

Can Graduates Increase Earnings by Acquiring Multiple Qualifications?

Mahinda Pushpakumara¹, AthulaRanasinghe² and Padmasiri Siddhisena³

Introduction

Sri Lanka maintained an average economic growth of around 6 percent during the past decade. With such economic growth, the overall unemployment rate has significantly declined, but still the unemployment rate among educated youth remains high. According to the Quarterly Labour Force Survey (QLFS)⁴, conducted by the Department of Census and Statistics, Sri Lanka, in 2013, the overall unemployment rate was only 4.4 per cent, though unemployment among youth who have qualifications above General Certificate Examination of Advanced Level (G.C.E. A/L) was 8.6 percent. Data from the Graduates' Career Outcome Survey (GCOS) for 2011 reveals that unemployment three years after graduation is 49 percent among graduates.

Many researchers have introduced several hypotheses to explain the Sri Lankan unemployment problem. Among these, three hypotheses are prominent: Skill mismatch hypothesis [ILO (1971), World Bank (1999), Aggestam and Hallberg (2004)] Demand deficiency hypothesis [Kelly and Gunasekera (1990)] and, Queuing hypothesis [Rama (1999), Heltberg and Vodopivec (2008), Rama (2003), World Bank (2007)]. The skill mismatch hypothesis [World Bank (1999)] concludes that the skills of educated youth do not match labour market requirements. As graduates understand this, they use different strategies to increase employability and earnings. One such strategy is to diversify their skills by following professional and certificate courses.

According to the Graduates Career Outcome Survey 2011, graduates diversify their skills by following certificates and professional courses other than degrees. Twenty seven percent of graduates have followed professional courses. A significant percentage of graduates have certificates in Computing (62%), English language (42%), Tamil language (20 %) and Management (10%).

Objectives

¹ Lecturer, University of Colombo

² Professor, University of Colombo

³ Professor Emeritus, University of Colombo

⁴ Figures related to graduates unemployment is not available in LFS report.

The objective of this paper is to identify whether acquiring multiple qualifications is an effective strategy to increase the earnings of graduates.

Methodology

Data

The empirical analysis is based on data collected from the Graduates Career Outcome Survey (GCOS) conducted by the Department of Manpower and Employment in 2011.

Econometric Model

As all individuals have an equal level of education it is not possible to estimate standard mincer earning function. However based on the mincer earnings functions a log earnings function is estimated.

$$\begin{aligned} \log W = & \alpha_0 + \alpha_1 X + \alpha_2 X^2 + \sum_{i=3}^5 \alpha_i DT_i + \sum_{i=6}^8 \alpha_i DR_i + \alpha_9 DM + \alpha_{10} DS \\ & + \sum_{i=11}^{12} \alpha_i MA_i + \sum_{i=13}^{14} \alpha_i PQ_i + \alpha_{15} ENG + \alpha_{16} COM \\ & + \alpha_{17} MAN + \alpha_{18} TEC + \alpha_{19} WS + \alpha_{20} WST + \alpha_{21} GD + e \end{aligned}$$

Where;

- LogW = Log monthly wage in Rupees
- X = Years of Experience
- DT = Degree Type
- DR = Result of degree
- DM = Medium of instruction
- DS = Degree status
- MA = Postgraduate qualifications
- PQ = Professional qualifications
- ENG = Certificate for English language
- COM = Certificate for management
- TEC = Certificate for technical course
- WS = Working Status (full time /part time)
- WST = Working sector
- GD = Gender

Results and discussion

Table 1 presents the results of the model. The value of the adjusted R is 0.30 which implies that 30 percent of the total variation of the log wage has been explained by independent variables in the model.

All variables related to university education except the status of the degree are statistically significant at the acceptable level. For the variable of degree type, the reference category is Bachelor of Arts graduates. All the coefficients related to degree types are significant and have positive signs. This implies that Arts Graduates have low earnings compared to other graduates.

The wage of the graduates who graduated from Commerce or Management Faculty is 22 percent higher than that of Arts graduates. The individuals who graduated from the Sciences Faculty earn 32 percent more than Arts graduates. Individuals with a Bachelor of Information Technology or of Laws (LLB) have monthly earnings 50 percent higher than Arts graduates. The earnings of engineers are 40 percent higher than those of Arts graduates.

The coefficient related to degree status is not significant which implies that there is no earnings differences between graduate with a special degree and a general degree. Among the employed only 38 percent of them have a general degree. The majority of general degree holders are unemployed. However employed general degree holders' monthly earnings are equal to those of special degree holders.

The coefficients related to the result of second class lower and second class upper divisions are not significant, implying that the wages of graduates with second class upper and lower divisions are equal to the wages of graduates with a simple pass. The graduates with a first class have a wage premium in the labour market. The earnings of graduates with first class results are 28 percent higher than the others.

The medium of instruction of the degree can be identified as a significant determinant of the wage of a graduate. The wage of graduates who studied in English is 20 percent higher than others.

Table 01 : Regression Results

| | Coef. | T |
|-------------------------------------|-------|-------|
| Experience | -0.04 | -0.43 |
| Square of Exp. | 0.01 | 0.20 |
| BBA or B.Com or B.Sc.(Mgt) | 0.22* | 2.13 |
| B.Sc. (Science) | 0.32* | 3.52 |
| BIT or Law or Other | 0.50* | 4.39 |
| Degree status , Special | 0.05 | 0.84 |
| Result ;2 nd class lower | 0.02 | 0.39 |
| Result ;2 nd class upper | 0.02 | 0.35 |

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| | | |
|-------------------------------|--------|-------|
| Result ;1 st Class | 0.28* | 2.88 |
| Medium of instruction English | 0.20* | 2.36 |
| MA Following | 0.21* | 3.12 |
| MA Completed | 0.31* | 2.20 |
| Professional qual. Following | -0.04 | -0.62 |
| Professional qual. Completed | 0.16* | 1.96 |
| Certificate for English | 0.00 | -0.09 |
| Certificate for Computer | -0.17* | -3.06 |
| Certificate for Management | -0.06 | -0.71 |
| Certificate for Technical | -0.09 | -1.10 |
| Working in Public sector | -0.02 | -0.38 |
| Working full time | 0.13* | 2.20 |
| Male =1 | 0.24* | 4.64 |
| Consent | 9.48* | 89.09 |
| Adj R-squared | 0.32 | |

*Source: GCOS 2011, author's calculation, * significant at a 5 percent significance.*

Graduates with postgraduate qualifications have a wage premium in the labour market. Some follow Masters degree while working. Their earnings are 21 percent higher than the earnings of graduates with only Bachelors degrees. The earnings of graduates who have completed a Masters degree are 31 percent higher than graduates without such qualifications.

Graduates with a professional qualification have a better position in the labour market. The earnings of graduates who have completed professional qualifications are significantly (16%) higher than the earnings of graduates without such qualifications. As explained above, degree, postgraduate, and professional qualifications have a significant impact on the earnings of graduates.

However, graduates do not receive returns for other qualifications such as a certificates in Computing, Management, English and other technical subject. The surprising finding is that coefficients related to above certificates except for English have a negative impact on earnings. The coefficient related to the certificate in Computing is significant, but other coefficients are not. This suggests that earnings of graduates with a certificate in Computing is significantly less than those who do not have such qualifications. Male graduates have a better position in the labour market compared to their counterparts, with earnings 24 percent higher than females'.

Conclusions

This paper analysed wages of graduates by qualification. Graduates have acquired three types of qualifications; post-graduate qualifications, professional qualifications, and certificate courses, in order to enhance their positions in the labour market.

The earnings of Arts graduates are significantly lower than others. Graduates who learn in English have a better position in the labour market than those who learned in Sinhala or Tamil. Average earnings of graduates with first class results are higher than the others. Post-graduate qualifications also increase earning capacity.

Other than university education, the graduates can improve their position at the labour market by acquiring professional qualifications. Graduates with professional qualifications earn more than others.

Though a significant percentage of graduates have followed certificate courses in English, Tamil, Computing and Management, they do not receive returns for such courses.

In the Sri Lankan education system, specialisation begins at the GCE Advanced level. Future earnings depend on decisions taken at school level. Therefore individuals should assess their capabilities before taking decisions regarding specialisation. If they have the capacity and opportunity to enter the Science or Mathematics streams they will earn relatively higher incomes after graduation.

After entering university, individuals should perform well in order to get a higher income after graduation. Individuals can increase their income by following their degree in English. Following professional courses is also an effective strategy to increase future earnings.

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