REGULATION AND CHALLENGES OF YOUTH EMPLOYMENT IN THE DEVELOPING COUNTRY

Naim Ismajli *, Meriton Ismajli **, Adelina Gashi *

* AAB College, Pristina, Republic of Kosovo
** Corresponding author, AAB College, Pristina, Republic of Kosovo

CONTACT DETAILS: AAB College, St. Elez Berisha, No. 56, Fushë Kosovë Industrial Zone, Pristina 10000, Republic of Kosovo

Abstract

The problem of youth unemployment has started to receive attention in a relevant way recently, especially in Europe, where the percentage of unemployment registered for this category of the population is relatively greater than that for the adult population (Perugini & Signorelli, 2010), also being influenced by the last financial crisis (Choudhry et al., 2012). Youth unemployment is a critical social issue because it is linked to a number of aspects of society (Yamamoto, 2011). The purpose of the treatment of this paper is to identify the barriers faced by the young people of Kosovo to enter the labor market. The study uses the quantitative research method, through the use of an online questionnaire, a survey was participated by 496 respondents. The econometric model used in this study is the structural equation model (SEM). The empirical results from the SEM model show that the most important factor is the lack of work experience, which is a barrier to the employment of young people in Kosovo. The results of this paper are important to understand the importance of effectiveness in the design of policies for the elimination of barriers to the employment of young people in Kosovo.

Keywords: Regulation, Challenges, Youth Employment, Developing Country

1. INTRODUCTION

This work will be important because, in the field of youth employment, there is a significant lack of treatment of the barriers faced by young people in employment, therefore, this work differs from others, in several aspects: first, the barriers to employment among young people in countries in transition are specific and differ in terms of face-to-face factors, with countries that are developed, and secondly, the paper will be based on scientific theory, which is missing in many works of this nature of the topic.

The employment of young people is of great importance because it enables the refreshing of the labor market with trained and educated cadres, who are motivated and enthusiastic to work.

The importance of employment among young people (18–24 years old) has begun to receive the attention of state policies in developing and developed countries since the consequences of their unemployment are greater than the cost of their
employment. Entering the labor market poses major challenges for young people in many countries. While it is true that in general young people tend to be in a more vulnerable position than older workers, the recent economic crisis has shown that the integration of young people into the labor market is problematic in some countries, while it seems more easily in other countries.

The term “youth” is better understood as a period of transition from childhood dependence to adulthood independence. However, age is the easiest way to define this group, especially in relation to education and employment, because young people are often referred to as people between the age of leaving compulsory education, and finding their first job. Nakjyungi (2019), for statistical purposes, defines youth as those persons between the ages of 15–24 years, without prejudice to other definitions by Member States. In fact, young people between the ages of 15–18 years begin to consider careers of interest, however, they tend to use more of an imaginative approach to career exploration and fantasize about “typical” jobs such as pilot, firefighter, or doctor (Howard & Walsh, 2010).

The paper aims to contribute to the scientific literature by providing empirical evidence for the barriers faced by the young people of Kosovo in their employment. To do this, we will use the questionnaire data in order to address the hypotheses established in the paper.

The handling of this paper has two aspects, first, to identify the barriers that the young people of Kosovo face, and second, to have a real overview of the barriers of the young people in Kosovo, because we can be informed and have a basis to build policies national and local, for the youth of Kosovo.

Another goal of this paper is the development of research and research skills, respectively finding the material related to our topic, and then selecting the necessary data, analyzing them, and using them for the design of the paper.

The research questions of the paper are:

RQ1: Which barrier affects the employment of young people in Kosovo the most?
RQ2: Which barrier has the least impact on youth employment in Kosovo?
RQ3: Who influences the most the choice of work among young people in Kosovo?
RQ4: How does education affect youth employment in Kosovo?
RQ5: How prepared are the young people of Kosovo for the labor market?

The research is structured as follows. The first section shows the literature gap, the purpose and research questions, the theoretical/conceptual framework applied, the significance and importance of the study, the research methodology used, and the main findings/contributions. The second section shows a review of the literature and the findings of other authors. The third section presents the methods used in the research. The fourth section shows the empirical results of our study. The fifth section discusses the compatibility of our results with those of other authors. The sixth section concludes this paper and provides recommendations for future research.

2. LITERATURE REVIEW

The challenge of creating jobs for young people is at the core of development, jobs that require low skill levels can easily be filled by unemployed youth, but those that require higher skill levels cannot be easily filled by the unemployed (Luseno & Obere, 2020). In the modern conditions of the market economy, the sphere of employment occupies a central position in the state's economic and social policy and promotes the formation of young people's living standards and social reference points (Evratova et al., 2019). The availability of opportunities for quality work among young people is more worrying than the general challenges of unemployment (Gondwe et al., 2020). Unemployment and underemployment pose a challenge for different categories of young people: high unemployment is highest among urban, educated young people; and underemployment and low productivity constitute major challenges for young people active in the informal sector (Ismail, 2016). In a comparative perspective, access to the labor market by young people is a complex issue and has attracted the interest of labor market specialists for some time (Fashoyin & Tiraboschi, 2011).

The challenge of involving young people in the labor market is a problem that many European countries are facing. Examining the transition from education to employment, youth, diversity, and employment combines knowledge from the law and social sciences to connect the specific challenges and barriers facing young and vulnerable people (Halvorsen & Hviden, 2018). Pre-employment support comprises a critical element in preparing young people for the world of work and covers career guidance and counselling, work-based learning, job search assistance, coaching, and mentoring (Dadzie et al., 2020). Similarly, beyond the effects of employment policies on employability, variables such as gender, age, and marital status, affect participation in employment programs; these results bring implications for economic policy (Lekouka & Mokombi, 2021).

According to Global Employment Trends for Youth 2022 (International Labour Organization [ILO], 2022), the COVID-19 crisis exacerbated the many labor market challenges faced by young people in general, who have been hit hard by the broad scope of the labor market and social impacts of the COVID-19 crisis (Organisation for Economic Co-operation and Development [OECD], 2021). At the same time, decent work deficits have persisted as reflected in youth unemployment rates, significant gender disparities between labor force participation rates and wages, and high levels of informality (ILO, 2022). According to a report by the ILO (2022), the projected increase in economic inequality and insufficient employment opportunities has the potential to negatively impact a generation of young people around the world. The challenge of employing young people will become even greater in the near future, and reaping the “demographic dividend” — that is, the economic benefits of a younger society — would require broad political initiatives as well (Lam & Elsayed, 2021).

Several studies have been done in this field, which has had a lot of problems in searching for the relevant literature, because this topic is little
treated, from a scientific and theoretical point of view, but during the research, it was noticed that we have two types of works, which are based on literature review. The first group is research based on economic and econometric models, while the second group, which are few, is based on two theories that belong to the field of economics, however, which are not specific to barriers to youth employment, comprise most of the theoretical part. The paper will be oriented to the theory of human capital.

Schultz (1970) modified the theory of human capital in the early 1970s, presented how the classical economic idea, that of return on investment, can be applied in practice in labor markets, argued that education is a means to invest in human capital. Human resource management has included personnel and staff, industrial and employee relations, and human resource management (Andersen & Fagerhaug, 2002).

Different methods should be used to stimulate young people to work by rewarding them for their performance.

Likewise, this argument of Becker and Schultz (Becker, 1993, as cited in Yamamoto, 2011) was challenged by Thurow, Arrow, and Riley (Thurow, 1973, as cited in Yamamoto, 2011), who argued that education is not necessary for a good job, because adequate practice is also needed to have a good job. “Human capital is the qualification of resources, skills, and knowledge that are available to be acquired by individuals to increase their employability” (Caspi et al., 1998, p. 427, as cited in Yamamoto, 2011).

The theory of human capital emphasizes that investing in education offers the possibility of gaining a job, the term “education” is not only related to formal education, but also to non-formal education formal, such as vocational training outside school and other forms of non-formal education. In the 1970s, economists revised the theory of human capital and created the “screening theory”, because there was a certain level of skepticism about the direct relationship between education and employment (Yamamoto, 2011). This theory states that schooling and obtaining a degree are a single sign that the individual is capable of entering the labor market, but there are also other forms that enable an individual to enter the market, other accompanying forms of education are the development of self-skills, which are determined by the labor market.

Employment is an individual problem, as such, it is characterized by many barriers, which have specific characteristics. Different authors see the barriers from many perspectives, therefore they are specific for each economy, in our case, for the young people of Kosovo, the barriers are of different types, but we will channel these barriers based on the theory elaborated above. There is a number of barriers to young people entering the workforce in New Zealand (New Zealand Youth Parliament, 2013), they include economic conditions, educational attainment, lack of experience and certain skills, competition with older workers, pay and employers’ attitudes. According to Oxenbridge and Evesson (2012) engagement of young people in workplaces after completing education is presented in the form of part-time work combined with studies, full-time work, involvement of the employer in the educational system, professional and educational training and through labor market intermediaries.

Young people who are included in this group of people, consist of young people: Who are employed, unemployed and full-time education students (UK Commission for Employment and Skills [UKCES], 2012). In the research done by the UKCES (2012), where 60 employed and 90 unemployed were included as a sample, it is observed that the factor that most affects the employment of young people is the lack of experience in the required work. The research shows that young people are still having difficulty transitioning from school to work (Bell & O’Reilly, 2008). These authors point out that the factors that influence this transition are: professional training, education and the size of the labor market.

The human capital component is similar to youth education, but this form of education is often presented in specific industries, where additional professional training is needed, regardless of completed education. Many organizations use reward systems and provide staff with additional training and professional development (Suynato et al., 2018).

There are many forms of professional training because they are dictated by the level of development of education in a country, in our case, the level of education is at a lower level of development, determining that professional training is a necessity, for a better workplace for sure. In general, better-educated young workers have better access to gainful employment and better jobs. Vocational education and training bring young people closer to the labor market (Zimmermann et al., 2013). They emphasize that the performance from professional training enables young people to make a good investment, which will make it easier for them to find employment in the labor market, thus creating a fluctuation in the labor market. Concrete examples are countries such as Austria, Denmark, Germany, and Switzerland, which are the countries where young people, after completing professional courses, enter the labor market very easily, in contrast to Eastern European countries, which have major problems with education, as such the need for professional training is bigger. While, in our case in Kosovo, professional training is few, because there are very few professional training centers, which are associated with a low level of education, where this combination continuously brings problems to young people in Kosovo, to employed.

In the questionnaire developed by Puerto (2007), professional training, which has high quality, shows that it is a powerful element that facilitates the journey, from education to work. These types of forms of vocational training are more common in developing countries and countries of origin. Vocational training affects the motivation of young people.

The first problem facing young people getting hired is the lack of experience in full-time jobs. Such a trend has large dimensions, where the employer is increasingly looking for people who have work experience, and this element conditions young
people to find it more difficult to find employment (Riggert et al., 2006). They also pointed out that the decline in full-time employment opportunities has generally led to an increase in part-time youth employment, but has limited choices for youth who wish to work full-time. The consequences of this barrier are numerous, but the biggest consequence for young people will be not being able to get the job they want, because the lack of experience in full-time work prevents them from the future, to look for a target job, also brings the other opposite effect, the loss of the value of his/her work in the labor market, which will prevent him/her from fulfilling his career goals.

The term “labor supply” refers to the total amount of work offered by employed persons and unemployed persons as defined by the ILO, otherwise referred to as “active persons” for work.

The term “labor demand” refers to the total amount of work required by the employer.

H1: The level of employment is lower among young people who have started academic studies, than for young people who are finishing their studies.

The start of studies among young people is more oriented towards education than towards employment, therefore they are more focused on studies than on employment, while students who are in the process of completing their studies are attacked more with anxiety to be employed. As such, they require more of the labor market to be employed and we assume that the level of employment is lower among students, who have started their academic studies (Ersoy-Kart & Erodst, 2008).

H2: Gender determination has no influence on the employment of young people.

Numerous studies are in the balance of whether or not gender determination has an impact on the employment of young people. Gender in employment is not a direct obstacle, but an indirect one that is included by some other challenging elements, but in general it does not present an obstacle to employment (Crompton & Harris, 1998).

H3: Lack of work experience is a barrier to the employment of young people.

The weakest point in the employment of young people is undoubtedly the lack of work experience, where employers use this lack to not accept them in certain jobs, therefore, work experience, supporting the theory of human capital (Becker et al., 2011), is the most effective barrier to employment.

H4: Salary is not an obstacle to the employment of young people.

Young people, when looking for their first job, are more interested in their personal achievements in that job position, than in the salary, because the employment of a young person is a psychological achievement for them, but with the construction of work experience, it is presented as an element to leave that job position, but not an obstacle to employment.

Young people are categorized into two groups:

1. “NEETS”, has the definition: Non-inclusion of young people in education, employment, or professional training (ILO, 2012). The report of ILO (2012) reveals the fact that young people are increasingly discouraged. The number of youth NEETS is increasing, representing 10% of the young population.

2. “School-work” transition, this group includes young people who are in the process of studies or have completed the schooling process. Bell and O’Reilly (2008) point out that the definition of the term “young”, who go from school to work, is presented in the following forms:

- Bachelor studies begin;
- Bachelor studies continue;
- Bachelor studies are completed;
- They entered the labor market;
- He/she starts the first job after finishing education;
- Performs voluntary activities while he/she is unemployed.

The term “employed person” includes persons from the age of 15 years and its forms are (Heyes, 2017):

- People who work at least one hour a day;
- Self-employed persons;
- People who work for free in family businesses;
- People who have part-time work;
- People who have full-time work.

The aforementioned persons, according to the report of ILO (Heyes, 2017), include employees, self-employed persons, persons working in family businesses, apprentices, recruits, officers, and young officials, while undergoing basic military training or further, who continue to keep their jobs and employment contracts, school students and students who work in parallel with their studies and people who continue working in retirement.

The term “unemployed person”, according to the report of ILO (Heyes, 2017), refers to people between the ages of 15–74 years and includes:

- People who do not have any working hours per week;
- People who are actively looking for work for at least 4 weeks;
- People who are ready for work.

The term “job” refers to all job positions that are filled. Whereas, to a large extent, the concepts of “job” and “employed person” do not always coincide, considering that an employed person can hold several jobs. In such cases, the employed person has a primary job and one or more secondary jobs.

According to the report of ILO (Heyes, 2017), the term “work” refers to persons in part-time work, who work at least 6 hours per week, and those working full-time, who work at least 20 working hours, while self-employed persons are not included in this group.

3. RESEARCH METHODOLOGY

The methodology of the paper is oriented to epistemology, using the positivist attitude. The model of the work is a “cross-sectional study” or “representative study”, which will be accompanied by quantitative data, while the strategy of the work is evaluation. Source of data, primary data were used in this paper. The work will use structural data (questionnaire), because this method will show better what are the barriers faced by the young people of Kosovo, and this form of data collection will be used because no such type of work has been done in Kosovo. The main advantage of quantitative research lies in the fact that it provides a deeper
understanding of the population under study (Gorman et al., 2012).

The research was carried out on the basis of primary data, 500 young people from Kosovo were part of the research, from which we received 496 valid questionnaires for our research.

First, we can see the relationship between the independent and dependent variables (Figure 1).

**Figure 1. The relationship between the dependent variable and the independent variables**

![Diagram](image)

In order to determine the challenges faced by young people, a structured survey was first conducted. The survey questions (Gender, Choice of work, Family, Field of study, Society) in which the questions vary: Q1 (Employment level), Q2 (Gender determination), Q3 (Lack of experience), and Q4 (Salary).

To test the hypotheses raised in this research, the construction of variables is needed. To test the first hypothesis (H1), the variable for the level of employment needed by young people who have started and completed academic studies was created. To test the second hypothesis (H2), the variable for gender determination was created (men and women). To test the third hypothesis (H3), the variable for absenteeism was created of experience for young people who have work experience and those who do not have work experience. To test the fourth hypothesis (H4), the variable for the salary and employment of young people was created.

Variables Q1, Q2, Q3, and Q4 are variables that determine the latent variable. The model from which the latent variable is measured is the structural equation model (SEM). The number of students interviewed in university education institutions in Kosovo is 496. We will use a random sample to select the students of these institutions.

**Table 1. Descriptive statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>496</td>
<td>1.186</td>
<td>0.3894964</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Q2</td>
<td>496</td>
<td>1.326</td>
<td>0.4692167</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Q3</td>
<td>496</td>
<td>1.869739</td>
<td>0.7794204</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Q4</td>
<td>496</td>
<td>1.869739</td>
<td>0.8334577</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations.

4. RESULTS

Kosovo, the country with the highest unemployment rate in Europe, is faced with many employment problems, which also affect the employment of young people. According to the Statistics Agency of Kosovo (KAS, 2015), the labor force among young people (18-24 years old) in Kosovo, is 82,619 people, where 57,230 are men and 25,389 are women, while of the mentioned number, 32,222 are employed (male: 25,046 and female: 7,176), while 50,396 are unemployed (male: 32,183 and female: 18,213).

The figure below shows the SEM where we see the correlation of the variables Q1, Q2, Q3, and Q4 with the latent variable which determines the employment challenges of young people in Kosovo.

**Figure 2. Structural equation modeling: Path and estimates**

![Diagram](image)
The empirical results from the SEM model show that the factors (academic studies, lack of experience, salary, and gender determination) had a negative impact on the level of employment of young people in Kosovo.

The question that the level of employment is lower among young people who have started academic studies, than for young people who are at the end of their studies (Q1), the results are significant, which approves that first-year students are less employed than students of the last academic year, with a significant relationship between employment and years of study, we have the average rate of employment, indicating that the rate of employment is greater among students who are in the last year of study than to students starting their studies.

As for the question that gender determination has no influence on the employment of young people (Q2), according to the SEM model, the results are significant. This shows that there is no difference regarding the gender aspect, which is often thought of as an influential factor in Kosovo, between women and men, and that women, in addition to having greater participation in studies, also have greater participation in employment.

Most of the respondents stated that the lack of work experience is a barrier to the employment of young people in forestry (Q3). The empirical results show that the factor that affects the employment of young people in Kosovo the most is work experience, although with a negative coefficient.

And, in the next question, if the salary is not an obstacle to the employment of young people (Q4), we have insignificant results since the salary is not seen as an initial barrier in Kosovo to the employment of young people compared to other factors.

The model that has been applied in our paper is SEM, from which the latent variable is measured, an alternative method that would be suitable for conducting research would be the ordered logit model, which makes it possible to study the possibility that an individual can make a choice from several possibilities.

5. DISCUSSION

Rrumbullaku (2019) reveals the attitudes, thoughts and expectations of young people in the country. The findings present the daily life of young people in Kosovo in the context of education and employment mismatches in reality that match our results. The results of our study also reflect the high mismatch between labor market supply and labor demand across the youth generation. Lower salaries in the private sector, along with low levels of job security are some of the underlying issues that have increased mistrust in the labor market and economic environment. The results of this study are similar to ours as they demonstrate that salary as a factor, work experience, and other factors used in the research are some of the challenges faced by young people in Kosovo.

Our results are also similar to the research of Baah-Boateng (2016). Their findings showed that the transition from school to work remains a major barrier in addressing youth employment challenges in Africa. On the other hand, according to a study done by Msigwa and Kipesha (2013), gender, education, and skills are all important factors in explaining the change in the employment status of young people in Tanzania which is similar to our research. Yamamoto (2011), in his study, argued that education is not a necessity, for good employment, because adequate practice is also needed, to have a good job, these results are similar to ours. Similar to ours are Bell and Reilly’s (2008) results. In their research, it is argued that young people have difficulty transitioning from school to work. Such a trend has large dimensions, where the employer is increasingly looking for people who have work experience, and this element conditions young people to find it more difficult to find employment (Riggert et al., 2006). This is similar to the results of our research.

6. CONCLUSION

In this paper, we empirically analyzed the questionnaire data on the challenges of youth employment in Kosovo. Barriers to the employment of young people in Kosovo are generally an absorbent element with the economic-central factors of development, specifically Kosovo. Young people in Kosovo are the dominant population in the population structure, while support is missing. The methods used for the analysis of this paper are mainly empirical methods using the SEM since the latent variable in this paper is the level of youth employment.

As the main limitations of the paper, it is worth noting that this paper deals only with some factors that influence the employment of young people. Future researchers who deal with this topic can use
other variables that are influential to obtain specific results that contribute better to the challenges of youth employment.

The empirical results from the SEM show that the factors (academic studies, lack of experience, salary, and gender determination) had a negative impact on the level of employment of young people in Kosovo.

The negative impacts on the level of employment are reflected as a result of the decline in the economic situation in Kosovo, especially in the field of employment.

REFERENCES


APPENDIX A. THE QUESTIONNAIRE

1. Gender:
   a) Female
   b) Male

2. Age:
   a) 18–21 years
   b) 22–24 years
   c) 24–30 years
   d) 30–41 years
   e) Over 42 years

3. Level of education:
   a) Bachelor's
   b) Master's
   c) Doctorate
4. What is your study profile? ___________________________

5. The status of your studies:
   a) The first year
   b) Second year
   c) Third year

6. Employment status:
   a) Employed
   b) Unemployed

7. Have you been employed before?
   a) I have never been
   b) Employed part time
   c) Employed full time

8. What is your work experience?
   a) 3 years
   b) 2 years
   c) 1 year or less
   d) No experience

9. Factors affecting the selection of work among young people (1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree):
   Age                                                                1     2      3    4    5
   Society                                                           1     2      3    4    5
   Family                                                            1     2      3    4    5
   Lack of experience                                         1     2      3    4    5
   Lack of Training                                             1     2      3    4    5
   Inadequate field of study                               1     2      3    4    5
   Political influences                                         1     2      3    4    5

10. Are you generally satisfied with the quality of education at the university where you studied?
    Nothing    1    2      3    4    5    More

11. In the university where you studied, were you able to follow practical work?
    Nothing    1    2      3    4    5    More

12. In the university where you studied, were you able to attend adequate training?
    Nothing    1    2      3    4    5    More

13. After graduation, do you think you had enough skills to find a job?
    Nothing    1    2      3    4    5    More

14. After completing your studies, were you employed in your profession?
    Nothing    1    2      3    4    5    More

15. Main factors for choosing a workplace (1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)
   Salary                                                                            1     2      3    4    5
   Personal achievements                                                 1     2      3    4    5
   Cooperation with people                                              1     2      3    4    5
   Safety in the place you choose                                     1     2      3    4    5
   Good working conditions                                             1     2      3    4    5

APPENDIX B. ANALYTICAL STATISTICS

Table A.1. Correlation

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>0.1604</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>-0.1140</td>
<td>-0.2407</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>-0.0023</td>
<td>0.0150</td>
<td>0.0497</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Note: Obs. = 496.
Source: Authors' calculations.
### Table A.2. Likelihood-ratio (LR) test

<table>
<thead>
<tr>
<th>Fit statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log-likelihood</td>
<td>26.347075</td>
</tr>
<tr>
<td>LR (Chi^2)</td>
<td>3.23</td>
</tr>
<tr>
<td>Prob. &gt; Chi^2</td>
<td>0.5206</td>
</tr>
<tr>
<td>Pseudo R^2</td>
<td>0.0577</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations.

### Table A.3. Ordinary least squares (OLS)

#### Probit regression

| DAM         | Coef.  | Std. Err. | z     | P > |z|  | [95% Conf. interval] |
|-------------|--------|-----------|-------|-----|---|---------------------|
| Q1          | -0.0598961 | 0.4391784 | -0.14 | 0.892 | -0.9206699 | 0.8008777 |
| Q2          | 0.3489258 | 0.4288525 | 0.81  | 0.416 | -0.4916097 | 1.1894661 |
| Q3          | 0.2576816 | 0.2500281 | 0.99  | 0.320 | -0.2500441 | 0.7653674 |
| Q4          | -0.1870234 | 0.1313275 | -1.42 | 0.154 | -0.4444205 | 0.0703737 |
| _cons       | 1.0686848 | 0.0242729 | 2.02  | 0.043 | 0.0572305 | 3.680137  |

Note: Obs. = 496.
Source: Authors’ calculations.

### Table A.4. Structural equation model (SEM)

#### Estimation method = ml
Log likelihood = -1734.485

#### (1)(1) Youth_employment_level = 1

<table>
<thead>
<tr>
<th>Measurement</th>
<th>OIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 &lt; Youth_employment_level 1 (constrained)</td>
<td>_cons 1.1875 0.0175255 67.76 0.000 1.153151 1.221849</td>
</tr>
<tr>
<td>Q2 &lt; Youth_employment_level</td>
<td>2.486624 1.007658 2.47 0.014 0.5116505 4.461597</td>
</tr>
<tr>
<td>Q3 &lt; Youth_employment_level</td>
<td>-2.963701 0.9458912 3.13 0.002 -4.817614 -1.109789</td>
</tr>
<tr>
<td>Q4 &lt; Youth_employment_level</td>
<td>-0.1199028 0.5353015 -0.22 0.823 -1.169075 0.9292689</td>
</tr>
<tr>
<td>_cons</td>
<td>1.745968 0.0379312 46.69 0.000 1.672678 1.819257</td>
</tr>
<tr>
<td>e.Q1</td>
<td>0.1404285 0.0102421 12.71 0.000 0.119207 0.1616498</td>
</tr>
<tr>
<td>e.Q2</td>
<td>0.1455576 0.033631 4.36 0.000 0.0825367 0.2085781</td>
</tr>
<tr>
<td>e.Q3</td>
<td>0.3021926 0.053988 5.60 0.000 0.2005719 0.4038132</td>
</tr>
<tr>
<td>e.Q4</td>
<td>0.0913608 0.0448441 2.03 0.043 0.0021931 0.1805282</td>
</tr>
<tr>
<td>Youth_employment_level</td>
<td>0.0119153 0.0062808 1.96 0.050 0.0002392 0.0237904</td>
</tr>
</tbody>
</table>

#### Variance

| Youth_employment_level | 0.0119153 0.0062808 |

LR test of model vs. saturated: Chi^2(2) = 1.56, Prob. > Chi^2 = 0.4582

Note: Obs. = 496.
Source: Authors’ calculations.