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Creative workers: returns to education and experience. The evidence from Australia

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Abstract: This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey conducted on 7340 individuals. The mapping methodology of Australian creative economy was implemented to extract 455 workers belonging to 27 creative occupations. To compare differentiation of influence of human capital on the creative workers' hourly wage with the general population's returns to education and work experience, the quantile and ordinary least squares regressions were used. Results indicate larger wage gap among creative workers than among other working persons. Returns to education and to experience are similar for the creative workforce, while in the general population return to education is three times as large as to experience. The most important finding is that investing in school education is less profitable for creative economy workers than that for other working people. Besides, there is a considerable difference in the profitability of investment in human capital among creative men and women.

Keywords: human capital, creative workers earnings, returns to education, returns to experience

JEL codes: J24, J31, O15, Z11

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1. Introduction

Creative economy workers are quite a distinct and internally differentiated segment of the labour market. As numerous analyses show, artists, journalists, designers, media workers, IT specialists, and other representatives of – using the language of Richard Florida – the creative class (Florida, 2002), are usually very well educated (Menger, 1999; Davies and Lindley, 2003; Okley, 2009; DCMS, 2014), and they invest much time and money in their formal competence capital. It is reflected not only by an exceptionally high percentage of well-educated people among that professional group but also by the fact of pursuing lifelong learning during their whole careers

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(Throsby and Hollister, 2003). Theoretically, the higher level of education of creative economy workers should be followed by their significantly better income situation compared with other, lower-educated labour market groups. As human capital theory says, the higher level of human capital of a worker (measured by the number of years of formal education and professional experience), the higher his or her productivity (Becker, 1964). Therefore, in the market economy, an increase in productivity should bring about an increase in wage rates. This relationship was confirmed by research carried out *ia* by George Psacharopoulos and Harry Anthony Patrino (Psacharopoulos, 1994; Psacharopoulos and Patrino, 2004) who showed that higher wage rates go with the higher level of education at each level of both wage rates and education.

Human capital theory is strongly confirmed and much research convinces that investment in education should result in higher wage rates. It, therefore, seems rational to investigate whether there are any differences in return to formal qualifications and to work experience also among creative workers. A recognition of that relationship is the main purpose of this article. There has been a great deal of empirical work on the role of human capital in the traditional labour markets in general, including in particular the relevance of education. Nonetheless, there have been relatively few studies on that problem in the creative economy markets.

Analyzing the relation between education and material situation of the creative class, one should notice that income of creative workers is stratified and highly dispersed. Hans Abbing signalizes that problem among artists: *`Despite some exceptionally high incomes in the arts, the average (and median) incomes in the arts are consistently lower than in comparable professions. This implies that a highly unequal distribution of income exists in the arts. It is more skewed than in comparable professions* (Abbing, 2002: 113). Similarly, Richard E. Caves concludes: *„several factors predict that the distribution of individual artists' earnings will be widely dispersed"* (Caves, 2002: 81). In addition, Pierre-Michel Menger notes that „*[artists'] earnings distributions are extremely skewed*" (Menger, 1999: 541). Such opinion is shared also by Ruth Towse, who says that „*the distribution of artists' earnings is very uneven, with the majority earning low income from arts work, though a few superstars earn very high incomes"* (Towse, 2010: 330). Moreover, David Hesmondhalgh, when referring to a broader group of creative economy workers, says that „*rewards for creative work continue to be very uneven, with very high rewards for the few superstar creative workers and much less for other workers, including creative managers and technical personnel*" (Hesmondhalgh, 2007: 207).

Apart from the problem of transferability of human capital into wages and a significant dispersion of income among creative economy workers, one more issue is of significance, i.e. a considerable wage gap between men and women working in creative industries. Eurostat data show that in the EU-28 the gender wage gap between the average income of men and women working in information and communication (NACE Section J) in 2010 amounted 25.3%, while in arts, entertainment, and recreation (NACE Section R) 24.7%. These two areas represent most of the employment in the creative industries.

The question of inequalities in the pay of men and women is important for the main topic of our analysis because they influence also the return on investment in formal education. This phenomenon is clearly visible for the whole economy in the results of research carried out by the World Bank (Psacharopoulos and Patrino, 2002: 15). They show a higher return on investment in education gained by women than by men (by 1.1 pp); the relationship, however, is not linear. Among low-educated workers, further formal learning is more profitable for men, among the middle-educated – for women, while among the best-educated workers the return to education is almost equal for men and women.

To verify how human capital theory works in the creative economy, the following research questions have been phrased:

- Does the Mincer earnings function explain the differentiation of hourly wages of creative workers?
- What are the returns to education and work experience among creative workers and in the whole workforce?
- What are the rates of returns to education and work experience for creative workers at each decile of hourly wage distribution?
- What are the differences in returns to education and work experience among creative men and women?

Consequently, a set of hypotheses has been formulated:

1. The Mincer earnings function explains well the differentiation of hourly wages among creative workers.
2. The returns to education and work experience among creative workers, and in the whole workforce, are different.

3. The higher decile of the hourly wage distribution, the bigger rates of return to education for creative workers.
4. The higher decile of the hourly wage distribution, the lower rates of return on work experience for creative workers.
5. The returns to work experience are higher for creative men than for creative women.
6. The returns to education are higher for creative women than for creative men.

It may not be sufficient to look at the impact of the main variables only at the average level of income in diversified population to understand the complexity of the human capital influence on wages. For this reason, we used quantile regression which enables estimation of the direction and strength of the impact of education and experience on a specific part of income distribution.

2. Description of the samples

To carry out the analysis of the influence of creative human capital on various parts of the income distribution, we applied unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. That survey data was previously used for human capital return estimations (Leigh and Ryan, 2008), but not for analyses on creative workers. The general sample (GS) that we investigate covers 7340 individuals in any occupation, having any wage or salary, and living in Australia in 2010.

The levels of education from the database have been recorded into YoEDU according to the suggestion of the Melbourne Institute at the University of Melbourne (responsible for HILDA survey) in the following way:

- Masters or doctorate – 18 years;
- Graduate diploma or certificate – 16 years;
- Bachelor of honours – 15 years;
- Diploma – 13 years;
- Certificate III or IV – 12 years;
- Certificate I or II – 11 years;
- Certificate not defined – 11 years;
- Year 12 – 12 years;
- Year 11 and below – 11.

Almost two-thirds of the general sample consists of medium educated individuals who completed 11 or 12 years in formal education (table 1). Tertiary graduates make up 28.5% of that subpopulation.

Table 1. Structure of the General Sample by sex and years of education

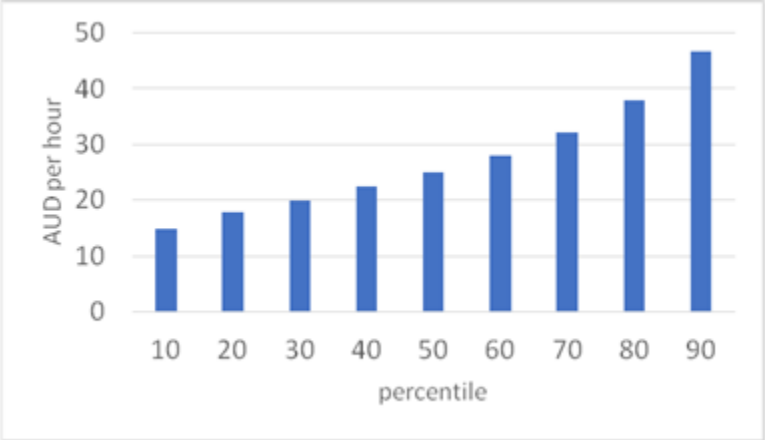
		Years of education						Total
		11 or less	12	13	15	16	18	
Women	number	736	1328	360	696	286	180	3586
	% of women	20.5%	37.0%	10.0%	19.4%	8.0%	5.0%	100.0%
	% of the group of years in education	49.4%	42.9%	53.8%	56.3%	58.5%	49.3%	48.9%
Men	number	753	1764	309	540	203	185	3754
	% of men	20.1%	47.0%	8.2%	14.4%	5.4%	4.9%	100.0%
	% of the group of years in education	506%	57.1%	46.2%	43.7%	41.5%	50.7%	51.1%
Total	number	1489	3092	669	1236	489	365	7340
	% total	20.3%	42.1%	9.1%	16.8%	6.7%	5.0%	100.0%
	% of the group of years in education	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Authors' own elaboration.

In Australia – as in many other developed countries – women are, on average, better educated than men. Almost every third woman in the general sample (32.4%) and every fourth man (24.7%) has at least a bachelor's degree. The average respondent's professional experience is almost 22 years. Every tenth of the GS representative has short experience (not more than 4 years), but on the other hand, 10% of them have worked for more than 40 years.

Predictably, income distribution in the general sample is asymmetric (right-skewed). The median (AUD 25.00 per hour) is smaller by one-sixth from the mean (AUD 29.84 per hour), a standard deviation equals as high as AUD 31.54. The levels of the GS hourly wages by deciles are presented in Figure 1.

Figure 1. Hourly wages in the general sample by percentile of distribution (in AUD)



Source: Authors' own elaboration.

To extract information on workers belonging to creative occupations, the "mapping methodology" of Australian creative economy was implemented (Higgs and Cunningham 2007: 34-36). Out of the GS, we specified data on 455 workers belonging to a group of 27 creative occupations (creative sample – CS). The list of `creative occupations' prepared in the mapping methodology is coherent with the Australian and New Zealand Standard Classification of Occupations (ANZSCO 2006) and consists of: 4 occupations related to advertising and marketing, 23 occupations linked with architecture, design and visual arts, 18 occupations belonging to the film, TV and radio industry, 14 occupations connected with music and performing arts, 10 occupations representing the publishing industry, and 16 occupations related to software and interactive media development. Having applied that catalogue of occupations to the data in HILDA database, our creative sample (CS) has been constructed. In consequence, the CS used for research presented in that article covers 27 creative occupations chosen at the 4-digit level of ANZSCO 2006 (table 2), which was the most detailed level of occupation specification available in HILDA database.

Table 2. Creative occupations according to the unit groups of ANZSCO 2006

4-digit code	Unit group
1311	Advertising and Sales
1399	Other Specialist Managers

2111	Actors, Dancers and Other Entertainers
2112	Music Professionals
2113	Photographers
2114	Visual Arts and Crafts Professionals
2121	Artistic Directors, and Media Producers and Presenters
2122	Authors, and Book and Script Editors
2123	Film, Television, Radio and Stage Directors
2124	Journalists and Other Writers
2242	Archivists, Curators and Records Managers
2246	Librarians
2251	Advertising and Marketing Professionals
2252	ICT Sales Professionals
2321	Architects and Landscape Architects
2323	Fashion, Industrial and Jewellery Designers
2324	Graphic and Web Designers, and Illustrators
2325	Interior Designers
2326	Urban and Regional Planners
2613	Software and Applications Programmers
2632	ICT Support and Test Engineers
3131	ICT Support Technicians
3993	Gallery, Library and Museum Technicians
3994	Jewellers
3995	Performing Arts Technicians
5997	Library Assistants
5999	Other Miscellaneous Clerical and Administrative Workers

Source: Authors' own elaboration.

The structure of the creative sample by education and sex is presented in Table 3.

Table 3. Structure of the creative sample by sex and years of education

		Years of education						Total
		11	**12**	**13**	**15**	**16**	**18**	
Women	Number	20	42	20	63	17	22	184
	% of women	10.9	22.8	10.9	34.2	9.2	12.0	100.0
	% of the group of years in education	57.1	34.4	36.4	39.1	39.5	56.4	40.4
Men	Number	15	80	35	98	26	17	271
	% of men	5.5	29.5	12.9	36.2	9.6	6.3	100.0
	% of the group of years in education	42.9	65.6	63.6	60.9	60.5	43.6	59.6
Total	Number	35	122	55	161	43	39	455
	% z Sex_1male	7.7	26.8	12.1	35.4	9.5	8.6	100.0
	% of the group of years in education	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Authors' own elaboration.

Only one-third of creative workers in our research completed just 11 or 12 years of formal education. It is not more than half of the share of the similarly educated workforce in the general population. On the other hand, tertiary education appears in the CS (54.5%) almost twice as often as in the GS. There is, however, no disproportion in the education of creative men and women: a share of university graduates is similar for both sexes. The only important difference concerns the highest level of education, namely Master's or PhD degrees, which was obtained by twice as many women as men.

The average individual within the creative sample is slightly less experienced than in the GS – half of them worked for less than 20 years. One-tenth of the least experienced workers had not more than 4 years of experience, while 10% of the most experienced individuals were present in the labour market for more than 40 years.

Income dispersion among creative workers appears to be less asymmetric than in the general population. The median (AUD 25.00 per hour) is lower from the mean (AUD 29.84 per

hour) only by 7.5%, and the standard deviation in that distribution equals AUD 18.57, which is much less than in the GS.

3. Estimation

3.1. Model specification

To compare the differentiation of influence of human capital on the creative workers' hourly wage with the general population's returns to education and work experience, we used the quantile and OLS regressions (as a benchmark). Estimated models are based on the Mincer wage function (Mincer: 1974). The most popular Mincer human capital earnings function was applied, where natural log hourly earnings are modelled as the sum of a linear function of years of education and a quadratic function of years of experience.

$$\ln y = \ln y_0 + \beta_1 YoEDU + \beta_2 EXP + \beta_3 EXP^2 + \varepsilon, \quad (1)$$

where is a natural logarithm of hourly wages. The hourly wages were calculated using the derived variables taken from HILDA dataset: combined hours per week that an individual usually works in all jobs, and imputed current weekly gross wages and salary in all his or her jobs.

A vector of independent variables includes:

1) a variable showing years of schooling (YoEDU), which represents the highest level of education achieved;
2) years in paid work since leaving full-time education (EXP);
3) the number of years of work experience squared (EXP_squared).

Apart from these three variables, a binary variable Sex_1male was added for the equations comparing the whole general sample with the creative sample. The variable equals "1" for "Male", and "0" for "Female".

3.2. Estimations for the general population (GS)

Applying the OLS and quantile regression, six models were estimated: three for the GS (whole population, male population, and female population) and three for the creative sample (whole creative population, male population, and female population). To prepare these estimations, the econometric program GRETL ver. 1.9.92 was used. Details of all the calculations are shown in the Statistical appendix, tables 4 to15.

4. Results and conclusions

The return to education and experience among creative workers in Australia at different levels of their hourly wage is not equally distributed. Regression models for men working in creative occupations explain better the variance of hourly wages than those for women (*ipso facto* the first hypothesis has been confirmed for men). It may result from the fact that there are more factors – apart from education and experience – playing a significant role in wages distribution among creative women than among creative men. The conducted analyses show that men in Australia earn, on average, more than women, both in the whole economy (by 18%) and in creative occupations (by 13%). It appears, however, that the gender wage gap in the creative economy is smaller than in the whole workforce. The impact of being female or male is more diverse in the general population. Smaller differences between men's and women's income are among the lowest paid workers. While hourly wage rates increase, the differences between women's and men's income extend as well, in favour of men. Among creative workers, the gender gap is quite stable at almost every level of income. The differences between women's and men's hourly wage are smaller only at the first decile and larger at two highest deciles of the income distribution.

Education is profitable both among creative workers and the whole workforce, although education influences wage rates to a visibly smaller extent in the creative sample than in the GS (which verifies the H2 positively). Return to education among representatives of creative occupations is similar for each level of hourly wage. On the contrary, the rise of wages among the general population can be explained better by educational differences at high income rates than at low income rates. The impact of professional experience on the wage rate is positive and gets smaller and smaller in accordance with the growing working experience, both in the GS and among the creative workforce.

Moreover, our research shows that experience and education explain the variability of the hourly wage rate to a much smaller extent for women than for men, both in the creative sample and in the general sample. Undoubtedly, the investment in education does bring profits (higher hourly wage rates) for women, but that increase of income is higher among the whole group of women in the workforce than among creative female workers. In turn, the working experience of women impacts slightly or insignificantly the variability of women's hourly wages. Among men, the models based on the classic Mincer's wage function can explain the variability of hourly wages to a similar extent among men in the creative sample and among men in the whole workforce. Return

to investment in education is positive, but smaller among the male creative group than among men in the whole economy. Interestingly, when the impact of education on hourly wages increases with the growing deciles of wage in the general population (see: Appendix, table 5), that phenomenon is opposite in the creative occupations and the impact on wages is the smallest among the best-off (Appendix, table 11) (the H3 verified negatively). It seems that experience of men in creative occupations (Appendix, table 13) brings a higher return than among men in the general sample (Appendix, table 7) (the H2 verified positively). In both male samples, the return grows with the wage rate, however slower and slower (the H4 verified positively). In consequence, the return to education and experience is similar in the male creative sample, while the return to education gives higher hourly wages increase than the return to experience in the general male sample.

Within the creative samples, the rise of experience brings an average wage increase of 6 per cent for creative men, while only 2 per cent for creative women (the H5 is verified positively). The average impact of education is positive among both creative women and men at circa 6.5 per cent (Appendix, tables 12 and14). At each higher decile, however, women gain a lesser increase in the hourly wage because of education increase than men do (the H6 is verified negatively).

Finally, it is important to bear in mind that the classic Mincer wage function is a rather simplified model of a complex issue of determinants of the wage rate increase in the creative economy. The research further confirms that complexity since the goodness of fit is considerably lower for the CS women model than for the CS men regression. It implies that the creative women's hourly wage is at the same time influenced by some other factors than years of education and work experience.

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Appendix

Table 4. OLS estimation of the hourly wage (ln) for the whole general population (N=7340)

Variable	Coefficient	SE	t	p-value
constant	1.58373	0.0398096	39.7825	<0.00001
EXP_squared	−0.000471726	2.96645e-05	-15.9021	<0.00001
EXP	0.0284505	0.00144491	19.6902	<0.00001
YoEDU	0.0987124	0.00291477	33.8663	<0.00001
Sex_1male	0.13227	0.0111758	11.8354	<0.00001

Significance: * p≤0.1; ** p≤0.05; *** p≤0.01.

Mean dependent var.	3.238836	S.D. dependent var.	0.536724
sum of squared residuals	1671.877	standard error of the residuals	0.477422
R-squared	0.209202	Pseudo-R-squared	0.208771
F(4, 7335)	485.1110	F test p-value	0.000000
Log-likelihood	−4985.641	AIC	9981.282
BIC	10015.79	HQC	9993.144

Table 5. Quantile regression (deciles) estimation of hourly wage (ln) for the general population (N=7340)

Decile (tau)	Coefficients			
	YoEDU	EXP	EXP squared	Sex_1male
0.1	0.0822145	0.0393800	-0.000759152	0.0874334
0.2	0.0863542	0.0271663	-0.000467734	0.0846292
0.3	0.0874685	0.0260813	-0.000435833	0.100355
0.4	0.0937039	0.0262357	-0.000439246	0.112492
0.5	0.0999451	0.0263801	-0.000429823	0.127214
0.6	0.0992404	0.0266023	-0.000427467	0.136677
0.7	0.0993630	0.0279635	-0.000448033	0.170271
0.8	0.102407	0.0300252	-0.000388786	0.185933
0.9	0.114253	0.0281397	-0.000388786	0.201840

Median (lnY)= 3.218876, standard dev. (lnY) = 0.536724

Table 6. OLS estimation of the hourly wage (ln) for the general population, male only (N=3754)

Variable	Coefficient	SE	T	p-value
Constant	1.58892	0.0562761	28.2343	<0.00001
YoEDU	0.10291	0.00428514	24.0155	<0.00001
EXP	0.0350238	0.0020704	16.9164	<0.00001
EXP_squared	−0.000577298	4.19938e-05	-13.7472	<0.00001

Mean dependent var.	3.289304	S.D. dependent var.	0.554631
sum of squared residuals	893.9528	standard error of the residuals	0.488249
R-squared	0.225668	Pseudo-R-squared	0.225049
F(4, 7335)	364.2947	F test p-value	1.3e-207
Log-likelihood	−2633.343	AIC	5274.685
BIC	5299.607	HQC	5283.548

Table 7. Quantile regression (deciles) estimation of hourly wage (ln) for the general population, male only (N=3754)

Decile (tau)	YoEDU	EXP	EXP squared
0.1	0.0753020	0.0455811	-0.000864357
0.2	0.0889256	0.0338513	-0.000589047
0.3	0.0900991	0.0317691	-0.000533987
0.4	0.0963750	0.0315287	-0.000516008
0.5	0.105621	0.0314665	-0.000512253
0.6	0.105573	0.0333316	-0.000537939
0.7	0.106524	0.0347508	-0.000557108
0.8	0.111659	0.0370230	-0.000577397

0.9	0.123692	0.0324068	-0.000451973

Median (lnY)= 3,267666 standard dev. (lnY) = 0,554631

Table 8. OLS estimation of the hourly wage (ln) for the general population, female only (N=3586)

Variable	Coefficient	SE	t	p-value
Constant	1.72008	0.0538482	31.9430	<0.00001
YoEDU	0.0939562	0.00394989	23.7870	<0.00001
EXP	0.0219027	0.00200741	10.9109	<0.00001
EXP_squared	−0.000367461	4.17535e-05	-8.8007	<0.00001

Mean dependent var.	3.186005	S.D. dependent var.	0.512089
sum of squared residuals	770.2735	standard error of the residuals	0.463724
R-squared	0.180658	Pseudo-R-squared	0.179972
F(4, 7335)	263.2673	F test p-value	2.1e-154
Log-likelihood	−2330.595	AIC	4669.191
BIC	4693.930	HQC	4678.009

Table 9. Quantile regression (deciles) estimation of hourly wage (ln) for the general population, female only (N=3586)

Decile (tau)	YoEDU	EXP	EXP squared
0.1	0.0846560	0.0287798	-0.000546485
0.2	0.0844363	0.0221570	-0.000365581
0.3	0.0838399	0.0208220	-0.000346680
0.4	0.0914495	0.0219909	-0.000372835
0.5	0.0938426	0.0211613	-0.000341474
0.6	0.0950596	0.0217149	-0.000350579
0.7	0.0941462	0.0233642	-0.000374514
0.8	0.0930572	0.0219455	-0.000353909
0.9	0.0884869	0.0199122	-0.000267871

Median (lnY)= 3.164758 standard dev. (lnY)= 0.512089

Table 10. OLS estimation of the hourly wage (ln) for the creative sample, male and female (N=455)

Variable	Coefficient	SE	T	p-value
Constant	2.19436	0.158777	13.8204	<0.00001
YoEDU	0.0599269	0.0107941	5.5518	<0.00001
EXP	0.0451234	0.00708609	6.3679	<0.00001
EXP_squared	−0.00090081	0.000149661	-6.0190	<0.00001

Mean dependent var.	3.454454	S.D. dependent var.	0.493217
sum of squared residuals	93.10991	standard error of the residuals	0.454370
R-squared	0.156930	Pseudo-R-squared	0.151322
F(4, 7335)	27.98329	F test p-value	1.30e-16
Log-likelihood	−284.6845	AIC	577.3689
BIC	593.8501	HQC	583.8618

Table 11. Quantile regression (deciles) estimation of hourly wage (ln) for the creative sample (N=455)

Decile (tau)	Coefficients			
	YoEDU	EXP	EXP squared	Sex_1male
0.1	0.0564199	0.0298650	-0.000619131	0.0555345
0.2	0.0746696	0.0319068	-0.000663167	0.173660
0.3	0.0645018	0.0363257	-0.000695995	0.166368
0.4	0.0633564	0.0385305	-0.000721365	0.122049
0.5	0.0665483	0.0414270	-0.000774597	0.157591
0.6	0.0561752	0.0461479	-0.000869535	0.142105
0.7	0.0561752	0.0516589	-0.00100290	0.145907
0.8	0.0580222	0.0533335	-0.00100290	0.191218
0.9	0.0571979	0.0577898	-0.00113910	0.209945

Median (lnY)= 3.489751 standard dev. (lnY)= 0.493217

Table 12. OLS estimation of the hourly wage (ln) for the creative sample, male only (N=271)

Variable	Coefficient	SE	t	p-value
constant	2.08128	0.200464	10.3823	<0.00001
YoEDU	0.0668786	0.0137107	4.8778	<0.00001
EXP	0.05805	0.00848688	6.8400	<0.00001
EXP_squared	−0.00121848	0.000181079	-6.7290	<0.00001

Mean dependent var.	3.529645	S.D. dependent var.	0.478295
sum of squared residuals	47.62768	standard error of the residuals	0.422352
R-squared	0.228912	Pseudo-R-squared	0.220248
F(4, 7335)	26.42130	F test p-value	5.37e-15
Log-likelihood	−148.9378	AIC	305.8757
BIC	320.2842	HQC	311.6608

Table 13. Quantile regression (deciles) estimation of the hourly wage (ln) for the creative sample, male only (N=271)

Decile (tau)	YoEDU	EXP	EXP squared
0.1	0.0897773	0.0665487	-0.00134064

0.2	0.0906756	0.0407963	-0.000902208
0.3	0.0814881	0.0438244	-0.000881018
0.4	0.0794004	0.0466450	-0.000916561
0.5	0.0736633	0.0403858	-0.000771503
0.6	0.0592706	0.0458847	-0.000869510
0.7	0.0564360	0.0540538	-0.00104623
0.8	0.0631528	0.0568201	-0.00117653
0.9	0.0543346	0.0597900	-0.00117879

Median (lnY)= 3.555348 standard dev. (lnY)= 0.478295

Table 14. OLS estimation of the hourly wage (ln) for the creative sample, female only (N=184)

Variable	Coefficient	SE	t	p-value
constant	2.24162	0.246031	9.1111	<0.00001
YoEDU	0.062817	0.0166681	3.7687	0.00022
EXP	0.0204445	0.0118241	1.7291	0.08551
EXP_squared	−0.000352984	0.00024629	-1.4332	0.15353

Mean dependent var.	3.343711	S.D. dependent var.	0.495256
sum of squared residuals	40.21249	standard error of the residuals	0.472655
R-squared	0.104120	Pseudo-R-squared	0.089188
F(4, 7335)	6.973233	F test p-value	0.000183
Log-likelihood	−121.1749	AIC	250.3499
BIC	263.2096	HQC	255.5621

Table 15. Quantile regression (deciles) estimation of the hourly wage (ln) for the creative sample, female only (N=184)

Decile (tau)	YoEDU	EXP	EXP squared
0.1	0.0605578	0.00249371	4.64034e-006
0.2	0.0687797	0.0141977	-0.000195742
0.3	0.0517885	0.0233001	-0.000386418
0.4	0.0413563	0.0363610	-0.000671258
0.5	0.0395889	0.0412056	-0.000780087
0.6	0.0499614	0.0513749	-0.000974094
0.7	0.0394111	0.0572215	-0.00112149
0.8	0.0421367	0.0530721	-0.00102761
0.9	0.0410236	0.0345441	-0.000658490

Zwrot z inwestycji w wykształcenie i doświadczenie na przykładzie pracowników kreatywnych w Australii

Streszczenie

W artykule wykorzystano bazę danych jednostkowych z Badania Gospodarstw Domowych, Dochodów i Dynamiki Pracy w Australii (HILDA) zawierającą dane 7340 osób. Zastosowano metodykę mapowania australijskiej gospodarki kreatywnej dla wyabstrahowania danych 455 pracowników reprezentujących 27 zawodów kreatywnych. Zastosowano regresję kwantylową oraz MNK aby porównać zróżnicowanie wpływu kapitału ludzkiego na godzinowe stawki wynagrodzeń pracowników kreatywnych oraz zwrot z inwestycji w wykształcenie i doświadczenie zawodowe w całej populacji. Wyniki wskazują na większą lukę płacową pośród pracowników kreatywnych niż pośród pozostałych osób. O ile zwrot z wykształcenia i z lat doświadczenia jest podobny wśród kreatywnej siły roboczej, to w całej populacji zwrot z edukacji jest trzykrotnie większy niż z doświadczenia. Główną konkluzją jest stwierdzenie, że inwestowanie w edukację formalną wśród pracowników gospodarki kreatywnej jest mniej opłacalne niż wśród ogółu pracujących. Ponadto zidentyfikowano istotną różnicę w zyskowności inwestowania w kapitał ludzki przez kobiety i mężczyzn reprezentujących gospodarkę kreatywną.

Słowa kluczowe: kapitał ludzki, wynagrodzenia pracowników kreatywnych, zwrot z wykształcenia, zwrot z doświadczenia zawodowego.