

The Determinants of Participation in Vocational Training in Albania

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Abstract

The Albanian labour market has changed drastically during the last two decades as a result of technological developments, labour force mobility, structural unemployment etc. New skills are required by firms and many types of skills turned to be obsolete and no longer in demand. The article tries to analyze the situation in the Albanian labour market, in order to identify the actual trend and to explain theoretical reasons and determinants that cause it.

Using Labour Force Survey data it's aimed an empirical model to evaluate the determinants of employees' participation in vocational training in Albania. Based on the empirical literature such determinants can be person related, job related, and employer related.

The findings from this paper will be compared with findings from the literature in order to see differences and similarities.

Keywords: Labor market, gender discrimination, training incidence, Labor Force Survey

Introduction

As human capital theory (Becker, 1964) states, agents will invest in training if the discounted net present value of training benefits exceeds training costs. From the employer point of view, the decision will depend on expectations about the benefits that he will gain from post-training productivity and the costs for lost productivity during the training period and perhaps also costs for the training itself. For the individual, the decision to take part in training is made on expectations about the costs of training and about the benefits in terms of higher wages after training. So, training has the potential to increase the productivity of firms, increase the earnings for employees and enhance the skills and consequently the employability in the society. Therefore human capital contributes to economic growth

through raising the productivity of workers and facilitating the adoption and use of new technologies. Because we live in a globalized world and under technological pressure our skills became obsolete and we may need regular training to keep up with the changing requirements of new jobs. For this reason the training investments will be a vehicle for this skills upgrading.

In Albanian empirical studies there is no evidence on training incidence and on the determinants to participate in vocational training. Most of the studies have tended to focus on the role of educational attainment, which is more readily measured than training. This paper addresses this knowledge gap by providing an overview of the determinants of participation in vocational training in Albania. Nevertheless, vocational trainings in Albania have not yet achieved satisfactory level. Many firms are reluctant to train their workers especially the small and medium scale industries because of several reasons. The majority of them do not foresee training as important (Rahmah, 2000).

The aim of this paper is to determine which are the factors that determine the decision of an individual to receive a vocational qualification in Albanian labor market and to identify which individuals and groups are most likely (or least likely) to receive this type of training despite of its duration. In this paper we have used secondary data collected from the Albania Labor Force Surveys (LFS) of 2013. Unfortunately the latest data were not available online on the Albanian INSTAT page, so we based our study on latest data corresponding to year 2013. Logit-regression will be run in order to discover if the determinants and correlations found in literature are valid for Albania. Only participants who are employed and not retired will be considered for the analysis.

In the literature employees' participation in training has been described as varying by personal characteristics and job characteristics as well as the type of workplace in which an employee works. Empirical findings of other countries suggest that employed receive more training than the unemployed, who in turn receive more training than those not economically active (O'Connell, 1999). Also, employees who are regarded as being more likely to bring in larger returns to their employer from participating in training are more likely to receive training, such as younger employees, full-time employees and more highly educated employees. Workers in higher skill occupations are more likely to receive training and there is evidence that employees in larger firms or working in public sector are also more likely to receive training.

We hope that government authorities, organizations and trade unions to become aware more and more everyday that the human capital is a growth factor to succeed and so they need to encourage workers to upgrade their skills. In this context, the need to better understand the determinants of

participation in vocational training becomes very relevant. Our findings will help them to better understanding these variables that influence the probability to participate in vocational training in Albania.

Main Text

Base on theoretical and empirical studies the decision to undertake training will depend on number of personal and family characteristics (such as gender, age, marital status, qualification, occupation) and job and employer characteristics (as full-time or part-time status, sector, industry, and size of workplace). The following text details theoretical explanations, empirical studies and hypotheses related to each of our variables in the model.

Gender

Human capital theory (Becker, 1962) predicts that the incidence of training should be higher among men than women, and this has largely been confirmed in empirical studies (Greenhalgh and Stewart, 1987; Booth, 1991, 1993; Green, 1991, 1993, 1994; Arulampalam & Booth, 1997; Evertsson, 2004). Employers see higher risks in training female employees. Employers regard women employees as likely to leave work to have children. Women will have more family responsibilities after having children, which could possibly result in reduced hours of work or less interest in skill advancement or career progression at work (Oosterbeek, 1998). In general, there is little evidence to suggest any marked gender differences in access to training. For example, O'Connell (1999) shows that the incidence of training is similar for men and women across a range of OECD member countries.

However, Evertsson (2004) shows that in Sweden women are less likely than men to participate in formal on-the-job training. Improvements in the labour market status of women (Vanden Heuvel, 1997) possess 'advantages' in terms of particular characteristics associated with higher qualifications may increase the participation training of women. Base on the study of Simpson and Stroh (2002) the authors find an increased training participation by females as a consequence of technological changes such as the introduction of computers that have primarily affected female-intensive occupations in the 1990s. Using U.S. data, they report that around one-third of the gender difference in overall training incidence can be attributed to occupational differences, rising to 40 per cent for employer-supported training.

Hypothesis 1: Female gender is negatively related to participation in vocational training.

Age

Participation in training has also been found to decline over the life course (Ben-Porath, 1967). In the earlier stage of a career individuals tend to invest a greater amount of time into on-the-job training and that in the second half employees tend to consume their investment. Ben-Porath suggests that individuals reduce their investment in training as their age increases because the decreasing marginal utility of further investment in human capital will be combined with higher opportunity costs. The factors that increase training costs or reduce benefits would have a negative impact on training participation (Cloutier, Renaud and Morin, 2008) and would be different for employees with various ages.

One reason for this pattern may be that older workers have less time to reap the benefits from additional training so making the costs for training exceed the benefits. Secondly, older workers are less interested in participating in work-related training. Thirdly, people often maintain the stereotyped view that older workers are less productive than younger workers so age can be a barrier to train (Cully, 2000). The study of Arulampalam, Booth and Bryan (2003) reveals that negative correlation between age and training selection for men, but not for women.

Hypothesis 2: Age is negatively related to participation in vocational training.

Marital status

Based on the theory, the need to allocate the optimal share of time to both job and family might result in stress and a conflict of the different roles of an individual (Mark, 1977). Women who have family responsibility tend to participate in other activities such as training less than men, particularly those with children (Blundell, Dearden and Meghir 1996; Tharenou, 1997; Pischke, 2001). In support, Tharenou (1997) noted that a lower participation in training activities by women can be explained by the fact that “women with young children and spouses are thought less able to be more committed to paid labor than others because of family-caring responsibilities.” Even though women are increasingly educated and their labor force attachment has increased in the past decades, they have not abandoned their traditional role (Aryee, 1992).

Hypothesis 3: Married individuals are negatively related to participation in vocational training.

Education

A broad range of researches come to a similar conclusion that employee's education level increases the training probability substantially (Arulampalam and Booth, 1997). Training and qualifications have been

found to be complementary (Shields, 1998; OECD, 1999; Draca & Green, 2004). Employees with higher educational attainment are likely to be more experienced in undertaking formal learning, making further learning easier. Also, educated employees are more likely to have a body of knowledge that can be easily extended or supplemented through further training. For these reasons the educated workers are likely to have higher returns than for less educated workers (Booth, 1991; Long, Ryan, Burke & Hopkins, 2000). Therefore, establishments with a larger share of qualified employees tend to train more (Zwick, 2004a).

Hypothesis 4: Education level is positively linked with training participation.

Occupations

Studies that used employee surveys also found that training incidence and intensity vary by occupation. Occupations that require a higher skill level are more likely to participate in employer-funded training (Draca & Green, 2004). To maintain the occupation worker will participate in a higher level of training. Occupational groups identified as having the highest training participation rates include professionals, managers and technicians, while employees in relatively unskilled jobs such as laboring tend to receive the least training (Gobbi, 1998).

Hypothesis 5: High skilled occupations are positively linked with training participation.

Industry

Earlier researchers have examined the effect of industry on training. Lynch and Black (1996) find that the percentage of formal training outside working hours is positive and significant for the manufacturing sector. The computer training was positive and significant in the nonmanufacturing sector. Recently, in Van de Wiele (2010), industry dummies were created (25 for manufacturing, 18 for non-manufacturing). The results suggest that training participation in chemical manufacturing is significantly higher than others while the manufacturers of wood and wooden products train less than other firms. Among those non-manufacturing firms, those that are involved in sales or business activities (computer services, R&D, etc.) train more while the training participation rate is significantly lower for land transport.

Hypothesis 6: Industries that are more capital intensive are positively linked with training participation.

Part-full time

Part-time workers will receive less training than those working full-time (Arulampalam & Booth, 1998). This relationship was also observed by Draca and Green (2004) and Booth (1991). According to them, employers

will benefit less from training investment if they train part-time employees. Part-time employees are expected to spend fewer hours at work than fulltime employees over the same employment duration, yielding less benefit for the employer. It is suggested by Long et al. (2000) that employers will want to invest in employees who are more likely to stay with the firm. As employees on temporary contracts are less likely to have long-term ties to the firm, it could be expected they will receive less training.

Hypothesis 7: Full time status is positively linked with training participation.

Establishment Size

Larger firms tend to offer more training than the small one (Baron et al, 1987; Booth, 1991; Holtmann et al , 1991; Simpson et al, 1984; Jennings et al,1996; Shields, 1998; Lin, et al ,2004). This is true because they are more likely to have their own training department and the fixed costs of training can be spread over a larger number of employees (Lynch et al, 1998). However, Zwick (2006) did not lend any support to the above theoretical explanation made by Lynch and Black (1998). In Zwick's work, he found that establishments with more than 20 employees train less intensively than establishments with less than 20 employees.

Hypothesis 8: Size of establishment is positively linked with training participation.

Methodology

To verify our hypotheses we used the Labor Force Survey (LFS) data in the year 2013, collected by the Albanian Institute of Statistics (INSTAT). From 2007, respondents aged 15-64 in each year were asked if they had received vocational qualification.

Have you attended a vocational qualification (in spite of duration)?

1 yes, in a public center of vocational formation

2 yes, in a private center of vocational formation

3 no

Before we continue the analysis we define **vocational qualification** as training connected with your job, refer to work-related. This ia a qualification that people receive while in work, or in anticipation of working in the future, and the effects it has on people's careers. This is a qualification received after the end of education. It does not include any continuous full-time education that is usually regarded as formal school qualification. A vocational qualification gives the learner a proof that he or she is adequately trained for a particular workplace once the course is completed.

In this section, logistic regression model is used to estimate the direct relationship between personal characteristics, job and enterprise characteristic and the probability of receiving vocational training, adjusting

for other factors. The dependent variable in regression is whether or not the individual participated in vocational training in *spite of duration*. The range of explanatory variables included in the regressions was based on findings from the literature. They include factors that are believed to influence the probability of receiving training in economic theory. These explanatory variables are gender, marital status, age, education, job status (full- versus part-time), occupation, industry, firm size.

Measurements

Participation

The PARTICIP variable indicated whether a person receive a vocational qualification. This variable was coded 1 when the person attended a vocational training and 0 otherwise

Age. The AGE variable was measured in number of years.

Gender. Gender was measured using the FEMALE dichotomous variable; a female employee was given a value of 1 and a male employee a value of 0.

Marital status. The MSTAT was given a value of 1 when the employee declared a spouse and 0 in other cases. In the database, having a spouse was irrespective of the legal status of the relationship.

Education level. The academic background of participants was measured using a series of dichotomous variables. These variables provided information on the highest level of education attained by an employee.

The EDULEVEL2 variable, = 1 when the employee had a high school level or less,

EDULEVEL3 = 1 when the employee had a university degree or more.

The “low school level or less” category was the omitted category.

Occupations. The consulted data included five occupations levels of employment. We defined the following variables:

OCCUPATION1 = 1 when the employee work as managers, professionals, and technicians,

OCCUPATION2 = 1 when the employee work as clerical, service and sales workers,

OCCUPATION3 = 1 when the employee work as skilled agricultural and trades workers,

OCCUPATION4=1 when the employee work in plant and machine operators, and assemblers,

OCCUPATION5 = 1 when the employee work in armed forces,

The “elementary occupations” category was the omitted category.

Industry. The consulted data included five industry levels of employment. We defined the following variables:

INDUSTRY1=1 if the employee work in Manufacturing,

INDUSTRY2=1 if the employee work in Construction,
 INDUSTRY3=1 if employee work in Mining and quarrying & Electricity, Gas and Water supply,
 INDUSTRY4=1 if the employee work in Market Services,
 INDUSTRY5=1 if the employee work in Non-market Services.
 The “Agriculture” category was the omitted category.

Employment status. The FULLTIME variable was coded as 1 for a position, and 0 in other cases.

Establishment size. The MEDORGANIZATION variable was coded as 1, if the number of employees in the establishment is more than 11 but less than 50, and 0 in other cases.

The LARORGANIZATION variable was coded as 1, if the number of employees in the establishment is more than 50, and 0 in other cases.

The “small establishment” category was the omitted category.

Empirical Results:

We now look at some estimation results from the logit model of the determinants of receiving vocational training and consider personal characteristics, job characteristics, and organizational characteristics. Table 1 presents the result of vocational training incidence, measured as a binary variable and coded 1 if any vocational training was undertaken despite its duration. The non-standardized coefficient associated with each explanatory variable indicated its marginal effect on the probability of participating in vocational training. These results are not so favored compared to development countries. This is partly due to demographic factors but mainly due to low performance of the vocational centers decreasing attractiveness of this vocational stream among individual and their families. Several factors have influenced the lower incidence of training activity such as higher participation of young people in education, or young people and women being increasingly discouraged from searching for work, etc.

Table 1: Logistic Regression of Vocational Training
 (Non-Standardized Coefficients)

	B	S.E.	df	Sig.
FEMALE	-.287	.002	1	.000
MSTAT	-.159	.003	1	.000
AGE	.026	.001	1	.000
AGESQR	.000	.000	1	.000
EDULEVEL2	.784	.002	1	.000
EDULEVEL3	.452	.003	1	.000
HPOSITION1	.042	.005	1	.000
HPOSITION2	.025	.005	1	.000

HPOSITION3	-.377	.005	1	.000
HPOSITION4	.238	.005	1	.000
HPOSITION5	.631	.010	1	.000
IDUSTRY2	-.428	.005	1	.000
IDUSTRY3	.857	.005	1	.000
IDUSTRY4	.350	.003	1	.000
IDUSTRY5	.998	.004	1	.000
FULLTIME	.093	.003	1	.000
MEDORGANIZATION	-.094	.003	1	.000
LARORGANIZATION	-.033	.003	1	.000
Constant	-4.093	.011	1	.000

Source: Authors' calculations based on Labor Force Survey 2013

For the FEMALE variable, we have obtained a negative and significant coefficient ($p < 0.05$), indicating that being a woman decreased the probability of participating in the vocational training being offered. This result confirmed our first hypothesis.

For the AGE variable, we obtained a positive and significant coefficient ($p < 0.05$). In consequence, hypothesis 2 was not supported. We have take and the AGESQR (age squared) variable to see if the age function is U shaped. The older the worker gets, more likely is he/she to participate in workplace training. But this is true up to a level and after that the older the worker gets, the less likely he/she participates in workplace training. Because older workers have fewer years remaining in their working lives, their returns on training investments are expected to decrease with age from both the employer and worker perspectives

With respect to marital status, MSTAT variable, we have obtained a negative and significant coefficient ($p < 0.05$). Results in Table 1 showed that employees who are married or living with a partner are also less likely to participate in training. This confirmed our third hypothesis.

For the EDULEVEL2 variable, we had a coefficient of +0.784 ($p < 0.05$) indicating that an employee who successfully completed a high school level was more likely to participate in vocational training than an employee who had a low education level or less

The coefficient estimator for the EDULEVEL3 variable was also positive and significant +0.452 ($p < 0.05$). This indicating that an individual with a bachelor's degree or more, was more likely to participate in training than an individual who had only a low education level or less. Our results confirmed our fourth hypothesis of a positive relation between education level and participation in vocational training.

Hypothesis 5 stated that high skilled occupations were positively related to participation in vocational training. Results confirmed our hypothesis. All coefficients to all OCCUATION 1/2/4/5, were significant ($p < 0.05$) showed that the probability of participating in vocational training increased with the occupations which require high skills. But this was not satisfied for OCCUPATION 3 variable, where the coefficient is -0.377 but significant ($p < 0.05$).

Relative to the baseline case of elementary occupation, armed forces, managers, professionals and technical/trade workers have higher marginal participation rates in workplace training.

For the INDUSTRY variables we have obtained these results: if the employee works in manufacturing industry we obtained no significant coefficient. For the INDUSTRY2 we have a coefficient of - 0.428 ($p < 0.05$) indicating working in this industry will decrease the probability to participate in training relative to the baseline case of workers in agriculture sector. While for other industries, INDUSTRY 3/4/5 the variable coefficients obtained was significant and positive. So, our hypothesis was partly satisfied.

For the FULLTIME variable we obtained a positive coefficient and significant. Therefore, our hypothesis was satisfied. Working full time will increase the probability to participate in training.

Finally, the MEDORGANIZATION variable and LARORGANIZATION variable are our last evaluations. For these variables we found significant coefficient ($p < 0.05$) but negative. In consequence, hypothesis 8 was not supported. This means that workers who receive more training work in small establishment that in larger one.

Conclusion

The aim of this study was to determine the factors that influence the probability to participate in vocational training in Albania. Based on the literature review we identified gender, marital status, age, education, job status (full- versus part-time), occupation, industry, firm size as explanatory variables. Our results suggest that men are more likely to participate in vocational training than women. This hypothesis has developed based on both empirical results (Feinberg, 1978; Green 1993) and the segmentation market theory (Boston, 1990) which proposes that women receive less training and development because they are employed in secondary sectors.

According to age variable we identify that as an employee is ageing, the probability of participating in vocational training increases. This finding is inconsistent with predictions from the human capital theory. From a practical perspective, this result signals to government authorities and to organizations to pay closer attention to youth in training and development activities. With regard to marital status, we found a significant relationship

between this determinant and participation. This result was consistent with theory and some empirical research (Blundell, Dearden and Meghir 1996; Tharenou, 1997; Pischke, 2001).

Based on Becker's human capital theory, suggest a positive relationship between educational level and participation in training activities. Our results provided support to that hypothesis. This suggests that the more an employee is educated, more vocational training he will received in the future because they have higher learning capabilities. Employees with low education in a firm requiring extensive human capital, thus this will increase the training investment for employer. So the employer will train more the educated workers. As predicted, empirical results showed that the probability of participation in training increased with occupations that require high skill level (Draca & Green, 2004). As it is the case for age, organizations need to be careful and offer development activities to all if they want to maintain their human capital.

Our results found that armed forces, managers, professionals and technical/trade workers have higher marginal participation rates in vocational training compared to workers in elementary occupations. Based on the theory the industries that are more capital intensive are positively linked with training participation. Our results confirmed this hypothesis. We can predict that service industries offer more vocational training than manufacturing one.

Finally, results revealed that full-time employees engaged more in vocational training than part-time employees, so our hypothesis satisfied. According establishment size variable, Zwick (2006) found that establishments with more than 20 employees train less intensively than establishments with less than 20 employees. This was contradictory with the theoretical prediction that larger firms tend to offer more training than the small one. Our results are in same line with Zwick's work, so our last hypothesis was not supported.

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