

Who expects high salaries? A pilot survey of salary expectations and academic achievements of Accounting and Controlling students*

Bartosz Kurek¹
Ireneusz Górowski²

Cracow University
of Economics, Poland
College of Management
and Quality Sciences

ORCID: ¹ 0000-0002-8554-2874
² 0000-0002-2866-7857

Abstract: University graduates are entering the labour market and they expect to be rewarded for their accumulated knowledge and skills. The levels of these assets vary. Students also differ in their salary expectations. The aim of the paper is to investigate the relationship between salary expectations of Accounting and Controlling students and their current educational achievements. The research methods used in this paper include: analysis and critique of literature, statistical tests (Shapiro–Wilk W test, Wilcoxon signed-rank test, Spearman rank correlation), econometric modelling (models are estimated by OLS and Huber/White robust standard errors are used to assess statistical significance of each parameter). We conduct a survey among full-time Accounting and Controlling students from Cracow University of Economics. Our pilot sample comprises of 59 respondents who are second year students. The analysis of our econometric models reveals that GPA and language certificates are significantly associated with expected salary. However, there is a puzzle which manifests itself in a negative relationship between expected salary and GPA, even after controlling for holding a foreign language certificate.

Key words: salary expectations, educational achievements, GPA, language certificate

1. Introduction

Tertiary education provides professional training in all fields of study, e.g. accounting, business, management, law, pharmacy, medicine. It is not an exaggeration to claim that university-level education allows to gain comprehensive training—starting at the basic level (bachelor), going through the intermediate level (master), and ending at the most advanced level (doctorate).

It is believed that employers reward professional knowledge and skills. Therefore university graduates may expect to receive a fair salary that would be adequate to their education and professional experience—compare Dobija (2011), Hołda and Ren-

Correspondence to:
Bartosz Kurek
Uniwersytet Ekonomiczny
w Krakowie
Kolegium Nauk o Zarządzaniu
i Jakości
Instytut Zarządzania
Katedra Rachunkowości
ul. Rakowicka 27
31-510 Kraków, Poland
Tel.: +48 12 293 55 29
E-mail: kurekb@uek.krakow.pl

* The publication was financed from the subsidy granted to the Cracow University of Economics.

kas (2015), Koziół (2011), Koziół and Mikos (2019), Renkas (2013), Sulich (2015). By the same token current students may expect that they would receive such a salary after graduation. It is reasonable to assume that current students directly project their salaries through observation and expectation. The former are the observed salaries of the most recent graduates. These salaries are provided to current students by their older colleagues from the university and/ or by institutions preparing salary reports. The latter are current students' expectations of salaries for most recent graduates. These salaries are merely a guess, which may be an accurate or an inaccurate one.

Current students differ in terms of salary expectations for current graduates, as these are just suppositions and they cannot be identical among all students. However, some groups of students expect higher salaries than other groups. Salary expectations are subjective assessments of students self-worth at the labour market—the worth that is relevant to their knowledge and skills. The concept of self-esteem might incorporate—*inter alia*—the perception of employability.

The aim of the paper is to investigate the relationship between salary expectations of Accounting and Controlling students and their current educational achievements.

The research methods used in this paper include: (1) analysis and critique of literature; (2) statistical tests (Shapiro–Wilk W test—test for normality, Wilcoxon signed-rank test—test for the differences between medians, Spearman rank correlation—test for correlation between variables); (3) econometric modelling (regression analysis with Huber–White robust standard errors). The following software was used: *Stata/IC 14.1* for statistical tests and econometric modelling and *Microsoft Office Excel 2013* for initial data filtering and descriptive statistics.

We contribute to the scientific debate by measuring and explaining the relationship between Accounting and Controlling students' salary expectations and their educational achievements. In our research we include variables that were not investigated in Polish literature. Furthermore, we analyze the most recent data, which is important because of recent significant changes at the labour market. Our pilot survey findings are contrary to the current state of knowledge that better performers (i.e. students with higher GPA) should demand and expect higher salaries. We find out that students with higher GPA have lower salary expectations than students with lower GPA. This puzzle that emerges from the pilot survey requires further detailed studies, plans for which we outline at the end of the paper. We also find that students who hold a foreign language certificate demand and expect higher salaries, which would confirm the current state of knowledge that better performers (i.e. holders of foreign language certificates) should demand and expect higher salaries.

Results of our research are important for numerous groups of readers. Scientists who are examining salaries at the labour market may be interested in knowing the expectations of students. Current students may be interested in positioning their salary expectations compared to the group in which they are studying. Current students may be also interested in comparing the expectations of the whole group to the offers at the labour market. Employers may be interested in knowing the level of salaries expectations.

The paper is organized as follows: section 1 covers introduction, section 2 contains brief literature review, section 3 includes research methodology, section 4 describes data, section 5 analyzes results, and section 6 concludes. List of references follows the last section.

2. Related literature

A number of research studies confirm a positive correlation between self-esteem and academic performance¹ (Baumeister, Campbell, Krueger and Vohs, 2003, p. 10). Similarly, there is an evidence for a positive relationship between self-esteem and earnings (Drago, 2011, p. 480). Therefore it is reasonable to expect a positive correlation between academic performance and earnings. Research studies confirm such an association (Oehrlein, 2009, p. 22). GPA is a measure of academic performance. It is also known that GPA is a valid predictor of job performance (Roth, BeVier, Switzer III and Schippmann, 1996, p. 553). Roth and Clarke (1998, pp. 387–388) recall a number of reasons why grades should be related to salary. An interesting review of literature on the relationship between college grades and adult achievement is presented by Hoyt (1965). Interestingly, Thibadoux, Scheid and Tefeteller (2014, p. 143) argue that there are no significant differences between higher and lower GPA accounting graduates in regard to job and career satisfaction.

Poteralski (2008) analyzes students salary expectations from the first job and confronts these with threshold salary and satisfying salary. Salary expectations were not related to students achievements.

Jakubiak (2012) analyzes salary expectations in various conditions: just after graduation, 10 years after graduation, currently if a student quits university without graduation, 10 years after quitting studies without graduation. The author differentiates salaries expectations between genders, level of mother's education, level of father's education, material status. However, no econometric model was constructed.

Stańdo-Górowska (2014) confronts salary expectations with theoretical salary derived from the human capital theory. Similarly to other authors, Stańdo-Górowska did not relate salary expectations to students achievements.

Another analysis of students salary expectations was conducted by Sulich (2015), who researched a group of students from Wrocław University of Science and Technology. He noticed that respondents differ in their salary expectations depending on their faculty. The author did not relate salary expectations to students achievements.

Renkas (2018, pp. 32–35) analyzes expected salaries among people who were seeking employment in Ukraine. This author finds an association between expected salary (dependent variable) and age and years of professional education (independent variables).

3. Research methodology

The brief literature review leads us to the hypothesis that there should be observable positive relationship between salary expectations and academic achievements of Accounting and Controlling students. We operationalize the research hypothesis by measuring salary expectations and academic achievements of students and then evaluating the relationship among the variables. In order to measure the variables, we present students with a particular scenario and then ask them a number of questions. In order to measure salary expectations of students, we show them the following scenario and ask them a set of questions:

¹ Other noncognitive predictors of academic success are some of the Big Five personality factors. For example conscientiousness correlates with grades (Trapmann, Hell, Hirn and Schuler, 2007, p. 132).

A student graduates from Cracow University of Economics in 2019. The student has a full-time contract of employment. According to you what should be the minimum net salary that would be adequate to educational background and professional experience of a:

- a) *graduate with a bachelor's degree in Accounting and Controlling without any professional experience in accounting, controlling or finance?*
- b) *graduate with a bachelor's degree in Accounting and Controlling with three years of professional experience in accounting, controlling or finance?*
- c) *graduate with a master's degree in Accounting and Controlling without any professional experience in accounting, controlling or finance?*
- d) *graduate with a master's degree in Accounting and Controlling with three years of professional experience in accounting, controlling or finance?*

It is important to note that survey participants are current students of Accounting and Controlling major. Therefore, we may anticipate that the provided salaries are expectations of their future salaries that are given in current values (not to confuse it with present value or future value).

We measure educational achievements by two proxies: grade point average (GPA) and holding a foreign language certificate. GPA is the arithmetic average of all grades from the previous academic year. At Cracow University of Economics the following grading system scale is in force: one failing grade (2.0) and six passing grades (3.0, 3.5, 4.0, 4.5, 5.0, 5.5). If a student receives a failing grade, s/he has to retake the course and eventually has to receive a passing grade.

To empirically verify our general hypothesis, we set out four simple econometric models and four extended econometric models in which we control for holding a foreign language certificate, which is also one of the measures of student's commitment towards education. We present these models in Table 1.

Table 1. Econometric models

Simple models	
Simple Model 1a	$Salary\ B/NE = \beta_0 + \beta_1\ GPA + \varepsilon$
Simple Model 2a	$Salary\ B/E = \beta_0 + \beta_1\ GPA + \varepsilon$
Simple Model 3a	$Salary\ M/NE = \beta_0 + \beta_1\ GPA + \varepsilon$
Simple Model 4a	$Salary\ M/E = \beta_0 + \beta_1\ GPA + \varepsilon$
Extended models	
Extended Model 1b	$Salary\ B/NE = \beta_0 + \beta_1\ GPA + \beta_2\ Certificate + \varepsilon$
Extended Model 2b	$Salary\ B/E = \beta_0 + \beta_1\ GPA + \beta_2\ Certificate + \varepsilon$
Extended Model 3b	$Salary\ M/NE = \beta_0 + \beta_1\ GPA + \beta_2\ Certificate + \varepsilon$
Extended Model 4b	$Salary\ M/E = \beta_0 + \beta_1\ GPA + \beta_2\ Certificate + \varepsilon$

Notes: Salary B/NE—expected net salary for the graduate who completed Accounting and Controlling bachelor studies and does not have any professional experience (in PLN), Salary B/E—expected net salary for the graduate who completed Accounting and Controlling bachelor studies and has three years of professional experience (in PLN), Salary M/NE—expected net salary for the graduate who completed Accounting

and Controlling bachelor and master studies and does not have any professional experience (in PLN), Salary M/E—expected net salary for the graduate who completed Accounting and Controlling bachelor and master studies and has three years of professional experience (in PLN), GPA—grade point average, Certificate—holding a foreign language certificate (1—yes, 0—no).

S o u r c e: Authors' own deliberations.

4. Data description and initial analysis

The survey was conducted on 1 October 2019 among full-time students who studied Accounting and Controlling major at Cracow University of Economics (bachelor studies, second year, third semester). In total 100 questionnaires were distributed among participants of the Financial Accounting course. All of the students returned the questionnaires, however, not all of the questionnaires were fully filled out. There were 59 questionnaires which contained all required information that was necessary for this pilot research (41 questionnaires lacked some of the relevant answers, such as GPA).

Table 2 presents descriptive statistics (minimum, maximum, average, standard deviation—SD, coefficient of variation—CV, first quartile—Q1, median, third quartile—Q3, skewness, kurtosis, number of observations—*n*) for each of the variable in the analyzed sample. Salaries are given in PLN. Table 3 presents the outcome of normality test (Shapiro–Wilk *W* test) for all of the variables in the analyzed sample. All but one of the variables are not normally distributed. As one might expect it is GPA, which is normally distributed.

Table 2. Descriptive statistics of variables

Variable	Salary B/NE	Salary B/E	Salary M/NE	Salary M/E	GPA	Certificate
Minimum	2000	2500	2500	3000	3.44	0
Maximum	5000	8000	8000	15,000	5.11	1
Average	2954	4069	4164	5832	4.20	0.10
SD	671	1154	1023	2264	0.34	0.30
CV	22.7%	28.4%	24.6%	38.8%	8.1%	297.2%
Q1	2500	3500	3500	4500	4.00	0.00
Median	3000	4000	4000	5700	4.20	0.00
Q3	3000	4500	5000	7000	4.40	0.00
Skewness	1.0	1.3	1.0	2.2	0.0	2.7
Kurtosis	1.6	1.9	2.2	7.4	-0.2	5.5
<i>n</i>	59	59	59	59	59	59

N o t e s: Salary B/NE—expected net salary for the graduate who completed Accounting and Controlling bachelor studies and does not have any professional experience (in PLN), Salary B/E—expected net salary for the graduate who completed Accounting and Controlling bachelor studies and has three years of professional experience (in PLN), Salary M/NE—expected net salary for the graduate who completed Accounting and Controlling bachelor and master studies and does not have any professional experience (in PLN), Salary M/E—ex-

pected net salary for the graduate who completed Accounting and Controlling bachelor and master studies and has three years of professional experience (in PLN), GPA—grade point average, Certificate—holding a foreign language certificate (1—yes, 0—no). Descriptive statistics for Salaries are rounded to the nearest currency unit, whilst descriptive statistics for GPA and Certificate are rounded to two digits after a comma.

S o u r c e: Authors' own computations.

Table 3. Shapiro–Wilk W test results for variables

Variable	Salary B/NE	Salary B/E	Salary M/NE	Salary M/E	GPA	Certificate
p-value	0.00338	0.00025	0.00520	< 0.00001	0.96394	< 0.00001
Normality	Rejected	Rejected	Rejected	Rejected	Not rejected	Rejected

S o u r c e: Authors' own computations.

Average expected net salary for the graduate who completed Accounting and Controlling bachelor studies and does not have any professional experience equals to PLN 2954 (median equals to PLN 3000). Average expected net salary for the graduate who completed Accounting and Controlling bachelor studies and has three years of professional experience equals to PLN 4069 (median equals to PLN 4000). Average expected net salary for the graduate who completed Accounting and Controlling bachelor and master studies and does not have any professional experience equals to PLN 4164 (median equals to PLN 4000). Average expected net salary for the graduate who completed Accounting and Controlling bachelor and master studies and has three years of professional experience equals to PLN 5832 (median equals to PLN 5700).

All of the respondents valued professional experience² and education (compare Table 4). The difference between the expected salary for the graduate who completed Accounting and Controlling bachelor studies and has three years of professional experience and the expected net salary for the graduate who completed Accounting and Controlling bachelor studies and does not have any professional experience was positive and on average equalled to PLN 1115 (median difference equalled to PLN 1000 and was statistically significant at 1%). The difference between the expected salary for the graduate who completed Accounting and Controlling master studies and has three years of professional experience and the expected net salary for the graduate who completed Accounting and Controlling master studies and does not have any professional experience was positive and on average equalled to PLN 1668 (median difference equalled to PLN 1000 and was statistically significant at 1%). The difference between the expected salary for the graduate who completed Accounting and Controlling master studies and does not have any professional experience and the expected net salary for the graduate who completed Accounting and Controlling bachelor studies and does not have any professional experience was positive and on average equalled to PLN 1210 (median difference equalled to PLN 1000 and was statistically significant at 1%). The difference between the expected salary for the graduate who completed Accounting and Controlling master studies and has three years of professional experience and the expected net

² Contrary to our findings, H. Stańdo-Górowska (2014, p. 58) concludes that students do not value professional experience.

salary for the graduate who completed Accounting and Controlling bachelor studies and has three years of professional experience was positive and on average equalled to PLN 1763 (median difference equalled to PLN 1500 and was statistically significant at 1%). Surprisingly, respondents do not value education more than professional experience. The difference between the expected salary for the graduate who completed Accounting and Controlling master studies and does not have any professional experience and the expected net salary for the graduate who completed Accounting and Controlling bachelor studies and has three years of professional experience was positive and on average equalled to PLN 95. However, the median difference equalled to PLN 0 and was not statistically significant at 10%. In the analyzed sample: 29 respondents valued master studies with no professional experience more than bachelor studies with three years of professional experience, 19 respondents valued master studies with no professional experience less than bachelor studies with three years of professional experience, and 11 respondents valued master studies with no professional experience at the same level as bachelor studies with three years of professional experience.

Table 4. Mean and median differences for net salaries

Variable 1 less Variable 2	Mean difference	Median difference (p-value)
Experience vs. No experience		
Salary B/E less Salary B/NE	PLN 1115	PLN 1000 (p-value < 0.0001)
Salary M/E less Salary M/NE	PLN 1668	PLN 1000 (p-value < 0.0001)
Master vs. Bachelor		
Salary M/NE less Salary B/NE	PLN 1210	PLN 1000 (p-value < 0.0001)
Salary M/E less Salary B/E	PLN 1763	PLN 1500 (p-value < 0.0001)
Master no experience vs. Bachelor experience		
Salary M/NE less Salary B/E	PLN 95	PLN 0 (p-value = 0.1959)

Notes: Wilcoxon signed-rank test was used to verify statistical significance of median differences.

Source: Authors' own computations.

Table 5 presents rank correlation coefficients between variables accompanied by their statistical significance levels. All Spearman rank correlation coefficients for salaries are positive and highly statistically significant, which is an expected outcome for obvious reasons. It is, however, important that GPA is negatively correlated with all expected salaries and Certificate is positively correlated with all expected salaries. Correlations between GPA and all salaries (B/NE, B/E, M/NE, M/E) are statistically significant and correlations between Certificate and three salaries (B/E, M/NE, M/E) are statistically significant.

Table 5. Spearman rank correlation coefficients ρ

	Salary B/NE	Salary B/E	Salary M/NE	Salary M/E	GPA	Certificate
Salary B/NE	1	—	—	—	—	—
Salary B/E	$\rho = 0.8730^{***}$ < 0.0001	1	—	—	—	—
Salary M/NE	$\rho = 0.6657^{***}$ < 0.0001	$\rho = 0.7462^{***}$ < 0.0001	1	—	—	—
Salary M/E	$\rho = 0.6527^{***}$ < 0.0001	$\rho = 0.8532^{***}$ < 0.0001	$\rho = 0.7740^{***}$ < 0.0001	1	—	—
GPA	$\rho = -0.2646^{**}$ 0.0429	$\rho = -0.2238^{*}$ 0.0885	$\rho = -0.2825^{**}$ 0.0302	$\rho = -0.2631^{**}$ 0.0441	1	—
Certificate	$\rho = 0.1912$ 0.1469	$\rho = 0.2607^{**}$ 0.0461	$\rho = 0.3644^{***}$ 0.0045	$\rho = 0.2498^{*}$ 0.0564	$\rho = -0.2358^{*}$ 0.0722	1

Notes: First number represents Spearman rank correlation coefficient ρ . Second number represents p-value (*—statistically significant at 10%, **—statistically significant at 5%, ***—statistically significant at 1%).

Source: Authors' own computations.

5. Extended analysis of results

In this section we verify eight specific econometric models: four simple and four extended (in extended models we control for holding a foreign language certificate). Table 6 presents the results of the econometric modelling—simple econometric models. In all cases independent variable GPA is statistically significant, has a negative sign and magnitude between -537 (model 1a) and -2190 (model 4a). These results are puzzling, because students with higher GPA provide lower minimum net salaries that would be adequate to educational background and professional experience of a graduate from the same major, i.e. Accounting and Controlling. It is challenging to find a plausible explanation for this phenomenon. On the other hand, there are a number of reasons why the contrary outcome would be more likely. High GPA students are more conscientious and therefore should be more informed about the current labour market situation, which shows a deficit of employees in Poland (including Lesser Poland Voivodeship) in the area of accounting and bookkeeping (WUP Kraków, 2018, pp. 19, 24, 30). Furthermore, high GPA students should have a higher level of self-esteem and therefore they should expect higher salaries. A number of studies show a positive relationship between self-esteem and academic performance (Arshad, Zaidi and Mahmood, 2015, p. 161; Rosli, Othman, Ishak, Lubis, Saat and Omar, 2012, p. 582).

Table 6. Basic econometric models—results of estimation

Model	Simple Model 1a	Simple Model 2a	Simple Model 3a	Simple Model 4a
Variables	Dependent variable Salary B/NE	Dependent variable Salary B/E	Dependent variable Salary M/NE	Dependent variable Salary M/E
Independent variable GPA	-537** (247) p-value = 0.0337	-858* (454) p-value = 0.0638	-911** (361) p-value = 0.0146	-2190** (1051) p-value = 0.0416
Constant	5210*** (1063) p-value < 0.0001	7670*** (1970) p-value = 0.0003	7988*** (1567) p-value < 0.0001	15028*** (4605) p-value = 0.0019
n	59	59	59	59
R ²	0.0741	0.0637	0.0914	0.1079
F	F(1, 57) = 4.74** p-value = 0.0337	F(1, 57) = 3.57* p-value = 0.0638	F(1, 57) = 6.35 p-value = 0.0146	F(1, 57) = 4.34** p-value = 0.0416

Notes: for Independent variables and Constant rows the first number represents the estimated coefficient (the estimation was conducted with the OLS method) which is bolded for independent variables if the variable is statistically significant (*—statistically significant at 10%, **—statistically significant at 5%, ***—statistically significant at 1%), the second number shown in parentheses represents Huber–White robust standard errors and the third number represents p-value, n is the number of observations, R² is the coefficient of determination, F is the value of statistics F (below is the p-value).

Source: Authors' own computations.

Table 7 presents the results of the econometric modelling—extended econometric models. In all cases independent variable GPA has a negative sign, however, only in 3 out of 4 cases it is statistically significant (models 1b, 3b, 4b). In all cases independent variable Certificate has a positive sign, however, only in 2 out of 4 cases it is statistically significant (models 2b and 3b). Only in model 3b both GPA and Certificate are statistically significant. The results are similar to those presented in Table 6.

Summing up, the results visible in extended econometric models also suggest that students with higher grade point average on average expect lower net salary compared to students with lower grade point average—for example in case of model 3b, an increase in GPA by 1 point is on average associated with the decrease in the demanded net salary by PLN 684. On the other hand, students holding a foreign language certificate on average tend to expect higher net salary compared to students without a foreign language certificate—for example in case of model 3b, holding a foreign language certificate is on average associated with the increase in the demanded net salary by PLN 1383.

Table 7. Extended econometric models—results of estimation

Model	Extended Model 1b	Extended Model 2b	Extended Model 3b	Extended Model 4b
Variables	Dependent variable Salary B/NE	Dependent variable Salary B/E	Dependent variable Salary M/NE	Dependent variable Salary M/E
Independent variable GPA	-437* (239) p-value = 0.0723	-652 (432) p-value = 0.1365	-684** (318) p-value = 0.0359	-1826* (957) p-value = 0.0615
Independent variable Certificate	610 (394) p-value = 0.1275	1254* (638) p-value = 0.0541	1383** (528) p-value = 0.0113	2221 (1348) p-value = 0.1049
Constant	4729*** (1009) p-value < 0.0001	6680*** (1846) p-value = 0.0006	6897*** (1359) p-value < 0.0001	13275*** (4182) p-value = 0.0024
n	59	59	59	59
R ²	0.1471	0.1680	0.2527	0.1929
F	F(2, 56) = 2.66* p-value = 0.0788	F(2, 56) = 3.15* p-value = 0.0505	F(2, 56) = 6.31 p-value = 0.0034	F(2, 56) = 3.14* p-value = 0.0509

Notes: for Independent variables and Constant rows the first number represents the estimated coefficient (the estimation was conducted with the OLS method) which is bolded for independent variables if the variable is statistically significant (*—statistically significant at 10%, **—statistically significant at 5%, ***—statistically significant at 1%), the second number shown in parentheses represents Huber–White robust standard errors and the third number represents p-value, n is the number of observations, R² is the coefficient of determination, F is the value of statistics F (below is the p-value).

Source: Authors' own computations.

6. Conclusions, limitations and guidance for further research

We conducted a pilot survey among full-time students who studied Accounting and Controlling major at Cracow University of Economics (bachelor studies, second year, third semester). The analyzed sample comprised of 59 student-questionnaires (out of 100 distributed student-questionnaires).

We asked survey participants a number of questions concerning the minimum net salary that would be adequate to educational background and professional experience of a graduate with a bachelor's/ master's degree in Accounting and Controlling with/ without professional experience in accounting, controlling or finance.

Surprisingly, we found a puzzle by measuring a relationship between academic performance and expected salary. We observed that students with higher GPA provide lower minimum net salaries that would be adequate to educational background and professional experience of a graduate from the same major compared to students with lower GPA. An increase in GPA by 1.0 is on average associated with a decrease in expected net salary of PLN 437 for a graduate with a bachelor's degree in Accounting and Controlling without any professional

experience in accounting, controlling or finance, PLN 684 for a graduate with a master's degree in Accounting and Controlling without any professional experience in accounting, controlling or finance, PLN 1826 for a graduate with a master's degree in Accounting and Controlling with three years of professional experience in accounting, controlling or finance. Our research hypothesis that there should be an observable positive relationship between salary expectations and academic achievements of Accounting and Controlling students is in question. The obtained results are contrary to our initial conjectures. However, we also found that students who hold a foreign language certificate provide higher minimum net salaries that would be adequate to educational background and professional experience of a graduate from the same major compared to students who do not hold a foreign language certificate. These differences equal on average PLN 1254 for a graduate with a bachelor's degree in Accounting and Controlling with three years of professional experience in accounting, controlling or finance, and PLN 1383 for a graduate with a master's degree in Accounting and Controlling without any professional experience in accounting, controlling or finance.

The major limitation of our research findings is that it is just a pilot study and a limited number of students were surveyed. That leads us to the guidance for further research, which is to extend the research into a greater number of students and to include additional explanatory variables into the models, such as gender and professional experience.

Acknowledgements

We would like to thank anonymous reviewers for thorough review, feedback provided and valuable comments that enhanced our paper.

References

- Arshad, M., Zaidi, S. M. I. H., Mahmood, K. (2015). Self-esteem and academic performance among university students. *Journal of Education and Practice*, 6(1), 156–162.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1–44.
- Dobija, M. (2011). Labor productivity vs. minimum wage level. *Modern Economy*, 2(5), 780–787. DOI: 10.4236/me.2011.25086.
- Drago, F. (2011). Self-esteem and earnings. *Journal of Economic Psychology*, 32(3), 480–488. DOI: 10.1016/j.joep.2011.03.015.
- Hołda, A., Renkas, J. (2015). Fair wage and the size of pension contributions in the theory of human capital measurement. *Актуальні проблеми економіки*, 12, 302–311.
- Hoyt, D. P. (1965). The relationship between college grades and adult achievement: A review of literature. *Research Reports*, ACT-RR-7, September.
- Jakubiak, M. (2012). Oczekiwania studentów kierunków ekonomicznych wobec rynku pracy. *Zeszyty Naukowe WSEI*. Seria: *Ekonomia*, 5(2), 265–288.
- Kozioł, W. (2011). Ekonomiczne aspekty procesu edukacji. *Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie*, 18(1), 185–194.
- Kozioł, W., Mikos, A. (2019). The measurement of human capital as an alternative method of job evaluation for purposes of remuneration. *Central European Journal of Operations Research*, 1–11. DOI: 10.1007/s10100-019-00629-w.
- Oehrlein, P. (2009). Determining future success of college students. *Undergraduate Economic Review*, 5(1), 7.
- Poteralski, J. (2008). Oczekiwania płacowe absolwentów wyższych uczelni w województwie zachodniopomorskim w świetle badań ankietowych. *Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania*, 3, 178–183.

- Renkas, J. (2013). Wage expectations in light of human capital measurement theory. *Argumenta Oeconomica Cracoviensia*, 9, 29–42.
- Renkas, J. (2018). *Pomiar i sprawozdawczość kapitału ludzkiego w gospodarce Ukrainy*. Użgorod: Wydawnictwo BREZA. ISBN 9786177344628.
- Rosli, Y., Othman, H., Ishak, I., Lubis, S. H., Saat, N. Z. M., Omar, B. (2012). Self-esteem and academic performance relationship amongst the second year undergraduate students of Universiti Kebangsaan Malaysia, Kuala Lumpur Campus. *Procedia—Social and Behavioral Sciences*, 60, 582–589. DOI: 10.1016/j.sbspro.2012.09.426.
- Roth, P. L., BeVier, C. A., Switzer III, F. S., Schippmann J. S. (1996). Meta-analyzing the relationship between grades and job performance, *Journal of Applied Psychology*, 81(5), 548–556. DOI: 10.1037/0021-9010.81.5.548.
- Stańdo-Górowska, H. (2014). Oczekiwania płacowe studentów a model kapitału ludzkiego. *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie*, 928(4), 51–59.
- Sulich, A. (2015). Oczekiwania płacowe studentów i absolwentów Politechniki Wrocławskiej wobec pierwszego pracodawcy. *E-mentor*, 59(2), 24–27.
- Thibadoux, G. M., Scheidt, M. A., Teffeteller K. (2014). What happens to accounting graduates with lower grade point averages? The impact of GPA on the life course of Accounting undergraduates. *American Journal of Business and Management*, 3(3), 143–160. DOI: 10.11634/216796061403559.
- Trapmann, S., Hell, B., Hirn, J. O. W., Schuler H. (2007). Meta-analysis of the relationship between the big five and academic success at university. *Zeitschrift für Psychologie*, 215(2), 132–151.
- WUP Kraków. (2018). *Barometr zawodów 2019* [online, accessed: 2019-11-05]. Kraków: Wojewódzki Urząd Pracy. Retrieved from: https://barometrzawodow.pl/userfiles/Barometr/2019/raport_ogolnopolski_pl.pdf.

Kto oczekuje wysokich płac? Badanie pilotażowe oczekiwań płacowych i dokonań akademickich studentów rachunkowości i controllingu

Abstrakt: Absolwenci studiów wyższych oczekują adekwatnego wynagrodzenia do uzyskanych przez nich wiedzy i umiejętności, które różnią się pomiędzy studentami. Studenci różnią się także pomiędzy sobą oczekiwaniami płacowymi. Celem tego artykułu jest zbadanie zależności pomiędzy oczekiwaniami płacowymi studentów rachunkowości i controllingu a ich osiągnięciami akademickimi. W artykule zastosowano następujące metody badawcze: analiza i krytyka piśmiennictwa, testy statystyczne (test Shapiro-Wilka oraz test znakowanych rang Wilcoxon, korelacja rang Spearmana), modelowanie ekonometryczne (modele są estymowane metodą OLS, a statystyczna istotność parametrów jest określana

z wykorzystaniem odpornych błędów Hubera-White'a). Przeprowadziliśmy badanie ankietowe wśród dziennych studentów kierunku rachunkowość i controlling z Uniwersytetu Ekonomicznego w Krakowie. Nasza pilotażowa próba badawcza obejmuje 59 respondentów, którzy są studentami drugiego roku. Analiza modeli ekonometrycznych ujawniła, że średnia ze studiów i fakt posiadania certyfikatu językowego są istotnie związane z oczekiwaniami płacowymi. Ciekawe jest jednak, że występuje negatywna współzależność pomiędzy oczekiwaniami płacowymi a średnią ze studiów, nawet przy zastosowaniu zmiennej kontrolnej, jaką jest posiadanie certyfikatu językowego.

Słowa kluczowe: oczekiwania płacowe, osiągnięcia akademickie, średnia ze studiów, certyfikat językowy