



Article

The Entropy of Romanian Economists into the Labour Market

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Abstract: The rate of unemployment for higher educated people has increased in Romania in the last few decades. The aim of this paper is to analyse survey data from master's students in Economics from some private and public universities in Bucharest. The study uses ANOVA/linear Dependent Dirichlet Process mixture model to explain the scores from these surveys. The results suggest that the causes of interview rejections for master's students are due to gender, work seniority, type of university attended, and the requirements of employers in the field. In addition, a rank ordered probit model is used to assess the importance assigned by managers to recommendations to improve university education. The results confirm the rigidities of the Romanian labour market and the necessity to design more and better internships that support policy recommendations for better school-to-work transition.

Keywords: labour market; jobs; university; unemployment



Citation: Simionescu, Mihaela. 2023. The Entropy of Romanian Economists into the Labour Market. *Social Sciences* 12: 254. <https://doi.org/10.3390/socsci12040254>

Academic Editors: Baliyar Sanghera and Nigel Parton

Received: 16 February 2023

Revised: 8 April 2023

Accepted: 20 April 2023

Published: 21 April 2023



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1. Introduction

Youth unemployment requires public policy solutions, including active labour market policies and education policies. These solutions require in-depth research to identify the information that needs to be provided by the labour market, as well as to monitor policies and evaluate programs to create more and better jobs for young people.

Unemployment is an imbalance between global labour supply and demand. Unemployment is considered a dysfunction of the labour market; it is an imbalance between the need for labour that exists at a given time in a real economy and all the decisions of labour market actors, i.e., economic agents.

Considering this acute issue for the Romanian labour market, the objective of this paper is to analyse the difficulties faced by higher-educated economists in entering the labour market. The research question is: how difficult is it for these Romanian economists to enter the labour market? The main purpose of the paper is to investigate the difficulties in entering labor market using a sample of higher-educated economists. The subjects used for the survey were master's students. Each subject had experienced job interviews and none had yet completed their master's level studies, but each had received a bachelor level degree. Most of the subjects were employed and their experience in the labour market helped us to better understand the difficulties they faced in trying to enter the labour market at their current level. The novelty of the research is in its empirical analysis of the survey data collected from master's students in Economics from private and public universities in Bucharest. Data processing was based on advanced modelling techniques, including ANOVA/linear Dependent Dirichlet Process mixture model. These results suggest that the causes of interview rejections for master's students relate to gender, work seniority, type of university attended, and the requirements of employers in the field. Moreover, a rank ordered probit model was used to evaluate the recommendations of managers to improve quality of education in the field.

The results indicate that more than half of the employed students believe that their managers require more internships for a better transition from college to work. On the

other hand, the results, based on non-parametric Bayesian models, confirm certain rigidities of the Romanian labour market mentioned in other studies: requesting work experience even for young graduates, gender discrimination, and preference for graduates of public universities (Naroş 2018, 2019).

2. Literature Review

Youth unemployment is a problem that has intensified during the COVID-19 pandemic. Therefore, it is important to understand the causes of unemployment at both the macroeconomic and microeconomic levels. This section first discusses the causes of unemployment at the macroeconomic level, with particular attention assigned to youth unemployment. Subsequently, the microeconomic approach employed in this paper is described by considering the causes for job interview rejections and educational recommendations to minimize this phenomenon.

A major cause of unemployment is population growth; this growth makes it difficult to find full employment in an economy (Biagi and Lucifora 2005). The most vulnerable category to this pressure are young people without work experience. There is a gap between their theoretical training and the practical requirements of the labour market. The causal relationship between unemployment and population growth has been also analysed, and a bidirectional causal relationship has been observed (Dănciă and Mazilescu 2014). High unemployment can stimulate population growth, as individuals with a low level of education and who cannot find a job can contribute to birth rate growth.

Another demographic cause of unemployment is labour migration and population aging. Emigration leads to rising unemployment in destination countries, but labour market tensions in countries of origin can be reduced. On the other hand, demographic aging leads to several social problems and causes rising unemployment among young adults (Vučković and Škuflić 2021). Unemployment can also increase when there is a large number of mature adults who apply for jobs after long breaks in employment or without any previous work experience.

The unfavourable development of the economy, accentuated by the lack of skills needed in the workplace, is an important cause of job losses. The gap between the requirements of employers and the lack of adequate professional training results in structural unemployment. As the level of education required for the workforce increases, fewer employment opportunities for under-educated people are available. Unemployment can also be caused by rising general employer-specific production costs that prevent an acceptable level of wages. Under these conditions, employees can search for better paid jobs. In the context of an economic crisis, restructuring or a pandemic, the number of employees can be reduced. Higher youth unemployment contributes to poverty enhancement, as Sánchez (2022) stated. During an economic crisis, this relationship becomes more intense, while during the expansion of the economy, unemployment and poverty reduce (Sánchez 2019).

Accelerated technological progress in recent decades has been a major determinant of unemployment due to the existence of advanced technologies that successfully replaced unskilled or low-skilled labour. Production speed and quality increase, but at the cost of losing jobs (Castellani and Roca 2021). The most vulnerable categories of unemployment are low-skilled and under-educated individuals whose jobs are replaced by automated processes. On the other hand, technological progress generates new jobs, especially in developed countries. Empirical results in the literature suggest a direct correlation between the degree of technical progress, job creation and employability (Karaliūtė 2019). However, the lack of adaptation to the requirements brought about by technological progress due to the lack of an efficient labour retraining system generates unemployment (Cords and Prettnier 2022).

The causes of rising youth unemployment have been the subject of much research since the late 1970s, especially in the context of the global economic crisis. The determinants of youth unemployment are mentioned by Quintini and Martin (2006): low level of education in the case of a large proportion of young people, structural problems specific to the labour

market, and the lack of skills required by employers. All these causes make the transition from one form of education to another difficult.

The difficulties of entering the labour market and unemployment were initially explained by excess labour supply because of the high birth rate recorded after the Second World War. Subsequently, even after these cohorts decreased, youth unemployment continued to rise. Research focused on the issues that characterize the education system and the labour market (Ahn and Hamilton 2022). Dietrich (2012) identified rigidities related to employment policies and labour market opportunities and proposing a European program to stimulate the mobility of young people for work. Improving the mobility of young people has been one of the objectives of the Europe 2020 Strategy, alongside ensuring quality education and supporting the employment of young people.

The rigidity of the Romanian labour market has led to rising unemployment, and subsequently led to the expansion of the informal sector and international migration. Young people represented the most mobile group of emigrants due to their independence from their family and aspirations regarding their professional career and income (Shi and Wang 2022). Despite intense emigration, the unemployment rate in Romania remains high. To avoid youth unemployment, it is necessary to better understand the issues in communication between potential employees and employers. There are multiple causes of rejection after job interviews. Several previous studies have considered the reasons mentioned by applicants rather than employers; this might be subjective, but these reasons provide an important piece of information related to the knowledge of managers' expectations (Boswell et al. 2003). On the other hand, Dlugos and Keller (2021) showed that external candidates have a greater chance of rejection when compared to internal candidates applying for another position in the company. Naroş (2018) showed that job interview rejection in Romania depends on demographic factors, type of university attended, and knowledge of job requirements. Bencze (2008) reported gender discrimination in the post-socialist economy of the Romania in regard to labour market insertion. A candidate's level of education and age are taken into account by Romanian employers when deciding to offer a job to a young candidate (Turnea 2018). In addition, the cultural features of the candidates are important for managers in transnational and multinational corporations (Gulea and Constantinescu-Stefanel 2002).

Considering these studies for Romania, the following hypothesis is formulated:

H1: *Job interview rejection is conditioned by age, gender, aging, type of university attended, and knowledge of job requirements.*

Given this issue of interview rejection, solutions should be provided to avoid such a situation. There are practical recommendations related to specific employers as well as educational recommendations that should be considered by universities. In this context, some practical recommendations are offered to avoid job interview rejection, including better knowledge of organizational structures and site-visit arrangements and follow-ups (Boswell et al. 2003). In our study, the objective is to focus on educational recommendations. Naroş (2018) indicated proposals related to improvement in the quality of education, including better educational programs and teaching strategies in line with the requirements of labour market, higher quality of internships, and the internationalization of education. X (2021) showed that more internships should be organised, that and digital entrepreneurship should be promoted. A permanent internship platform is useful for connecting educational providers with employers and potential employees. In this study, the second hypothesis considered is:

H2: *the chances of job interview rejection could be reduced by improvements in overall education provided to students. The following proposal should be considered: better and more up-to-date educational programs, better teaching strategies, and courses taught by foreign professors and experts from practice.*

This hypothesis is analyzed by considering factors related to gender and type of university attended (private or public). The two hypotheses are discussed in the next sections, beginning with the results of our sample.

3. Data and Methodology

In order to explain some of the causes of unemployment among young graduates, the difficulties of insertion into the labour market by master's students with specializations related to economics are analysed based on a survey. The data collected using an online survey cannot ensure the representativeness of the sample, and the selection is quasi-random because of probabilistic sampling based on volunteering. The use of an online questionnaire has the advantage of a low cost for data collection, but it is necessary to verify whether the selected sample is representative of the population of master's students in Economics from Bucharest according to the type of university attended (public/private).

Data collection was carried out between October 2022 and November 2022 and targeted master's students in Economics from two public universities (Bucharest University of Economics and the University of Bucharest) and two private universities (Dimitrie Cantemir University and Spiru Haret University) in Bucharest. The analysed population is represented by all master's students at these universities who follow a study program in Economics; its volume in the 2022/2023 academic year was around 11,824 students. Considering the 'type of university attended' characteristic, the volume of the master's degree sample (n) is calculated. The type of university attended is a binary variable with two possible values: public university and private university. The population is not homogeneous according to this variable and the mean of the binary variable is equal to 0.5 ($p = 0.5$), while the variance is $p(1 - p) = 0.25$. For the significance level of 5%, $z = 1.96$, and the maximum permissible error is considered to be $\pm 5\%$.

$$n = \frac{z^2 \cdot p(1-p)}{\Delta_w^2 + \frac{z^2 \cdot p(1-p)}{N}} = \frac{1.96^2 \cdot 0.25}{0.05^2 + \frac{1.96^2 \cdot 0.25}{11,824}} = \frac{0.9604}{0.0025 + 0.0000812246} = \frac{0.9604}{0.0025812246} \cong 370 \text{ master students}$$

N —population volume

p —mean of the binary variable *type of university* in the population

Δ_w —maximum permissible error

z — z score (confidence level for 95% probability).

A z test was applied to verify the representativeness of the selected sample of 370 master's students. In this group, 280 master's students attended the mentioned public universities and the rest from the mentioned private universities.

The proportion of master's students from public universities in the total number of students in the sample (w) is 75.68%, and the proportion in the population (p) is 74.21%.

The hypotheses of the z test are:

Null hypothesis: $w = p$.

Alternative hypothesis: $w \neq p$.

The calculated value of the test statistic is:

$$z_{\text{calculated}} = \frac{w - p}{\sqrt{\frac{p \cdot (1-p)}{n}}} = \frac{0.7568 - 0.7421}{\sqrt{\frac{0.5507}{370}}} = \frac{0.0147}{0.03857} = 0.3811$$

In this case, $|z_{\text{calculated}}| < 1.96$ and the null hypothesis is rejected at a 5% significance level. Therefore, the selected sample of students is representative for population according to the type of university attended.

The questionnaire consists of questions related to demographic characteristics (age, gender, type of university graduated at bachelor's level (public/private), and the type of

university they enrolled in for master's studies (public/private)). It also asked questions concerning the respondent's status in the labour market, the existence of seniority before bachelor's graduation, the knowledge of employers' requirements in the field of activity, the difficulties of integration in the field of work (reasons for interview rejection), and their managers' assessments related to the students capacity to adapt to job requirements.

Respondents indicated one or more reasons for interview rejection if they encountered this difficulty in entering the labour market at least once. The possible answers were:

- unfavourable result on the theoretical test;
- lack of practical skills;
- lack of seniority in work;
- lack of knowledge of the required foreign languages;
- lack of digital skills;
- the presence of better candidates.

The respondent could choose several answers for this question; for each selected answer, a score of 1 was assigned. Finally, a score was calculated as the sum of the scores corresponding to the answers selected by the respondent. This new variable was denoted by *score*. The questionnaire is presented in Appendix A.

The measurement of the internal consistency between the scale items is based on the Alpha (Cronbach) coefficient. For the question about the causes of interview rejection, Cronbach's Alpha coefficient was 0.874, indicating a good consistency.

The primary limitation of this research was the lack of representativeness of the sample at the national level; however, the conclusions based on this survey are useful for identifying barriers that make it difficult for Economics graduates to enter the labour market.

The statistical analysis of the data collected using the questionnaire provides information on the distribution of students in the group by demographic characteristics, including age and gender, seniority, type of university attended for the bachelor's degree (public/private), and type of university attended for master's studies (public/private). The age of the surveyed master's students was between 22 and 32 years old; 54.59% were 24 years old, 68.37% of the students were female and the rest male, 75.68% were master's students from public universities and the rest were from private universities, 81.62% of them graduated from a public university at the bachelor's level, and 67.34% of them had seniority at the end of their bachelor's studies. Lack of seniority in work was specified among the reasons for interview rejection by 81.89% of the master's students.

The methodology aims to describe two types of methods corresponding to the research objectives. The first method is ANOVA/linear Dependent Dirichlet Process mixture model (Analysis of variance/mixed linear DDP model). This method was used to explain the score associated with interview rejection causes by groups of students according to gender, type of university attended at the bachelor's level, seniority, and knowledge of employers' requirements in the field. The second method, known as the probabilistic rank ordered probit model, was employed to evaluate the suggestions by managers to improve the quality of education provided by universities.

These non-parametric Bayesian regressions are an extension of the regression models in the frequentist Econometrics. In the traditional approach, Y is a set of responses and X includes the predictors. In the non-parametric Bayesian approach, the aim is to model the distribution associated to y if x is known. The basic idea of this approach is to consider that the effect of different predictors is restricted to change any specific functional for the response distribution, such as quantile, mean, or the parameters that appear in a generalized linear model (Quintana et al. 2022).

If the dependent variable $y = (y_1, \dots, y_n)^T$ is given by the scores associated to interview rejection, the set of explanatory variables $X = ((1, x_i^T))_{n \times (p+1)}$ refer to gender, seniority, knowledge of the job requirements, and type of university attended, where $i = 1, \dots, n$ is the index for students in the sample. For a model with p variables and intercept, $x = (1, x_1, \dots, x_p)^T$, $(p+1)$ coefficients should be estimated $\beta = (\beta_0, \beta_1, \dots, \beta_p)^T$.

The variance of the errors is σ^2 . The probability density associated to normal distribution $N(\mu, \sigma^2)$ is $n(y|\mu, \sigma^2) = \frac{1}{\sigma\sqrt{2\pi}} \exp(-\frac{(y-\mu)^2}{2\sigma^2})$. The likelihood function for y given x is based on parameters $\theta = (\beta, \sigma^2)$ is $f(y_i|x; \theta)$.

The general form of the Bayesian non-parametric model is the one used by X (2022):

$$f(y|x; \theta) = \int f(y|x, \tau, \theta) dG_x(\theta) = \sum_{j=1}^{\infty} f(y|x, \tau, \theta_j(x)) \omega_j(x) \quad (1)$$

$\{f(\cdot|x, \tau, \theta)\} : (\theta, \tau) \in \Theta$ kernel densities

$\omega_j(x)$ mixed weights of unit sum for any $x \in \mathcal{X}$

$\delta_{\theta(x)}(\cdot)$ probability degenerating at $\theta(x)$

τ —other coefficients that are not part of mixed function

$\{\omega_j(x)\}_j, \{\theta_j(x)\}_j$ infinite collections of processes after \mathcal{X}

More details on this type of Bayesian models are provided in Quintana et al. (2022). From a total number of 20,000 generated samples, excluding 2000 burn in samples, 3600 Monte Carlo samples are considered.

The rank ordered probit model considers preferences in terms of utility for each alternative i : U_{qi} . Students were asked to order all the possible alternatives. The dependent variable is an ordinal variable indicating the preference among various alternatives.

$$U_{qi} = \beta_q' x_{qi} + \varepsilon_{qi} \quad (2)$$

$$\beta_q = b + \tilde{\beta}_q \quad (3)$$

$$\tilde{\beta}_q \rightarrow MVN_L(0, \Omega) \quad (4)$$

$x_q = (x_{q1}, x_{q2}, \dots, x_{qI})$ ($I \times H$) matrix

x_{qi} —vector for explanatory variables, including intercept ($H \times 1$)

Λ —matrix

$U_q = (U_{q1}, U_{q2}, \dots, U_{qI})$ vector ($I \times 1$)

β_q —vector for specific individual effects ($H \times 1$)

$\beta_q \sim N(b, \Omega)$

$\varepsilon_q \sim N(0, \Lambda)$

4. Results and Discussion

Before estimating the Bayesian models, all variables in the model are normalized. The intraclass correlation coefficient denoted by ICC shows the proportion of variation in the scores associated with interview rejection, determined by the heterogeneity between groups. On average, 44.6% of the variation in scores is due to the differences between public and private universities. Table 1 shows the marginal posterior distributions of the estimates' robustness associated with the random slopes of the groups. Betas are the slopes of the regression in Equation (2). The scores related to interview rejection represent the dependent variable. The students are grouped by different characteristics (gender, university, seniority, and acknowledgment of employees' requirements).

There are differences between scores of students from private and public universities according to gender; this suggests the existence of rigidities of the labour market, such as gender discrimination. Gender discrimination for Australian graduates in the period from 1999 to 2009 was analyzed by Li and Miller (2012), who detected a lower gender wage gap for older and male graduates with work experience when compared to younger and female graduates.

There are differences in the scores related to interview rejection between males and females according to age and university. This shows that older students with more labour

aging and graduates of public universities have a lesser chance of rejection at interview when compared to younger students from private universities. These results are in line with the findings of [Stypińska and Nikander \(2018\)](#), who argue that older graduates already in employment are more likely to be hired due to seniority when compared to young graduates without experience.

Table 1. The results of the posterior estimates robustness for explaining the scores associated to interview rejection.

Grouped by:	Parameter	Mean	25%	75%
University	β (requirements, public university)	0.098	−0.397	0.516
	β (requirements, private university)	0.086	−0.406	0.516
	β (age, public university)	0.027	0.049	−0.011
	β (age, private university)	0.032	0.065	−0.019
	β (gender, public university)	0.526	0.145	0.998
	β (gender, private university)	0.525	0.130	1.002
	β (aging, public university)	−0.288	−0.610	−0.022
	β (aging, private university)	−0.294	−0.631	−0.022
Gender	β (requirements, male)	−0.149	−0.548	0.137
	β (requirements, female)	−0.138	−0.538	0.138
	β (age, male)	0.071	0.058	0.096
	β (age, female)	0.076	0.063	0.099
	β (university, male)	−0.533	−1.053	−0.046
	β (university, female)	−0.537	−1.049	−0.051
	β (aging, male)	−0.227	−0.448	0.017
	β (aging, female)	−0.231	−0.449	0.012
Acknowledgment of employees' requirements	β (age, know requirements)	0.068	0.009	0.145
	β (age, do not know requirements)	0.067	0.009	0.137
	β (gender, know requirements)	0.814	0.431	1.262
	β (gender, do not know requirements)	0.822	0.471	1.262
	β (university, know requirements)	−0.567	−0.916	−0.163
	β (university, do not know requirements)	−0.569	−0.919	−0.168
	β (aging, know requirements)	−0.059	−0.404	0.245
	β (aging, do not know requirements)	−0.064	−0.409	0.256
Seniority	β (age, no aging)	0.010	−0.025	0.030
	β (age, aging)	0.011	−0.027	0.031
	β (gender, aging)	0.567	0.278	0.953
	β (gender, no aging)	0.566	0.287	0.959
	β (university, aging)	−0.613	−0.962	−0.109
	β (university, no aging)	−0.611	−0.109	−1.566
	β (requirements, aging)	0.083	−0.337	0.592
	β (requirement, no aging)	0.081	−0.337	0.514

The differences between the scores of students that know and do not know employers' requirements are explained by age, gender, and type of university attended. The results confirm gender and age discrimination by employers and the greater appreciation that

employers assign to graduates from public universities. Gender and type of university attended explain the differences in the scores related to interview rejection between students with seniority and without seniority. Gender discrimination in the labour market is also an issue for developed countries such as the USA and China (Shaffer et al. 2000), where this phenomenon is associated with stress and turnover intensity. In conclusion, the results based on non-parametric Bayesian models confirm the rigidities in the Romanian labour market mentioned in other studies: work experience is required even for young graduates, gender discrimination is present, and there is a preference for graduates of public universities (Naroş 2018, 2019).

The students were asked to express their preferences about improvements in university education to help graduates better integrate into labour market. The case-specific covariates are represented by *female* and *private university*. The variants “significant” and “non-significant” indicate whether the employed student’s manager at an actual job considers each option as being relevant or non-relevant for that job. Therefore, these variants are used to construct the variable *manager*, with three possible options expressed by them regarding each possibility to improve university education: significant, less significant, or neither. The alternatives are denoted from 1 to 6, where 1 is the most preferred option and 6 the least preferred (Table 2). The six alternatives are represented by:

- The educational programs are good enough;
- Better organized internship is necessary;
- Private experts should teach some lectures;
- The educational program should be updated;
- Teaching strategies should be improved;
- Foreign professors should teach some lectures.

Table 2. The results of rank-ordered probit choice model.

Rank	Coefficient	p-Value
Choices (base alternative: the educational programs are good enough)		
Significance expressed by manager		
Neither	0.192	0.000
Significant	0.269	0.000
Better organized internship is necessary		
Female	−0.518	0.138
Private university	0.254	0.437
Constant	−2.511	0.000
Private experts should teach some lectures		
Female	−0.312	0.036
Private university	0.463	0.016
Constant	−2.679	0.000
Educational program should be updated		
Female	−0.780	0.014
Private university	0.373	0.021
Constant	−1.710	0.000
Teaching strategies should be improved		
Female	−0.709	0.001
Private university	0.879	0.064
Constant	−0.211	0.214
Foreign professors should teach some lectures		
Female	−0.758	0.000
Private university	0.314	0.047
Constant	0.271	0.067

Source: Own calculations in Stata 16.

Gender and university are not relevant in explaining the choices of the students that consider better internship as the most important objective for the transition from school to work. Females and students from private universities are more eager to select the other alternatives. Previous studies confirm that internships are beneficial for all students that make contact with employers and understand their requests, as [Knouse and Fontenot \(2008\)](#) pointed out. Compared to men, women are more oriented towards theoretical tasks rather than the practical tasks imposed by internship; this might explain the preference of females for the other alternatives. According to [Wilger \(1997\)](#), the quality of the educational process has several dimensions that are followed by universities, but student satisfaction should also be considered as an element of this assessment in order to help professors perform better. The students' probabilities of choosing a certain option as the best are displayed in the following table (see Table 3):

Table 3. Students' probabilities of ranking first a certain option (expected choice probabilities).

Option	Expected Probability	<i>p</i> -Value
The educational programs are good enough.	0.001	0.234
Better organized internship is necessary.	0.470	0.000
Private experts should teach some lectures.	0.319	0.000
Educational programs should be updated.	0.079	0.057
Teaching strategies should be improved.	0.015	0.061
Foreign professors should teach some lectures.	0.116	0.000

Source: own calculations in Stata 16.

Better internship shows the greatest probability to be ranked first (0.47), while private experts teaching some lectures has the second greatest probability of being ranked first (0.319) (see Table 4). On the other hand, the lowest probabilities were computed for the variants related to updating educational programs and teaching strategies. These results indicate that students consider practical experience as a vital opportunity to ensure a faster transition into the labour market, while the theoretical issues related to educational programs are less important from this point of view. These findings might help professors to adjust their lectures to focus more on practical issues that support the school-to-work transition. Similar results were obtained by [Urquía-Grande and Perez Estebanez \(2020\)](#) for Spanish students in Economics and Business. Those students were more satisfied by internship when compared to theoretical background delivered from courses. Starting from this result, academics should improve the design internships and ensure best practices. For each option, we are interested in calculating its probability to be significant to a manager.

Table 4. Students' probabilities of ranking a certain option that is considered significant by the manager first.

Option	Expected Probability	<i>p</i> -Value
The educational programs are good enough.	0.003	0.238
Better organized internship is necessary.	0.555	0.000
Private experts should teach some lectures.	0.328	0.000
Educational programs should be updated.	0.098	0.000
Teaching strategies should be improved.	0.007	0.068
Foreign professors should teach some lectures.	0.009	0.068

Source: Own calculations in Stata 16.

We expect that 55.5% of the students whose managers consider internship to be significant would rank better internship as the most important improvement for faster transition from faculty to work. Of the employed students whose managers consider having private experts deliver lectures to be significant, we expect that 32.8% would rank this preference as a priority.

These results are in line with those of [Urquía-Grande and Perez Estebanez \(2020\)](#) for Economics and Business students from Spain. For example, the cognitive skills, written skills, and creativity that are required by managers are not well developed in students; as such, universities should help students to improve these features to ensure a better integration into the labour market. Internalisation is not prioritised enough in Romania, but students would prefer to have foreign professors visit Romania using Erasmus +, for example, rather than travelling to study in other countries. On the other hand, systems and structures should be improved to facilitate internalisation in universities ([Dewey and Duff 2009](#)).

All these results have practical implications and policy value. Internships are more useful than courses in the attempt to integrate into the labour market. However, these internships should be improved to meet the students' expectations. The benefits of better internships are related to the development of transversal skills. At a global level, successful internships will contribute to sustainable development, social innovation, and competitiveness. Government policies should ensure the financing of companies and public institutions that receive students for internships. In this context, managers will be more motivated to support the students during the internship. Moreover, additional support should be made available for companies that hire the students that completed internships with them. In addition, professors should be informed about the requirements of company managers and support their students to meet these expectations.

5. Conclusions

This paper is based on the analysis of survey data to identify factors explaining interview rejections and the perceptions of managers related to necessary improvements in the education of economists to better respond to labour market requirements. An online questionnaire was used to collect data related to the demographic characteristics of students (age, gender), the university attended at bachelor's level, and the university attended at master's level. The results confirmed some labour market rigidities related to gender, seniority, and type of university attended. Better internships are suggested to be vital by managers for faster transition from education into work.

A reform of the Romanian education system is needed. This can be achieved by developing a flexible curriculum focused on labour market requirements. It is also necessary to allocate graduates by professional qualifications and occupational structures. More investment in education and the continuing education of graduates and professors using structural funds is necessary to support the entrepreneurial initiatives of young graduates.

Only master's students from the selected faculties in Bucharest in the field of Economics were included in the study, as this educational profile has registered a significant increase in recent years, especially in private universities. Therefore, there is a rich educational offer for these study programs, but to what extent the skills of these graduates correlate with market requirements and jobs availability should be assessed. The study is limited to a few universities in Bucharest; as such, the sample is not representative at the national level. This is due to high costs and time constraints. Therefore, a future study should include more universities from the entire country to ensure a representative sample.

The empirical analysis is limited to the identification of some causes of the difficult entry into the labour market of Economics students using only microeconomic data and only two universities. Subsequent research will analyse the unemployment rate among young people with higher education in Romania based on macroeconomic data, including the explanatory variables of economic growth, the number of emigrants, and the number of unemployed beneficiaries of vocational training programs. The students' perception of the reasons for interview rejection is subjective. This is because employers do not

want to hurt job applicants (e.g., applicants are not from top universities), or they do not want to be accused by applicants. (e.g., racial discrimination, gender discrimination, age discrimination, etc.). A limitation of this study is the fact that the objective cause of rejection by employers was not known; instead, the subjective opinions of master's students were collected, based on possible reasons presented in the questionnaire. However, around 80% of the students' responses can be considered to be reliable.

More universities should be considered in a future study in order to make comparisons and check if students from the top-ranked universities have the same difficulties as students from middle-ranked or lower-ranked universities.

Funding: This research is part of the research plan of the Institute for Economic Forecasting of the Romanian Academy for 2023 with the title: "Unemployment among higher educated young people from Romania".

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of the University of Bucharest (52/09.05.2022). for studies involving humans.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data are available by request.

Conflicts of Interest: The author declares no conflict of interest.

Appendix A

Questionnaire

1. Please, write your gender:
2. Your age is:
3. Indicate the type of university graduated in the bachelor:
 - (a) public university;
 - (b) private university.
4. Indicate the type of university graduated you enrolled in for master studies:
 - (a) public university;
 - (b) private university.
5. What is your status on labour market?
 - (a) employed;
 - (b) non-employed.
6. Do you know employers' requirements in the field of activity?
 - (a) Yes;
 - (b) No.
7. What is your seniority (aging) on labour market (in years)?
8. If you were rejected at job interview, what are the reasons for interview rejection?
 - (a) unfavourable result at the theoretical test;
 - (b) lack of practical skills;
 - (c) lack of seniority in work;
 - (d) lack of knowledge of the required foreign languages;
 - (e) lack of digital skills;
 - (f) the existence of better candidates.
9. Rank the following suggestions to improve your insertion to labour market (1 for the most important) and indicate if it is significant for your manager or not:
 - The educational programs are good enough; significant/less significant, neither;
 - Better organized internship is necessary; significant/less significant, neither;

- Private experts should teach some lectures; significant/less significant, neither;
- Educational program should be updated; significant/less significant, neither;
- Teaching strategies should be improved; significant/less significant, neither;
- Foreign professors should teach some lectures. significant/less significant, neither.

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