

**The Impact of Tourism Oriented Vocational Training
Courses on Employability and Wages: The Case of Antalya**

*Turizme Yönelik Meslek Eğitim Kurslarının
İstihdam Edilebilirlik ve Ücretler Üzerindeki Etkisi: Antalya Örneği*

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The Impact of Tourism Oriented Vocational Training Courses on Employability and Wages: The Case of Antalya*

Turizme Yönelik Meslek Eğitim Kurslarının İstihdam Edilebilirlik ve Ücretler Üzerindeki Etkisi: Antalya Örneği

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Abstract

The aim of this study is to analyze the impact of tourism oriented training courses on employment and wages in Antalya. To achieve this end, a sample of 300 people, covering both research and control groups, was selected at random from the database of İŞKUR. These groups were further grouped on the basis of gender, and the differentials between men and women were analyzed. The impact of vocational training courses on employment was assessed by the Logit regression, while the impact of courses on wages was assessed by the regression model. In general, it was found that attending to any of the tourism oriented vocational training courses affected the employability positively, whereas it affected the wages negatively in the long term. On the basis of gender differentials, it was found that the tourism oriented training courses affected the employability of men positively, whereas there was no such a positive effect on the employability of women. Furthermore, attendance to the courses affected the wages of women positively, whereas it affected those of men negatively.

Keywords: Active labour market policy, vocational training, tourism, Antalya, İŞKUR

Öz

Bu çalışmanın amacı, Antalya'da turizme yönelik mesleki eğitim kurslarının istihdam edilebilirlik ve ücretler üzerindeki etkisini ampirik olarak analiz etmektir. Bu amaca yönelik olarak yapılan anket çalışmasında İŞKUR veri tabanından toplam 300 kişiden oluşan araştırma ve kontrol grupları tesadüfi olarak seçilmiştir. Ayrıca gruplar kadın ve erkek olarak ayrılarak, cinsiyet bazında istihdam edilebilirlik ve ücretler üzerinde bir farklılık olup olmadığı da incelenmiştir. İstihdam etkisi Logit regresyon aracılığıyla, ücret etkisi ise regresyon modeli ile ölçülmüştür. Çalışmanın bulguları; mesleki eğitim kurslarına katılmanın uzun dönemde istihdam edilmeyi pozitif yönde, ücretleri ise negatif yönde etkilediğini göstermektedir. Cinsiyet bazında ise, meslek eğitim kursları istihdam edilebilirlik bakımından erkekler için olumlu etki yapmışken, kadınlar için bu etki ortaya çıkmamıştır. Diğer yandan, cinsiyet bazında kurslar kadınlar için ücretleri olumlu etkilerken, erkekler için olumsuz etkilemiştir.

Anahtar Sözcükler: Aktif işgücü politikaları, mesleki eğitim, turizm, Antalya, İŞKUR

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Introduction

Unemployment has been one of the dilemmas that any government should tackle with at any time of the history. Time has seen several approaches to solve the socio-economic problems that arose due to unemployment. Governmental policies overseeing social policy aspect were based mostly on addictive outreach policy tools such as unemployment insurance and benefits especially after the World War II. However, the phenomena of high inflation and low growth rates observed in 1970s questioned such policies, introducing a new trend-line in labour politics known as “active labour market policy” that focused on integrating the unemployed people into the labour market by improving their skills. Beginning with the mid-1990s onwards, the unemployed people have been encouraged to take part in the labour market by means of extensive active labour market policy tools. Regarded as the social policy aspect of the mainstream economics, the active labour market policy tools were foreground by their success in encouraging labour market participation and a significant increase in employability. Most recently, even the international organizations such as the World Bank, IMF, OECD and ILO have been advising governments to invest in active labour market policy rather than funding the outmoded passive labour market policy tools.

There have been many theoretical and empirical studies conducted on active labour market policy tools pointing out their efficiency on the international scale. Bearing in mind that numerous active labour market policy programs have been implemented, the findings of these studies differ to a great deal due to the characteristics of each country selected, as well as the analysis methods and the periods adopted. In line with the aim of this particular study, only those prominent studies analyzing the impact of active labour market programs on employment and wages are taken into account.

In view of Turkey, there has been a limited amount of study directly analyzing the impact of vocational training courses on employment and wages. In this respect, the aim of this study is to contribute to the literature on the efficiency of vocational training courses in Turkey. The study consists of four parts followed by concluding remarks. The first part examines the theoretical background literature on passive and active labour market policies. The second part evaluates the empirical studies conducted on the efficiency of active labour market policy tools. The third part discusses the empirical models and data used in the study. The fourth part analyzes the impact of vocational training courses on employment and wages in general, as well as on gender basis in particular. Finally, the concluding remarks are presented at the end of the study.

1. Literature Review

The labour market literature covers two distinct governmental approaches widely referred to as active and passive employment policies. Passive employment policy essentially aims at realizing transfer payments during the unemployment and/or job seeking phase. (Meager, 2009: 3; Nie and Struby, 2011: 35; Hieda, 2011:4). It is asserted that, highly relying to policy tools like unemployment insurance, unemployment benefits and early retirement, passive employment policy acts as an automatic stabilizer in times of economic fluctuations, and increases the negotiation power, productivity and employability of the unemployed. (Nie and Struby, 2011: 38). These measures are considered as tools of passive employment policy, as they do not directly help the unemployed people find jobs. In this respect, all these measures of passive employment policy applied until 1990s have been highly criticized for

hindering the efforts of the unemployed people to find jobs, extending the duration of unemployment and reducing the integration of those people into the labour market following a long-term unemployment period. (Nie and Struby, 2011: 36-39).

Changing economic and social layout -associated with a number of situations such as prevalence of the service sector over the industrial one, integration of women into the work force market in huge numbers as well as radical changes in the roles assumed by each gender, existence of a long term unemployment among the poor and uneducated people thus increasing poverty- brought about new social risks for the society as a whole (Hieda, 2011: 4). In this context, criticism of the addiction to social benefits provided by the welfare state and neo-liberal discourse adopting a rational individual conception led the active labour market policies stand out as a cure to the problems encountered. Especially after the 1990s, international organizations such as, the World Bank, IMF, OECD, ILO have been suggesting to allocate funds to apply newly introduced active labour market policies rather than the passive labour market policies of the past. (Bonoli, 2010: 6; Hieda, 2011: 1; Biçerli, 2005: 3).

Contrary to the passive employment policy, active labour market policy has far-reaching tools for increasing employability of the unemployed. In other words, it aims at increasing the ability of the unemployed to find jobs, covering a wide variety of policy tools such as vocational training courses for unemployed, assistance for job seeking, encouragement of the entrepreneurship, support for job creation, and additional employment incentives for employers (Meager, 2009: 3; Nie and Struby, 2011: 36; Bonoli, 2010: 11). Supporters of active labour market policy tools argue that a more efficient matching might be created among the open jobs and the unemployed people both by upgrading the skills of the job seekers through vocational training courses and by enabling an effective job search through employment offices (Tvrdon and Cieslarova, 2012: 140). It is believed that, assisted by additional policy measures like direct support for job creation, vocational training courses may increase the productivity of the work force (Estevao, 2003: 4-5). An increase in the productivity will obviously increase labour demand, employment and wages. In addition, providing vocational training courses and building hope for improving job skills will decrease dissatisfaction of the unemployed and cause them raise wage demands. Consequently, it is argued that active labour market policy involves measures to solve the structural unemployment issues.

Along with the opinions on the efficiency of the active labour market policy, comes the hesitation to implement these policy measures: First of all, active labour market policy is not miraculous; because, its success depends highly on creation of new jobs. (Kapar, 2006:363; Nie and Struby, 2011: 40-41). Apart from the merits in balancing the supply and demand of work force and upgrading the vocational competences of unemployed, the active labour market policy should also seek ways for creating additional jobs. Accordingly, this policy domain does not involve programs to create regular and permanent employment. (Kapar, 2006: 363). The fact that employment has only increased in small amount during the booming period of global economic growth is an evidence of the situation defined above. Therefore, the more the labour demand is weak and the number of jobs available is low, relatively the less efficient the active labour market policy will be. Another criticism brought against is that people attending these programs simply replace the existing workers as a result of the State's employment and wage incentives granted to the employers. (Kapar, 2006: 364-367; Biçerli, 2005: 6-7; Şener, 2010: 8). Obviously, as wages and employment benefits fail

to provide long-term and regular work relations to the participants of the program, they also have the potential risk to decrease the existing employment. Ultimately, firms' attitude towards hiring the unemployed who have participated in a vocational course at the expense of discharging the existing employees is far from solving the unemployment issue. On the other hand, active labour market policy undermines both the negotiation power and the wages of the workers by increasing competition among the job seekers.

Another criticism against these programs is associated with the loss of efficiency. This situation arises when the targeted groups already have a high potential of employability even if they do not participate in active labour market programs. In other words, investing in those who already have a high potential of employability is a waste of scarce resources (Biçerli, 2005: 6). Active labour market policy programs have been subject to much criticism about their efficiency especially in times of crisis. It has been observed that the economic recovery and the increase in employment do not overlap and are not achieved simultaneously during the post-crisis period. For the employment reach its pre-crisis level, it takes about 5 to 8 years. (ILO, 2010: 6-7). Furthermore, a retarded rise in active policy expenditure, following a sharp rise in unemployment ratio, limits the macroeconomic stabilization function of the so-called policy preference. (ILO, 2010: 7; Kapar, 2006: 366). Whereas, increasing in line with the unemployment rate within the crisis context, the passive labour market policy expenditures for unemployment insurance and benefits lead to an increase in total demand and employment. In this sense, active labour market policy is insufficient and inefficient in increasing total demand and employment.

Active labour market policy programs have been implemented by many countries. Although there are many studies on the efficiency of these programs, the findings are rather complicated, and a consensus on their success in decreasing unemployment or else increasing employability has not been achieved, yet (Kluve, 2010: 904). The disputes arise from the fact that there are differences among the characteristics of the selected countries as well as the period and the methods of analysis. Therefore, in order to serve for the purpose of this study, the content of this section is limited to the prominent studies analyzing the impact of active labour market programs simply on employment and wages.

Fretwell *et al.* (1999: 14-19), discussing the efficiency of active labour market programs conducted in 1995 in a number of European and Central Asian countries (Czech Republic, Poland, Hungary and Turkey), asserted that the employment opportunity of people participating in vocational training courses was 10% higher and the wage earned was 86 dollars more than those of the non-participants. However, in the case of Turkey, the employment effect was found to be negative due to the short course durations. On gender basis, they found that the effect on employability of women was much higher than the men, while the situation of women was worse in the case of Turkey. On the other hand, the effect of training courses on wages was low in Poland and Hungary, while it was high for Czech Republic and Turkey.

Boone and Van Ours (2009: 304-08), analyzing the active labour market policies in 20 OECD countries, declared that these programs were efficient in decreasing unemployment. Even though vocational training programs did not affect the ratio of finding a job, they affected the ratio of unemployment quite well by eliminating the possibility of a redundancy. Furthermore, they asserted that the unemployment ratio was decreased by a perfect match between the workforce and the job. They further emphasized that the positive effects of these programs were much more visible in the long-term as compared to the short-term.

Leetmaa and Vork (2004: 113-140), evaluating the active labour market policy applied in Estonia between 2000-2002, asserted that the employability ratio was higher for the vocational training course participants compared to the non-participants, yet such a training course had no significant effect on net wages. In a similar study analyzing the impact of vocational training courses on wages of the participants in the city of Rostov-on-Don, Russia in 2000, Nivorozhkin (2005: 1069-1070) found that even though the courses had short term positive effects on wages, this effect was diminished after a year. On gender basis, the wages of men were found to rise much more than that of women.

Rodríguez-Planas and Jacob (2010: 78-81), analyzing the efficiency of vocational training courses applied in Romania between 1998-2002, found that both the employability and the wages of the vocational training course participants were higher (about 60%) as opposed to non-participants. They further argued that these courses decreased the unemployment period of the participants as well as the amount of unemployment payments they were granted. In a similar study analyzing the policy impact in Albania between 1999 and 2000, Vangjell *et al.* (2012: 1-17) demonstrated that among all tools especially the vocational training courses had positive results, increasing employment rate approximately 30%.

In an extensive literature survey, covering a number of studies on the efficiency of a total of 137 active labour market programs in 19 European countries (of which more than half were related to vocational training courses), Kluve (2010: 904-918) found that 54% of these programs had significantly positive effects, while 21.2% had negative effects, whereas 24.1% had no effect, at all. While, the results of meta-analysis, developed to find out the efficiency of the training courses, showed that they had a moderate impact on creating employment.

In their research based on 97 studies analyzing the effects of 199 programs, Card *et al.* (2010: 452) asserted that vocational training courses were more efficient in the mid-term rather than in the short-term. In another study examining the efficiency of vocational training courses implemented in the Dominican Republic in 2004, Card *et al.* (2011: 281-297) asserted that no such a significant change was seen on the employability of the participants as compared to the non-participants. Nevertheless, depending on the employment conditions, those people participating in a training course received comparatively high wages. Contrary to the expectations, the vocational training courses had only a moderate impact on the labour market conditions. Similarly, in their study dealing with the situation in the New Zealand between 1988-1997, Perry and Maloney (2007: 22-25) asserted that vocational training courses were not effective in the short run, yet they were of benefit on the long run, as they built skills especially of unqualified and unemployed people.

Sianesi (2008: 370-399), analyzing all the six programs applied for rising employment during the years of high unemployment in Sweden (1994-1999), demonstrated that all the programs had negative effects in the short-term, as people participating in any of these programs unfortunately showed less effort in seeking a job and the possibility of their maintenance in the labour market decreased approximately 15 to 25 points. It was noted that vocational training courses had a positive but small effect on finding a job in the long-term in general, though the medium and long-term effects differed for each program.

In their study covering the 1990-2005 period for Latin American countries (Chili, Peru, Argentina, Mexico, Dominican Republic, Panama and Colombia), Ibarra'n and

Shady (2009: 195&2011: 12) found that the effects of vocational training courses differed according to age, gender and region. There were no employment effect at all for Dominican Republic and Argentina, while the effect on employment was approximately 5% in Panama, Peru, and Colombia, recording much higher rise for women especially in Colombia and Panama. In terms of wages, it was found that their effect was positive for all countries, and that all these effects were gained in both short and medium terms. In their study on the gender based effects of active labour market policy in Australia (2000-2005 period), Lechner and Wienler (2011: 808-809) asserted that the efficiency of these programs on both men and women were very limited, but positive. Nevertheless, the Australian policy was successful in decreasing the number of women leaving the labour market.

In view of Turkey, only a limited amount of research was conducted on the impact of vocational training courses. In his study, analyzing the impact of the vocational training courses applied by the Turkish Employment Agency (İŞKUR) in 5 cities namely Istanbul, Ankara, Izmir, Adana and Bursa, Varçın (2004) found that these courses absolutely increased the employability of the participants, and even after two years following the course 63% of the participants were still able to find jobs. Among the course participants men, young, and trained people had chance to find jobs much more easily as compared to women, old and untrained people. Furthermore, the effect on wages was found to be positive although they varied to a great deal depending on the city itself. Diriöz (2012), analyzing four small-scale programs of İŞKUR (2003-2006) specially designed for the disabled and the non-disabled men and women respectively, asserted that these programs had much more positive effects on non-disabled compared to disabled people. In their study, analyzing the impact of vocational training courses (especially the employment guaranteed training courses) on the employment in the automotive industry in Bursa in 2007, Işığışık and Emirgil (2009: 214-231) asserted that these courses showed limited success on employability in general and that the job placement percentage of women was less than that of men.

2. Data and Descriptive Statistics

As part of employment policy reform in Turkey, vocational training courses have been supplied to unemployed people registered in İŞKUR database no matter whether they were entitled to any of unemployment benefits or not. Participants were granted a daily fee of 15 TL in return for attending the courses that lasted for 3 months. The participants were composed of people either with no vocational formation or newly joined the labour market.

This research analyzes the impact of employment guaranteed vocational training courses on employment and wages in the tourism sector, conducted by the Turkish Employment Agency (İŞKUR) in Antalya downtown and Alanya district. Between January 2008 and May 2012, İŞKUR has organized 221 specialized courses in four different modules –i.e. employment guaranteed workforce training course, general workforce training course, workforce training course for disabled and workforce training course for ex-convict-covering different topics ranging from software development to gas metal arc welding. 112 of these courses were directly associated with the tourism industry; namely cook, waitress, bellboy, housekeeper, receptionist, reservation personnel and transfer-men professions. 92 of them were employment guaranteed workforce training course. However, the employment guarantee could not be applied to the full sense, since the legal procedures have not been completed until 2010. Totally 3044 participants have been graduated among 5213 people who attended vocational training courses between 2008 and 2012, and 956 of the total graduates had the opportunity to get employed. In general, the total number of female

participants was less than that of male participants. Only in 2009, İŞKUR realized a total of 49 tourism related vocational training courses in Antalya, and a total of 1173 participants, representing 394 female and 779 male, were graduated from these courses.

In order to determine the efficiency of vocational training courses in general, and their effect on employment and wages in particular, a series of steps were taken. First of all, 665 people (of which 397 were male and 268 female), registered in a vocational training course organized by İŞKUR in 2009 and had permanent contact info, were selected as survey group. Further, another 557 people (of which 404 were male and 173 female), who applied İŞKUR as potential employee and gained their competence as practitioners of any post in tourism (i.e. waitress, cook, housekeeper, receptionist, bellboy, etc.), were selected at random as control group. These two distinct groups were further grouped according to their occupation, age, education level, marital status and gender, respectively. Then, a sort of twinning was made for each participant. For instance, the twin of a single woman, educated in primary school, falling into the 18-24 age interval in the survey group was matched with its counterpart in the control group. In this regard, the size of the sample amounted to a total of 582 people, consisting of twins with similar peculiarities and representing 291 people in each survey and control groups, respectively.

However, due to some shortcomings, such as inadequate contact details registered in İŞKUR database and the hesitation to participate in the survey, the twin matching technique was not fully implemented. As a result of this restriction, the size of the sample was determined as 165 people for the survey group and 135 people for the control group, respectively. The data was collected via questionnaires that have been applied during two months, between April and May in 2012. Independent two sample t test was applied in order to compare the averages of some variables for the control and survey groups, while two sample ratio test was applied in order to compare the percentages of categorical variables. Logit model for dummy dependent variable regression model and regular least squares regression model for constant dependent variable regression model were predicted.

Table 1 shows the frequency and percentage distribution in terms of gender, marital status, education level, work experience, nomination to unemployment benefits, employment status, dwelling ownership for both survey and control groups. In terms of statistical significance assigned to different variables in each group, gender has a significance value of 5% similar to the variable of currently employed status, while this value is 10% for the education level variable and for the prior work experience variable, and 1% for the unemployment insurance and for the house ownership variables. Marital status does not show any significant difference between the groups statistically.

Table 1: Differences between the Survey and Control Groups in terms of Gender, Marital Status, Education, Experience, Unemployment Benefits, Actual Work and Dwelling Ownership

	Survey Group		Control Group				
	Frequency	Percentage (%)	Frequency	Percentage (%)	Difference (%)	z	p
Gender							
Woman	74	44.8	43	31.9	±12.9	±2.279	0.023
Man	91	55.2	92	68.1			
Total	165	100	135	100			
Marital Status							
Single	96	58.2	68	50.4	±7.8	±1.350	0.177
Married	69	41.8	67	49.6			
Total	165	100	135	100			
Education							
Primary School	152	92.1	131	97	±4.9	±1.822	0.068
Primary School+	13	7.9	4	3			
Total	165	100	135	100			
Work Experience Before 2009							
No	14	8.5	5	3.7	±4.8	±1.697	0.090
Yes	151	91.5	130	96.3			
Total	165	100	135	100			
Unemployment Insurance							
Granted	152	92.1	86	63.7	±28.4	±6.043	0.000
Not granted	13	7.9	49	36.3			
Total	165	100	135	100			
Currently Employed							
No	58	35.2	33	24.4	±10.8	±2.024	0.043
Yes	107	64.8	102	75.6			
Total	165	100	135	100			
House Ownership							
Rent	68	41.2	80	59.3	±18.1	±3.120	0.002
Other	97	58.8	55	40.7			
Total	165	100	135	100			

Table 2 shows the averages and the differences of variables in the survey and control groups. According to the table, wages earned after registration to İŞKUR and participating in a course amount to 882.31TL in the survey group and 1062.94TL in the control group on average. The average duration of unemployment on monthly basis is higher in the survey group with 14.9 months, compared to the control group which is 12.7 months. The total duration of employment shows parallelism with the total duration of unemployment, which makes it higher in the control group compared to the survey group. In terms of the significance levels of the differences between the two groups, it is found that both total duration of unemployment after 2009 and age variables are 10% significant, while expected wage, wage after 2009 and total duration of employment after 2009 variables are 1% significant statistically. Both the total income of household variable and the total number of workers in household variable do not show any statistically significant differences between the groups.

Table 2: Averages and Differences of Variables in Survey and Control Groups

	Groups	Average	St. Deviation	Difference	t	p
Age	S	32.45	8.39	-1.596*	-1.71	0.089
	C	34.04	7.62			
Expected Wage	S	1294.13	597.65	-312.806***	-3.52	0.001
	C	1606.93	878.63			
Wage After 2009	S	882.31	390.18	-180.625***	-2.75	0.007
	C	1062.94	648.35			
Total Household Income	S	1684.40	1275.86	78.464	0.59	0.553
	C	1605.94	938.53			
Household Population	S	3.95	1.56	0.418**	2.12	0.035
	C	3.53	1.86			
Total Workers in Household	S	0.83	0.85	0.127	1.34	0.181
	C	0.70	0.76			
Total Unemployment After 2009 (monthly basis)	S	14.92	11.25	2.211*	1.83	0.069
	C	12.70	9.73			
Total Employment After 2009 (monthly basis)	S	17.70	10.81	-6.470***	-5.2	0.000
	C	24.17	10.59			

*.10 margin of error, **.05 margin of error, ***.01 margin of error

Tables 3 & 4 enable a deeper analysis of the discrepancies in the quantitative data between the two groups. Table 3 contains data for the survey group, whereas Table 4 shows data for the control group, each containing information on expected wage, wage after 2009, total employment and unemployment after 2009, total household population, household

workers, household income – all ranging according to age, gender, marital status and educational background. According to the tables, the more the age rises, the more the wages are expected to increase in the survey group. It is observed that being a man compared to being a woman, being single compared to being married lead to an increase in the expected wage. Furthermore, an increase in the education level increases the expected wage. Average expected wage is 1294.13TL at the survey group. In view of wages, the 25-29 age group in the survey group proves to be the highest wage owner, gaining 1029.52TL after 2009. The wages of men and of single in marital status are again higher compared to women and married people.

The total duration of unemployment is 14.9 months on average; besides, the 25-29 age group proves to have the lowest rate in total duration of unemployment during the period between 2009 and 2012. While the duration of unemployment after 2009 is longer for women as compared to men, being married shortens the duration of unemployment to a little extend compared to being single. The higher the education level is above the primary school, ironically the higher the total unemployment duration is. The 18-24 age group is the least working group with 15.2 months in view of total monthly working rates after 2009. Men have worked approximately 6 months more than women and their total employment period after 2009 is 20.5 months. Singles have worked longer than married people with an average of 18.3 months. In the survey group, the total population of household has an average of 3.95, and the working people in household amount to 0.83 people. In terms of household income, monthly household income of the 18-24 age group is higher than that of any other age group. Monthly income of the survey group is 1684.40TL on average, both men and single people, as well as those having an educational background acceding primary school record the highest rates.

Table 3: Distribution of Survey Group Averages by Various Properties

	Expected Wages	Wages After 2009	Total Unemployment After 2009	Total Employment After 2009	Total Household Population	Household Workers	Household Income
Age Group							
18-24	1094.64	785.42	14.64	15.28	4.48	1.28	2086.00
25-29	1449.21	1029.52	13.85	19.17	3.92	0.81	1774.77
30-34	1236.75	827.63	14.81	18.91	4.00	0.72	1632.94
35-39	1255.91	786.58	15.57	15.96	3.57	0.65	1688.35
40+	1301.11	859.23	16.16	17.46	3.84	0.76	1326.83
Total	1294.13	882.31	14.92	17.70	3.95	0.83	1684.40
Gender							
Woman	1141.96	807.08	17.41	14.23	3.65	0.96	1512.38
Man	1417.87	932.75	12.89	20.52	4.20	0.73	1823.93
Total	1294.13	882.31	14.92	17.70	3.95	0.83	1684.40
Marital Status							
Single	1344.27	923.56	15.34	18.39	3.96	0.84	1905.68

Married	1224.36	815.29	14.32	16.74	3.94	0.81	1375.26
Total	1294.13	882.31	14.92	17.70	3.95	0.83	1684.40
Education							
Primary School	1291.09	883.07	14.76	17.79	3.95	0.82	1609.85
Primary School+	1329.69	874.54	16.77	16.62	3.92	0.92	2544.62
Total	1294.13	882.31	14.92	17.70	3.95	0.83	1684.40

Table 4: Distribution of Control Averages By Various Properties

	Expected Wages	Wages After 2009	Total Unemployment After 2009	Total Employment After 2009	Total Household Population	Household Workers	Household Income
Age Group							
18-24	1465.00	943.60	11.10	21.75	3.70	0.80	1790.00
25-29	1622.73	1041.50	11.79	26.33	4.24	0.88	1823.70
30-34	1524.24	1068.57	10.15	24.76	2.97	0.58	1507.12
35-39	1751.92	1141.32	12.96	24.88	3.46	0.69	1637.38
40+	1602.61	1054.90	16.45	21.58	3.39	0.64	1406.45
Total	1606.93	1062.94	12.70	24.17	3.53	0.70	1605.94
Gender							
Woman	1116.28	723.05	15.60	19.53	3.19	0.79	1264.14
Man	1836.26	1206.44	11.35	26.33	3.70	0.66	1765.70
Total	1606.93	1062.94	12.70	24.17	3.53	0.70	1605.94
Marital Status							
Single	1641.91	1037.25	13.10	23.64	3.47	0.75	1734.87
Married	1571.43	1088.63	12.30	24.70	3.60	0.66	1475.09
Total	1606.93	1062.94	12.70	24.17	3.53	0.70	1605.94
Education							
Primary School	1589.59	1059.32	12.75	24.04	3.54	0.70	1588.95
Primary School+	2175.00	1175.00	11.25	28.25	3.25	0.75	2162.50
Total	1606.93	1062.94	12.70	24.17	3.53	0.70	1605.94

According to the tables, the highest expected wage for the survey group is 1449.21TL appropriated by the 25-29 age group, while that of the control group is 1751,92TL appropriated by the 35-39 age group. Expected wages of men and single people in the control group are higher similar to the case seen in the survey group. In both groups, a rise in the education level increases the expected wages. Wages after 2009 are almost the same in all age groups, with only a slight difference in the 35-39 age group. However it shows discrepancies in terms of gender between the control and survey groups. Wages of women, recording 732,05TL, are almost half of the wages of men. Wages of the single people amount to 1037,25TL, while that of married people amount to 1088,63TL. An increase in the education level leads to a slight increase in the average wage.

The 30-34 age group records the lowest duration of unemployment after 2009, with an average of 10.15 months. The unemployment duration of women and single people is higher than that of men and married people. In terms of total working period after 2009, the highest average is registered in the 25-29 age group, with 26.33 months on average. Men's employment period is extended up to 7 months on average, acceding the women's employment period. The average of total household population is recorded as 3.53, while the average of working people in household is only 0.70. In view of household income, the average income of women is 1264,14TL and that of the married is 1474,09TL, recording much more less rates as compared to men or single people. The total household income is 1605.94TL on average.

3. The Impact of Vocational Training Courses on Employability

As the first step, a logit model is developed with the aim of determining the variables influencing the impact of the vocational training courses on employability in tourism sector. Considered as the metric of long-term employability, the dependent variable is associated with the status of being either employed or unemployed. 1 represents the status of being employed, whereas 0 represents the status of not being employed.

The logit model and the probit model are two basic methods widely used in estimating models with dummy dependent variables or else models in which the dependent variable has two values such as 1 and 0. The difference between these two methods is the probability density function used in obtaining the estimator. It is observed that both modelling methods result in similar findings. In this study, the logit model is used, as it fits slightly better with the data obtained. Logit model for employability is set as in Equation 1.

$$\begin{aligned} \text{Employability} = & \beta_0 + \beta_1 \text{ALMP} + \beta_2 \text{Ln (Age)} + \beta_3 \text{Gender} + \beta_4 \text{Marital Status} + \\ & \beta_5 \text{Education} + \beta_6 \text{Experience} + \beta_7 \text{Population of Household} + \beta_8 \text{Ln (Expected Wage)} + \\ & \beta_9 \text{Unemployment Insurance} + \beta_{10} \text{Total Duration of Unemployment} + \\ & \beta_{11} \text{Total Working Period} + \beta_{12} \text{Ln (Working people in household)} + \beta_{13} \text{House Ownership} + \\ & \beta_{14} \text{Ln (Household Income)} + u_i \end{aligned} \quad (\text{Equation 1})$$

In the model, the dependent variable is employability. In Equation 1, β_0 is the constant of the model. ALMP shows whether the survey participants have attended (either 1 or 0) a training course to get employed or not. Natural logarithm of the age variable is used to show the age of the participants. Marital status defines the status of being single or married. The education level of participants as primary school graduates or above expresses the education variable in official records. The experience variable tells about whether the

participant has worked before 2009 or not. The population of the household indicates the total number of people residing together with the people participating in the survey. Expected wage refers to the natural logarithm of ideal wage expected in return for job, while the unemployment insurance variable shows whether the participant has benefited from unemployment insurance or not. Total working period is the total working period per month beginning with 2009 till the survey time, and the total period of unemployment is the variable of total unemployment per month beginning with 2009 till the survey time. Number of working people in household expresses the total number of working people, and income of household represents the natural logarithm of the total income. Ultimately, u is the error term of the equation.

Both the Logit model estimation findings regarding employment and the marginal coefficient are shown in Table 5. The estimated Logit model is statistically significant. (Wald $\chi^2=86.03$, $P>\chi^2=0.000$). The independent group depicted in the first column represents the status of participation in a course. Accordingly, the status of having participated in a course has affected employability positively at 10% statistical significance level by the time of survey. While an increase in the age by one unit has affected the chance to get a job negatively at 5% statistical significance level, being male has affected employability positively at %5 significance level statistically. Being married has affected employability positively at 5% statistical significance level. Having an education higher than primary school has affected it negatively. While one unit increase in both the wages expected and the income of household have affected employability positively, total period of staying unemployed has affected it positively at 5% statistical significance level, and total working period has affected at 1% significance level statistically. Experience and having received unemployment insurance have affected employability positively, whereas only one unit increase in both population of the household and number of working people in household have affected it negatively. House ownership has also affected the employability negatively. However, these variables have not been found statistically significant, and the results are highly consistent with the sectoral structure. Referring to the descriptive statistics regarding the positive impact of a rise in the household income on employment, it will be observed that the number of people working in household is comparatively high within the household population in the control group. This fact may explain the positive effect of a rise in household income on employment throughout the survey period. Nevertheless, this positive effect has no statistical significance. This result complies with the findings of the impact assessment research carried out by the World Bank (Dünya Bankası, 2013) to define the possible effects of vocational training courses on employment.

Table 5: Logit Model Estimation Findings and Marginal Effect Coefficients for Employability

Dependent Variable	Currently Working (2012)			
	β	z	Δ	z
Constant	-9.724 (-4.920)	-1.98	-	-
Group	0.617* (-0.367)	1.68	0.104* (0.062)	1.66
Ln Age	-1.613** (-0.790)	-2.04	-0.266** (0.127)	-2.09

Gender	0.791** (0.377)	2.1	0.137** (0.069)	1.99
Marital Status	0.7144** (0.388)	1.84	0.116* (0.062)	1.86
Education	-0.548* (0.661)	-0.83	-0.103 (0.137)	-0.75
Experience	0.595 (0.604)	0.99	0.113 (0.129)	0.88
Household Population	-0.573 (0.514)	-1.12	-0.095 (0.081)	-1.16
Ln Expected Wage	0.971* (0.564)	1.72	0.160* (0.088)	1.81
Unemployment Insurance	0.515 (0.489)	1.05	0.078 (0.067)	1.16
Total Unemployment Duration	0.043** (0.021)	2.07	0.007** (0.004)	2.02
Total Employment Duration	0.148*** (0.023)	6.46	0.025*** (0.004)	6.38
Household Workers	-0.343 (0.439)	-0.78	-0.057 (0.074)	-0.77
House Ownership	-0.110 (0.362)	-0.3	-0.018 (0.060)	-0.3
Ln Household Income	0.712* (0.409)	1.74	0.118 (0.069)*	1.71
Observation	298			
Wald chi2	86.03			
P>chi2	0.000			
Pseudo R2	0.34			

β represents the coefficients acquired from Logit model,

Δ represents the marginal effect coefficients.

* statistically significant at 10% level, ** statistically significant at 5% level,

*** statistically significant at 1% level

Values in parentheses under the coefficients show robust standard error

Variables affecting the employment are further analyzed in terms of gender, by segregating both men and women in the survey and control groups. This model contains the same dependent and independent variables as in the Logit model (Equation 1). Results of the analysis are shown in Table 6. Both models are statistically significant (for men, Wald chi2=36.11, P>chi2=0.000 and for women Wald chi2=39.06, P>chi2=0.000).

Table 6: Logit Model Estimation Findings and Marginal Effect Coefficients for Gender-based Employability

Dependent Variable	Currently Working (2012)							
	Men				Women			
Independent Variables	β	z	Δ	z	β	z	Δ	z
Constant	-12.530 (-7.154)	-1.75		-	-9.400 (-9.835)	-0.96		-
Group	0.914* (-0.541)	1.69	0.077 (0.049)	1.57	0.326 (-0.590)	0.55	0.081 (0.145)	0.56
Ln Age	-0.439 (-1.218)	-0.36	-0.037 (0.101)	-0.36	-3.983*** (-1.362)	-2.92	-0.993*** (0.337)	-2.94
Marital Status	2.016*** (-0.775)	2.60	0.137*** (0.044)	3.10	0.403 (-0.663)	0.61	0.100 (0.162)	0.62
Education	-0.265 (-1.107)	-0.24	-0.024 (0.112)	-0.22	-2.137** (-0.939)	-2.28	-0.402*** (0.110)	-3.66
Experience					1.771** (-0.844)	2.10	0.372*** (0.132)	2.81
Household Population	-0.839 (-0.671)	-1.25	-0.070 (0.051)	-1.38	-0.763 (-0.758)	-1.01	-0.190 (0.189)	-1.01
Ln Expected Wage	0.868 (-0.755)	1.15	0.073 (0.059)	1.22	1.332 (-1.417)	0.94	0.332 (0.352)	0.94
Unemployment Insurance	-0.015 (-0.688)	-0.02	-0.001 (0.058)	-0.02	0.155 (-0.837)	0.18	0.039 (0.209)	0.18
Total Unemployment Duration	0.029 (-0.035)	0.83	0.002 (0.003)	0.82	0.083** (-0.039)	2.13	0.021** (0.010)	2.15
Total Employment Duration	0.138*** (-0.039)	3.51	0.012*** (0.004)	3.28	0.208*** (-0.045)	4.60	0.052*** (0.011)	4.64
Ln Total Household Workers	0.478 (-0.619)	0.77	0.040 (0.051)	0.78	-1.693** (-0.866)	-1.96	-0.422 (0.216)	-1.95
House Ownership	-0.038 (-0.523)	-0.07	-0.003 (0.044)	-0.07	0.090 (-0.602)	0.15	0.022 (0.150)	0.15
Ln Household Income	0.838 (-0.666)	1.26	0.070 (0.055)	1.27	1.325* (-0.726)	1.83	0.331* (0.182)	1.82
Observation	179				116			
Wald chi2	36.11				39.06			
P>chi2	0.000				0.000			
Pseudo R2	0.30				0.39			

β represents the coefficients acquired from Logit model, Δ represents the marginal effect coefficients.

* statistically significant at 10% level, ** statistically significant at 5% level,

*** statistically significant at 1% level

Values in parentheses under the coefficients show robust standard error

179 observations are used to examine the employability of men. Participation in a course has affected employability positively at 10% statistical significance level. One unit increase in the age has affected the employability negatively just as in the general model. However, contrary to the general model, it has no significance statistically. Being married has affected the employability positively, and in line with the findings of the general model, the statistical significance has risen to 1% level. Although an increase in the education level has affected the employability negatively, contrary to the results of the general model, it has no significance statistically. As almost all of men have worked before 2009, the effects of experience variable cannot be interpreted. The population of the household, having received an unemployment insurance and house ownership have affected the employability of men negatively, whereas the expected wages, total unemployment duration, total number of household and the income of household have affected it positively. However, none of these eight variables have statistical significance.

116 observations are used to examine the employability of women. Variables regarding women show discrepancies to a great deal. Having participated in a course has affected employability of women positively similar to the case of men, however, it does not have statistical significance. Whereas, although one unit change in age has affected employability negatively, contrary to the other group, it has statistical significance of 1% level. Being married has affected the employability positively, and again contrary to men, it is not statistically significant. An increase in the education level has a negative effect and is found to be statistically significant at 5% level.

Men and women have displayed discrepancies in terms of the effects of being experienced before 2009. Accordingly, the employability of women has been affected positively at 5% statistical significance level by prior experience. The household population has not affected the employability of women negatively as in the case of men, and it is found to be statistically insignificant. Expected wages, having received unemployment insurance and house ownership have a positive effect on their employability. However, it does not have statistical significance. While an increase in the duration of unemployment has affected the employability of women positively, it has 5% statistical significance level contrary to the other group. Similar to the case of men, an increase in the total working period has a positive effect and the statistical significance level shows parallelism with 1%. Contrary to the case of men, an increase in the number of working people in household has affected their employability negatively, and this effect is statistically significant at 5% level. An increase in household income has affected employability positively with 5% statistical significance level.

4. The Impact of Vocational Training Courses on Wages

As the second step, an econometric model is set up to analyze the impact of vocational training courses on wages in tourism sector. In the model, the status of being participated in the İŞKUR courses, age, gender, marital status, education, experience, the number of working people household, house ownership as well as the income of household are selected as independent variables that may affect wages as shown in Equation 2.

$$\begin{aligned} \ln(\text{Wage}) = & \beta_0 + \beta_1 \text{ALMP} + \beta_2 \ln(\text{Age}) + \beta_3 \text{Gender} + \beta_4 \text{Marital Status} + \beta_5 \text{Training} \\ & + \beta_6 \text{Experience} + \beta_7 \text{Working people in household} + \beta_{13} \text{House Ownership} \\ & + \beta_{14} \ln(\text{Household Income}) + u_i \end{aligned}$$

(Equation 2)

In the model, the dependent variable is the wage earned after 2009. Equation 2 is estimated by the least square estimators (OLS). First of all, multi-collinearity and heteroscedasticity tests are applied. Results of these tests are shown in Table 7. In order to analyze the multi-collinearity problem, the Variance Inflation Factors (VIF) are calculated. Since all the VIF values calculated are less than 5, it can be argued that there is not a problem of multi-collinearity. Also according to the Breusch-Pagan / Cook-Weisberg test carried out to identify the heteroscedasticity, null hypothesis of the constant variance is objected. ($p=0.0002<0.05$).

Table 7: Multi-collinearity and Heteroscedasticity Tests

Variables	VIF	SQRT VIF	Tolerance	R ²
Ln Age	1.04	1.02	0.9661	0.0339
Ln Household Workers	1.16	1.08	0.8647	0.1353
Ln Household Income	1.19	1.09	0.8438	0.1562
Average VIF	1.13			
Breusch-Pagan / Cook-Weisberg test for heteroscedasticity				
Ho: Constant Variation				
Variables: fitted values of Ln wage2				
chi2(1) = 13.54				
Prob > chi2 = 0.0002				

In order to get rid of heteroscedasticity, standard errors are corrected by making robust regression. Results of regression analysis are shown in Table 8. The model is found to be statistically significant ($F(9, 264)=11,44, P>F=0.000$).

Table 8: Regression Model for Wages

Variables	Coefficients	Robust St. Error	t	P value
Dependent Variable: Ln Wage				
Constant	3.0578	0.5643	5.42	0.000
Group	-0.0918**	0.0413	-2.22	0.027
Ln age	0.2280**	0.1027	2.22	0.027
Gender	0.2083***	0.0470	4.43	0.000
Marital Status	0.0282	0.0437	0.65	0.519
Education	-0.0172	0.0668	-0.26	0.797
Experience	0.0540	0.0970	0.56	0.578
Ln Household Workers	-0.1494**	0.0590	-2.53	0.012
House Ownership	-0.0785*	0.0415	-1.89	0.060
Ln Household Income	0.3984***	0.0583	6.83	0.000

Observation	274
F(9, 264)	11.44
P>F	0.000
R2	0.35
Root MSE	0.33202

* statistically significant at 10% level, ** statistically significant at 5% level,
*** statistically significant at 1% level

According to the results of this analysis, participation in a vocational training course has influenced the wages negatively (-0.091) and it is statistically significant at 5% level. One unit increase in age has influenced the wages by 0.228 unit positively and it is statistically significant at 5% level. In terms of gender, being a man has influenced the wages by 0.208 unit, which has 1% significance level statistically. One unit increase in the number of working people in household has created a negative effect on wages by -0,149 unit at the statistical significance level of 5%. The effect of house ownership on wages is negative (-0.078 unit) at 10% statistical significance level. One unit increase in the income of household has increased the wages by 0.3984 unit, and is found to be statistically significant at 1% level. Being single and experienced have influenced wages positively, yet they have no significance statistically. The effect of an increase in the education level is negative similar to the case of vocational training courses, yet it is not statistically significant.

It is ironic that the wages of vocational training course participants have been negatively affected. However, as seen in the differential statistics between the control and the survey groups, there is a difference in the total unemployment duration. Furthermore, the waiting period of survey group is higher than that of the control group. As argued in most of the researches, the seniority time of almost half of the workers is between 0-6 months. Furthermore, job dissatisfaction is a common problem, and the optimum staff level has not been achieved, yet. In terms of wages, except for the white collar managers, most of the workers earn their living at the level of minimum wage. Despite the flexible working hours surpassing the thresholds, the premiums are calculated on monthly basis rather than hourly basis. The amount of workers employed under a fixed-term service contract is limited in number (Çalışma ve Sosyal Güvenlik Bakanlığı, 2011). The strict structure of the sector associated with seasonality is evident. Under these conditions, the wage expectancy of the workers in the survey group who have just joined the sector after completing a vocational training course is lower than that of the senior workers. The negative result reached by the analysis is highly dependent to the factors explained above.

As done in the Logit model developed in Equation 1 on the basis of employment, in the econometric model of Equation 2, men and women in both survey and control groups are analyzed separately to find out the effects of gender on wages. In order to ensure reliability and proper interpretation of the analysis forecasts, the existence of multi-collinearity regression and heteroscedasticity are tested separately for both women and men. As shown in Table 9, there is no question of multi-collinearity and heteroscedasticity for either party.

Table 9: Multi-collinearity and Heteroscedasticity Tests for Genders

Variables	Men			Women		
	VIF	Tolerance	R ²	VIF	Tolerance	R ²
Ln Wage	1.53	0.6537	0.3463	1.12	0.8933	0.1067
Ln Age	1.15	0.871	0.129	1.04	0.965	0.035
Ln Total Workers in Household	1.38	0.725	0.275	1.14	0.8795	0.1205
Ln Household Income	1.89	0.5296	0.4704	1.22	0.8222	0.1778
Breusch-Pagan / Cook-Weisberg test results	chi2(1) = 0.26			chi2(1) = 0.07		
	Prob > chi2 = 0.6088			Prob > chi2 = 0.7966		

Validity of the assumptions and the results of regression analysis for men and women are demonstrated in Table 10. Both regression equations obtained have statistical significance (For men, $F(8,168)=14.27$, $P>F=0.000$ and for women $F(8,88)=2.40$, $P>F=0.021$).

Table 10: Regression Model for Gender-based Wages

Dependent Variable	Ln Wages after 2009			
	Men		Women	
Independent Variables	Coefficients	t	Coefficients	t
Constant	2.475	3.96	5.249	8.26
	(0.624)		(0.635)	
Group	-0.177***	-3.22	0.116**	2.09
	(0.055)		(0.056)	
Ln Age	0.327**	2.23	0.022	0.17
	(0.147)		(0.131)	
Marital Status	0.067	0.99	-0.031	-0.52
	(0.068)		(0.060)	
Education	-0.015	-0.12	0.004	0.04
	(0.121)		(0.100)	
Experience	-0.088	-0.42	0.130	1.72
	(0.208)		(0.076)	
Household Workers	-0.180***	-2.78	-0.095	-1.27
	(0.065)		(0.075)	
House Ownership	-0.075	-1.36	-0.068	-1.21
	(0.055)		(0.056)	

Ln Household Income	0.485***	9.19	0.169***	2.83
	(0.053)		(0.060)	
Observation	177		97	
F(8, 168), F(8, 88)	14.27		2.40	
P>F	0.000		0.021	
R ²	0.4046		0.1793	
Root MSE	0.34		0.25	

* statistically significant at 10% level, ** statistically significant at 5% level,
*** statistically significant at 1% level

Participation of men in a course has affected their wages negatively by 0.177 unit just as in the general model, and it is statistically significant at 1% level. One unit increase in the age of men has caused an increase by 0.327 unit at 5% significance level statistically. One unit increase of the number of working people in household has decreased wages by 0.180 unit and this effect is statistically significant at 1% level. Having education higher than primary school, experience and house ownership have affected their wages negatively, whereas being married have had a positive effect. However, they are all statistically insignificant. The effect of one unit increase in the household income on wages is at 0.485 unit and it is statistically significant at 1% level.

On the other hand, with reference to women, participating in a course has affected their wages positively, and the effect is statistically significant at 5% level. Contrary to men, an increase in the age of women has not got a significant effect on the wages after 2009. Being married, house ownership and one unit increase in the number of working people in household have affected their wages negatively, whereas education and experience have had a positive effect. However, they are not statistically significant. One unit increase in the household income has also got a positive effect on the wages of women (0.169 unit), and similar to the case of men it is statistically significant at 1% level.

Conclusion

The impact of vocational training courses on employment and wages is a much debated issue in the labour market literature. While some people believe in the merits of vocational training courses in raising employability and wages, others are frustrated to find out that the expected positive outcomes are not met. In this study, the vocational training courses realized by İŞKUR in Antalya downtown and Alanya district, as part of active labour market policy programs, have been analyzed to find out their effects on employment and wages in the tourism sector by using impact assessment techniques. The results are as follows:

- According to the results of employment model, having participated in a vocational training course affects employability positively at 10% significance level, which proves that vocational courses are efficient in raising employability. According to the findings on gender basis, while participating in a course has statistically positive and significant effect at 10% level for men, it does not have any statistically significant effect for women. The marital status of men affects their employability positively. On the other hand, the age, education level and the number of total working people in household affect the

chance of women to get a job negatively, while the chance of women being employed is affected positively by the income of household, total working period, total unemployment period and experience. It should be noted that findings of the study are compliant with the results of other empiric studies on employability based on gender (e.g. Leetmaa and Vork, 2004; Nivorozhkin, 2005; Rodriguez-Planas and Jacob, 2010; Kluge, 2010; Card *et al.*, 2010; Perr and Maloney, 2007; Sianesi, 2008; Vangjell, 2012; Varçın, 2004; Diriöz, 2012; Işığcıok and Emirgil, 2009).

- According to the results of the wage model, participation in a vocational training course affects wages by -0.091 unit negatively contrary to the expectations, and it is statistically significant at 5% level. These findings contradict with the literature on the impact of vocational training courses on wages (e.g. Fretwell *et al.*, 1999; Ibarrara'n and Shady, 2009; Nivorozhkin, 2005; Rodríguez-Planas and Jacob, 2010; Card *et al.*, 2010; Varçın, 2004). Despite the above mentioned contradiction, the so-called paradox is removed once the descriptive statistics regarding the control and survey groups are examined in depth. For example, while 36% of the control group have benefited from the unemployment insurance, only 8% of the survey group have benefited from the unemployment insurance. Furthermore, 96,3% of the control group and 91,5% of the survey group have prior work experience. Similar to the figures regarding the total unemployment period, total working period of control group is higher (24,2 %) than that of the survey group (17,7%). In addition to these variables, expected wage of the control group is 1606,93 TL, while that of the survey group is 1294,13 TL, recording much less figure for the survey group as compared to the control group. These descriptive indices explain the reason why participation in a vocational training course has affected wages negatively in the survey group.
- According to the findings of the wage model based on gender, the wages of men participating in a training course is affected negatively by 0.177 unit at 1% statistical significance level, compared to non-participating men. As evident in the descriptive statistics, the reasons are that; the average expected wage of men in the survey group is lower, the average unemployment period is more, the total working period is lower, population of the household is more, the average income is lower than the figures of the control group. Considering all these indicators, it could be argued that men participating in a vocational training course get lesser wage compared to the non-participants. On the other hand, participation in a vocational training affects the wages of women by 0.116 unit positively at 5% statistical significance level, compared to the non-participating women. The reasons why the wages of the women participating in a course are higher than those of the non-participants simply result from the high expected wages, long total working duration, big size of household population, greater number of working people in household and the high income rate of household.

Based on a restricted sampling, this study has focused on the efficiency of a single tool of the active labour market policy, that is the effect of tourism oriented vocational training courses realized in Antalya in raising employment and wages. Findings of the study point out the need for a compact impact assessment analysis to reveal the costs and benefits of these vocational training courses in Turkey. It is believed that such a research is vital for measuring the impact of these programs as a whole and developing relevant policy measures. Only in this way, would it be possible to find out which programs are feasible in

the short and long terms in view of assessing the employability of the course participants and the wage opportunities, as well as allocating funds to the efficient programs.

References

- Biçerli, Mustafa Kemal (2005) *Aktif İstidham Politikaları İşsizliği Azaltır mı?*, **Çimento İşveren Dergisi**, 6(19):3-15.
- Bonoli, Giuliano (2010) *The Political Economy of Active Labour Market Policy*, **Working Papers on the Reconciliation of Work and Welfare in Europe RECOWE Publication**, Dissemination and Dialogue Centre (REC-WP 01/2010), Edinburgh.
- Boone, Jan and C. van Ours Jan (2009) *Bringing Unemployed Labor Market Policies*, **The Economist**, 157(3):293–313.
- Card, David; Kluge, Jochen and Andrea Weber (2010) *Active Labor Market Policy Evaluations: A Meta-Analysis*, **The Economic Journal**, 120 (November):452–477.
- Card, David; Pablo Ibarra'n, Ferdinando Regalia; David Rosas-Shady and Yuri Soares (2011), *The Labor Market Impacts of Youth Training in the Dominican Republic*, **Journal of Labor Economics**, 29(2):268-300.
- ÇSGB (Çalışma ve Sosyal Güvenlik Bakanlığı) (2011) **Turizm Sektöründe Çalışma Sürelerinin İyileştirilmesi Programlı Teftişi Sonuç Raporu**, YayınNo.48, Ankara.
- Diriöz Çapar, Sinem (2012) **İstihdamın Artırılmasında Aktif İşgücü Politikalarının Rolü**, T.C.Kalkınma Bakanlığı, YayınNo.2835,Ankara.
- Dünya Bankası (2013) **Türkiye: İŞKUR Mesleki Eğitim Programlarının Etki Değerlendirmesi**, RaporNo.82306-TR, Ankara.
- Destevão, Marcello M. (2003) *Do Active Labor Market Policies Increase Employment?*, **IMF Working Paper**, 3/234(December).
- Fretwell, David H.; Jacob Benus and Christopher J. O'Leary (1999) *Evaluating The Impact of Active Labor Programs; Results of Cross Country Studies in Europe and Central Asia*, **World Bank Discussion Paper**, June 24(final).
- Hidea, Takeshi (2011) *The Politics of Active Labor Market Policy in Post-Industrial Democracies: Divergent Policy Responses to New Social Risks among Pro-Welfare Parties*, **WIAS Discussion Paper**, No.2011-003, Tokyo.
- Ibarra'n, Pablo and David Rosas Shady (2009) *Evaluating the Impact of Job Training Programmes in Latin America: Evidence from IDB Funded Operations*, **Journal of Development Effectiveness**, 1(2):195-216.
- ILO (International Labour Organization) (2010) **Kriz ve Türkiye: Kriz Tedbirlerinin Etki Değerlendirmesi**, Ankara.
- Işığık, Özlem and Burak Faik Emirgil (2009) *Aktif İşgücü Piyasası Politikaları ve Meslek Yetiştirme: İşgücü Yetiştirme Kurslarının Etkinliğinin Bursa İli Örneğinde İncelenmesi*, **Sosyal Siyaset Konferansları Dergisi**, 57: 214-231.
- Kapar, Recep (2006) *Aktif İşgücü Piyasası Politikaları*, **İstanbul Üniversitesi İktisat Fakültesi Mecmuası**, 55(1):341-371.
- Kluge, Jochen (2010) *The Effectiveness of European Active Labor Market Programs*, **Labour Economics**, 17(6):.904-918.

- Lechner, Michael ve Stephan Wiehler (2011) *Kids or courses? Gender Differences in the Effects of Active Labor Market Policies*, **Journal of Population Economics**, **24**(3):783-812.
- Leetmaa, Reelika and Andres Võrk (2004) *Evaluation of Active Labour Market Programmes in Estonia*, **Working Papers of Eesti Pank**, Tallin.
- Meager, Nigel (2009) *The Role of Training and Skills Development in Active Labour Market Policies*, **International Journal of Training and Development**, **1**(13):1-18.
- Nie, Jun and Ethan Struby (2011) *Would Active Labor Market Policies Help Combat High U.S. Unemployment?*, **Economic Review**, Federal Reserve Bank of Kansas City, **Q3**:35-69.
- Nivorozhkin, Anton (2005) *An Evaluation of Government Sponsored Vocational Training Programmes for the Unemployed in Urban Russia*, **Cambridge Journal of Economics**, **29**(6):1053-1072.
- Öksüz Narinç, Nihan (2012) **Meslek Eğitim Kurslarının İstihdam Üzerindeki Etkisi: Antalya Örneği**, Akdeniz Üniversitesi Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezi, Antalya.
- Öksüz Narinç, Nihan; Sayım Işık and Mehmet Mert (2013) *Meslek Eğitim Kurslarının İstihdam ve Ücretler Üzerindeki Etkisi: Antalya Örneği*, ICOPEC "V. Uluslararası Ekonomi Politik Konferansı Çağın Aklı: Piyasa Kısacında Birey ve Toplum", 23 Ekim 2013, Kocaeli Üniversitesi.
- Perry, Geoff and Tim Maloney (2007) *Evaluating Active Labour Market Programmes in New Zealand*, **International Journal of Manpower**, **28**(1):7-29.
- Rodríguez-Planas, Núria and Jacob Benus (2010) *Evaluating Active Labor Market Programs in Romania*, **Empirical Economics**, **38**(1):65-84.
- Sianesi, Barbara (2008) *Differential Effects of Active Labour Market Programs for the Unemployed*, **Labour Economics**, **15**(3):370-399.
- Şener, Ülker (2010) *Yoksullukla Mücadelede Sosyal Güvenlik, Sosyal Yardım Mekanizmaları ve İşgücü Politikaları*, TEPAV, Ankara.
- Tvrdon, Michal and Gabriela Cieslarova (2012) *Labor Market Policies: Empirical Evidence from the European Union*, **European Journal of Economics, Finance and Administrative Sciences**, **44**: 139-147.
- Vangjell, Eleni; Sonela Stillo and Marinela Teneqexhi (2012) *Impact of Active Labor Market Programs on Employment: Albania's Case*, **Journal of Knowledge Management, Economics and Information Technology**, **8**(February):1-17.
- Varçın, Recep (2004) **İstihdam ve İşgücü Piyasası Politikaları**, Ankara: Siyasal Kitabevi.