreign language and having scholarship or not are included in the analysis.

**Table 7. The Impact of the First Chance Program on the Probability of Participant Having a Job in which they use their skills often or always**

VARIABLES	Whole Sample			Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	I often or always use my skills								
First Chance Participant	0.218 (0.216)	0.206 (0.222)	0.144 (0.130)	1.176*** (0.150)	1.292* (0.587)	1.211 (1.009)	-0.061 (0.096)	-0.065 (0.110)	0.161 (0.490)
Gender	0.025 (0.069)	0.028 (0.068)	0.062 (0.042)						
Constant	0.797** (0.231)	0.867*** (0.228)	1.021** (0.362)	-0.176 (0.150)	-0.353 (0.880)	-0.431 (2.670)	1.061*** (0.096)	1.084*** (0.200)	0.559 (1.325)
Number of Observations	69	69	69	24	24	24	45	45	45

Note: Column 1, 4 and 7 only control the status of participation in the program, gender, graduation year, application year to First Chance and year of birth. In columns 2, 5 and 8, in addition to these, URAP ranking of the graduated university is included. In columns 3, 6, and 9, whether the graduated program is formal, GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of foreign language and having scholarship or not are included in the analysis.

**Table 8. The Impact of the First Chance Program on the Probability of Participants Having Jobs They are Satisfied with**

VARIABLES	Whole Sample			Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	I like my job/love my job very much								
First Chance Participants	0.923 (0.687)	0.916 (0.698)	1.043 (0.818)	0.529 (0.432)	0.159 (0.644)	-0.498 (0.764)	-0.022 (0.440)	-0.025 (0.468)	-0.323 (0.750)
Gender	-0.008 (0.207)	-0.003 (0.214)	0.030 (0.257)						
Constant	-0.199 (0.819)	-0.115 (0.857)	-0.190 (1.355)	0.471 (0.432)	1.039 (0.813)	2.353 (2.088)	1.022* (0.440)	1.048 (0.573)	1.628 (1.415)
Number of Observations	70	70	70	24	24	24	46	46	46

Note: Column 1, 4 and 7 only control the status of participation in the program, gender, graduation year, application year to First Chance and year of birth. In columns 2, 5 and 8, in addition to these, URAP ranking of the graduated university is included. In columns 3, 6, and 9, whether the graduated program is formal, GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of foreign language and having scholarship or not are included in the analysis.



**Table 9. The Impact of the First Chance Program on the Probability of Being in Employment (2018 and 2019 Sample)**

VARIABLES	Whole Sample			Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	The Probability of Being in Employment								
First Chance Participants	0.570*** (0.139)	0.521*** (0.117)	0.526** (0.166)	0.819*** (0.147)	0.678*** (0.159)	0.615* (0.263)	0.460** (0.145)	0.454** (0.119)	0.453 (0.294)
Gender	-0.181** (0.059)	-0.169** (0.053)	-0.151* (0.064)						
Constant	0.369* (0.156)	0.496*** (0.131)	0.345 (0.306)	0.262** (0.099)	0.465** (0.122)	0.485 (0.493)	0.527** (0.161)	0.579** (0.156)	0.351 (0.283)
Number of Observations	85	85	85	38	38	38	47	47	47

Note: Column 1, 4 and 7 only control the status of participation in the program, gender, graduation year, application year to First Chance and year of birth. In columns 2, 5 and 8, in addition to these, URAP ranking of the graduated university is included. In columns 3, 6, and 9, whether the graduated program is formal, GPA group fixed effect, indicators of voluntary activity, student club participation, knowledge of foreign language and having scholarship or not are included in the analysis.

**Annex 1.**

**Survey Questions**

1. The city you are living in
2. Do you work full time? Yes/No

If it is yes,

- a. The organization s/he works
- b. The position s/he works
- c. Is your salary above, equal to or below the minimum wage
- d. Date of entry to the current job

If it is no,

3. Do you work part-time?

If it is yes,

- a. The organization s/he works
- b. The position s/he works
- c. Is your salary above, equal to or below the minimum wage
- d. Date of entry to the current job

4. **If 2 and 3 are yes then, how do you feel about your current job?**

- a. I would prefer another job.
- b. I love it truly little
- c. I have accepted my job, I neither like nor dislike it
- d. I like my job
- e. I love my job very much

5. **If 2 and 3 are yes then, at my current job I use my talents and skills;**

- a. Never
- b. Rarely
- c. Sometimes
- d. Often
- e. Always

If 2 and 3 are no

6. Are you looking for a job?

If yes,

- a. For how long have you been looking for a job?

If no,

- b. Why aren't you looking for a job?

My education is continuing

I am doing my military service.

Marriage/children

Sick or in poor health

I think I cannot find a job

Other-----

7. Marital Status

- a. Single
- b. Engaged
- c. Married
- d. Other

## Annex 2. URAP Ranking

1	HACETTEPE UNIVERSITY	800 - 849
2	MIDDLE EAST TECHNICAL UNIVERSITY	750 - 799
3	ISTANBUL UNIVERSITY	700 - 749
4	ISTANBUL TECHNICAL UNIVERSITY	
5	ANKARA UNIVERSITY	650 - 699
6	GAZI UNIVERSITY	
7	EGE UNIVERSITY	
8	BOGAZICI UNIVERSITY	
9	GEBZE TECHNICAL UNIVERSITY	
10	YILDIZ TECHNICAL UNIVERSITY	600 - 649
11	ATATURK UNIVERSITY	
12	ERCIYES UNIVERSITY	
13	MARMARA UNIVERSITY	
14	IZMIR HIGH TECHNOLOGY INSTITUTE	
15	DOKUZ EYLUL UNIVERSITY	550 - 599
16	SELCUK UNIVERSITY	
17	ESKISEHIR OSMANGAZI UNIVERSITY	
18	KARADENIZ TECHNICAL UNIVERSITY	
19	AKDENIZ UNIVERSITY	
20	CUKUROVA UNIVERSITY	
21	FIRAT UNIVERSITY	500 - 549
22	BURSA ULUDAG UNIVERSITY	
23	ONDOKUZ MAYIS UNIVERSITY	
24	SULEYMAN DEMIREL UNIVERSITY	
25	SAKARYA UNIVERSITY	
26	GAZIANTEP UNIVERSITY	
27	INONU UNIVERSITY	
28	ANADOLU UNIVERSITY	
29	ABDULLAH GUL UNIVERSITY	
30	DICLE UNIVERSITY	
31	IZMIR KATIP CELEBI UNIVERSITY	
32	KOCAELI UNIVERSITY	
33	ISTANBUL MEDENIYET UNIVERSITY	
34	ANKARA YILDIRIM BEYAZIT UNIVERSITY	
35	PAMUKKALE UNIVERSITY	450 - 499
36	VAN YUZUNCU YIL UNIVERSITY	
37	MANISA CELAL BAYAR UNIVERSITY	
38	CANAKKALE ONSEKIZ MART UNIVERSITY	
39	BOLU ABANT IZZET BAYSAL UNIVERSITY	
40	TOKAT GAZIOSMANPASA UNIVERSITY	
41	HATAY MUSTAFA KEMAL UNIVERSITY	

42	SIVAS CUMHURİYET UNIVERSITY	400 - 449
43	DUZCE UNIVERSITY	
44	NECMETTİN ERBAKAN UNIVERSITY	
45	MUGLA SITKI KOÇMAN UNIVERSITY	
46	KAHRAMANMARAŞ SÜTCÜ İMAM UNIVERSITY	
47	RECEP TAYYIP ERDOĞAN UNIVERSITY	
48	KIRIKKALE UNIVERSITY	
49	ZONGULDAK BÜLENT ECEVİT UNIVERSITY	
50	TEKİRDAĞ NAMIK KEMAL UNIVERSITY	
51	ADNAN MENDERES UNIVERSITY	
52	MERSİN UNIVERSITY	
53	HARRAN UNIVERSITY	
54	BALIKESİR UNIVERSITY	
55	HİTİT UNIVERSITY	
56	TRAKYA UNIVERSITY	
57	KUTAHYA DÜMLÜPİNAR UNIVERSITY	
58	BURSA TECHNICAL UNIVERSITY	
59	AFYON KOCATEPE UNIVERSITY	
60	SİNOP UNIVERSITY	
61	YOZGAT BOZOK UNIVERSITY	
62	NİĞDE ÖMER HALİSDEMİR UNIVERSITY	
63	ADİYAMAN UNIVERSITY	
64	GALATASARAY UNIVERSITY	
65	ERZURUM TECHNICAL UNIVERSITY	
66	AKSARAY UNIVERSITY	
67	KARABÜK UNIVERSITY	
68	CANKIRI KARATEKİN UNIVERSITY	
69	NEVŞEHİR HACI BEKTAS VELİ UNIVERSITY	
70	YALOVA UNIVERSITY	
71	KAFKAS UNIVERSITY	
72	ORDU UNIVERSITY	
73	ERZİNCAN BİNALI YILDIRIM UNIVERSITY	
74	MUNZUR UNIVERSITY	300 - 349
75	BİNGÖL UNIVERSITY	
76	KİRSEHİR AHI EVRAN UNIVERSITY	
77	OSMANIYE KORKUT ATA UNIVERSITY	
78	GİRESUN UNIVERSITY	
79	GÜMÜŞHANE UNIVERSITY	
80	KASTAMONU UNIVERSITY	
81	BARTIN UNIVERSITY	
82	BİLECİK SEYH EDEBALI UNIVERSITY	
83	BİTLİS EREN UNIVERSITY	
84	AMASYA UNIVERSITY	
85	KARAMANOĞLU MEHMETBEY UNIVERSITY	

86	BAYBURT UNIVERSITY	
87	BATMAN UNIVERSITY	250 - 299
88	BURDUR MEHMET AKIF ERSOY UNIVERSITY	
89	UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION	
90	SIIRT UNIVERSITY	
91	KILIS 7 ARALIK UNIVERSITY	
92	USAK UNIVERSITY	
93	AGRI IBRAHIM CECEN UNIVERSITY	
94	ARTVIN CORUH UNIVERSITY	
95	ISKENDERUN TEKNİK UNIVERSITY	
96	MIMAR SINAN FINE ARTS UNIVERSITY	
97	HAKKARI UNIVERSITY	
98	IGDIR UNIVERSITY	200 - 249
99	ANTALYA BILIM UNIVERSITY	
100	UNIVERSITY OF HEALTH SCIENCES	
101	MUS ALPARSLAN UNIVERSITY	
102	ARDAHAN UNIVERSITY	
103	KIRKLARELI UNIVERSITY	150 - 199
104	ANKARA SOCIAL SCIENCES UNIVERSITY	
105	SIRNAK UNIVERSITY	
106	MARDİN ARTUKLU UNIVERSITY	100 - 149
107	ALANYA ALAADDIN KEYKUBAT UNIVERSITY	
108	BANDIRMA ONYEDI EYLUL UNIVERSITY	
109	TURKISH-GERMAN UNIVERSITY	