

# **Determining the change in income due to increased tertiary education**

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## **Summary**

The primary objective of this study is to determine whether the level of tertiary education has a positive and significant impact on the level of income received. This study will focus on determining whether each subsequent level of tertiary education causes an increase in the likelihood of earning a higher wage, by using a multinomial logistic regression model as well as cross-tabulation estimates. This study will also make use of two different data samples, where the first sample is sourced from the National Income Dynamics Study's, 2010-2011, adult wave 2 dataset, and the second sample is sourced from a questionnaire distributed to the North-West University's School of Economics alumni from the Potchefstroom campus. Literature indicates that there is a significant relationship between an individual's income and variables such as gender, age, marital status, population group, occupation, sector or industry, years of work experience, location of employment, tenure, union membership, and, most importantly, education. Determining the effect of these variables on the income of tertiary educated individuals, will assist current and future graduates by providing relevant South African labour market information as well as providing some assistance in decisions which may result in higher future earnings. From the NIDS data set, it was found that the level of tertiary education was significantly associated with income, and that higher levels of tertiary education were associated with higher income categories, while lower levels of tertiary education were associated with lower income categories. From the Alumni data set it was concluded that the level of tertiary education was not significantly associated with income, which could be the result of the graduation period (2009-2012) of the sample individuals. It was also found that married individuals were more likely to have earnings within the higher income categories, while the same result was obtained for males as well as for those individuals who were employed in the Gauteng province. It was also found that those individuals with an honours degree had earnings within the low income categories, similar to those individuals with a bachelor's degree. The main factors considered to influence the income of an individual with a tertiary qualification is gender, age, marital status, occupation, and the level of tertiary education.

**Keywords:** Education, tertiary education, rate of return to education, income

## **Opsomming**

Die primêre doel van hierdie studie is om te bepaal of die vlak van tersiêre onderwys 'n positiewe en betekenisvolle impak op die vlak van inkomste het. Hierdie studie probeer ook bepaal of elke daaropvolgende vlak van tersiêre onderwys 'n toename veroorsaak in die waarskynlikheid om 'n hoér loon te verdien, deur van 'n 'Multinomial' logistiese regressie model sowel as 'cross-tabulation' skattings gebruik te maak. Hierdie studie sal ook gebruik maak van twee verskillende datastelle, waar die eerste datastel van die National Income Dynamics Study's, 2010-2011, adult wave 2 datastel gebruik maak, en die tweede datastel afkomstig is van 'n vraelys wat versprei is aan die Noordwes-Universiteit se Skool vir Ekonomie alumni van die Potchefstroom-kampus. Literatuur dui daarop dat daar 'n beduidende verhouding is tussen 'n individu se inkomste en die veranderlikes nl. geslag, ouderdom, huwelikstatus, bevolkingsgroep, beroep, sektor of bedryf, jare werk ervaring, die plek van indiensneming, verblyfreg, vakbondslidskap, en onderwys wat geag word as the belangrikste van die determinante. Die bepaling van die effek van hierdie veranderlikes op tersiêre opgevoede individue se inkomste, sal help om huidige en toekomstige gegradsueerdees met relevante Suid-Afrikaanse arbeidsmark inligting te verskaf, sowel as die verskaffing van hulp met besluite wat kan lei tot hoér toekomstige verdienstes. Die NIDS data het daarop gedui dat die vlak van tersiêre onderwys 'n beduidende verband hou met inkomste, en dat hoér vlakke van tersiêre onderwys verband hou met hoér inkomste kategorieë, terwyl laer vlakke van tersiêre onderwys verband hou met laer inkomste kategorieë. 'n Gevolgtekking vanuit die Alumni datastel het daarop gedui dat die vlak van tersiêre onderwys nie 'n beduidende verband hou met inkomste nie, wat die gevolg kan wees van die gradeplegtigheid tydperk (2009-2012) van die individue wat deel geneem het aan die mikro-studie. Daar is ook bevind dat getroude individue meer geneig is om in hoér inkomste kategorieë te verdien, terwyl dieselfde resultaat verkry is vir mans sowel as vir diegene wat in die Gauteng provinsie indiensgeneem was. Dit is ook bevind dat diegene met 'n honneursgraad meer geneig is om in lae inkomste kategorieë te verdien, soortgelyk aan die individue met 'n bachelorsgraad. Die belangrikste faktore wat 'n individu met 'n tersiêre kwalifikasie se inkomste beïnvloed word beskou as geslag, ouderdom, huwelikstatus, beroep, en die vlak van tersiêre onderwys.

**Kernwoorde:** Onderwys, tersiêre onderwys, opbrengs tot onderwys, inkomste

## Table of Contents

<b>Acknowledgements.....</b>	i
<b>Summary.....</b>	iii
<b>Opsomming .....</b>	iv
<b>CHAPTER 1.....</b>	1
<b>INTRODUCTION.....</b>	1
<b>1.1 Problem statement .....</b>	5
<b>1.2 Motivation.....</b>	6
<b>1.3 Research objectives .....</b>	8
<b>1.4 Method.....</b>	8
<b>1.5 Delimitation .....</b>	10
<b>1.6 Defining the concepts .....</b>	10
<b>1.6.1 Private rate of return to education .....</b>	10
<b>1.6.2 North-West University (NWU).....</b>	10
<b>1.7 Summary and structure .....</b>	11
<b>CHAPTER 2.....</b>	12
<b>LITERATURE OVERVIEW .....</b>	12
<b>2.1 Introduction.....</b>	12
<b>2.2 The significance of education in relation to earnings: The rate of         return to education.....</b>	16
<b>2.2.1 International literature.....</b>	16
<b>2.2.1.1 Regional returns to education.....</b>	16

2.2.1.2 Education and income .....	18
2.2.1.3 Returns to specific majors .....	19
2.2.1.4 Returns according to the level of education obtained .....	21
2.2.2 South African literature .....	22
2.2.2.1 Introduction.....	22
2.2.2.2 Education and income .....	23
2.2.2.3 Rates of return.....	25
<b>2.3 Comparing different models in estimating the effect of education on income.....</b>	<b>26</b>
2.3.1 Introduction.....	26
2.3.2 Heckman's two-stage selection Model & Double-Hurdle Model (DHM).....	27
2.3.3 Mincerian Model .....	27
2.3.4 Multinomial Logistic Regression Model .....	28
<b>2.4 Factors of influence .....</b>	<b>30</b>
2.4.1 Introduction.....	30
2.4.2 Experience and age.....	30
2.4.2.1 Experience.....	30
2.4.2.2 Age.....	32
2.4.3 Gender and population group .....	33
2.4.3.1 Gender .....	33
2.4.3.2 Population group .....	36
2.4.4 Other factors of influence .....	39

2.4.4.1 Occupation .....	39
2.4.4.2 Sector or industry .....	40
2.4.4.3 Location of employment.....	40
2.4.4.4 Marital status .....	41
2.4.4.5 Tenure .....	42
2.4.4.6 Union .....	42
<b>2.5 Summary and conclusion .....</b>	<b>43</b>
<b>CHAPTER 3 .....</b>	<b>47</b>
<b>DESCRIPTIVE RESULTS.....</b>	<b>47</b>
<b>3.1 Introduction.....</b>	<b>47</b>
<b>3.2 The questionnaire.....</b>	<b>47</b>
<b>3.3 Data description .....</b>	<b>49</b>
3.3.1 NIDS data set .....	49
3.3.1.1 Demographic information.....	49
3.3.1.2 Employment and income information .....	54
3.3.2 NWU School of Economics - Alumni questionnaire .....	56
3.3.2.1 Demographic information.....	56
3.3.3 Employment and income information .....	62
<b>3.4 Conclusion.....</b>	<b>68</b>
<b>CHAPTER 4 .....</b>	<b>72</b>
<b>METHODOLOGY AND EMPIRICAL RESULTS.....</b>	<b>72</b>
<b>4.1 Introduction.....</b>	<b>72</b>

<b>4.2</b>	<b>Method.....</b>	<b>73</b>
<b>4.3</b>	<b>Multinomial logistic regression empirical results .....</b>	<b>74</b>
4.3.1	NIDS data set empirical results .....	74
4.3.2	Alumni data set empirical results.....	79
<b>4.4</b>	<b>Cross-tabulation empirical results.....</b>	<b>85</b>
4.4.1	NIDS data set empirical results .....	85
4.4.2	Alumni data set empirical results.....	87
<b>4.5</b>	<b>Conclusion.....</b>	<b>88</b>
<b>CHAPTER 5.....</b>		<b>91</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>		<b>91</b>
<b>5.1</b>	<b>Introduction.....</b>	<b>91</b>
<b>5.2</b>	<b>Summary .....</b>	<b>93</b>
<b>5.3</b>	<b>Conclusion .....</b>	<b>94</b>
5.3.1	Conclusions from literature .....	95
5.3.2	Conclusions from descriptive results .....	96
5.3.3	Conclusions from empirical analysis.....	97
5.3.4	Conclusion and summary of findings.....	98
<b>5.4</b>	<b>Recommendations .....</b>	<b>99</b>
<b>Annexure: Alumni questionnaire.....</b>		<b>101</b>
<b>Bibliography .....</b>		<b>103</b>

## List of Tables

Table 2-1:	Rate of return to education by level, latest year, regional averages....	17
Table 2-2:	Wage Gaps Relative to Economics by Major, in the USA for 1990.....	20
Table 2-3:	Rate of Return to Education in Greece, 2002-2003 (Private sector) ...	22
Table 2-4:	Income Bracket Placement by level of Education, 2011 .....	23
Table 2-5:	Rate of Return to Education in South Africa .....	26
Table 2-6:	Ranking of Earnings determinants within each job-level.....	33
Table 2-7:	Returns to Education by Gender (%) .....	34
Table 2-8:	OLS Estimates of the Wage Function, South Africa, OHS 1993.....	35
Table 2-9:	Self-employment, Employment and Unemployment rates, OHS 1999.....	37
Table 3-1:	Analysis of questions for both the NIDS data set and the Alumni data set .....	48
Table 3-2:	Summary of results .....	69
Table 4-1:	Variable abbreviation and definition list for NIDS data set .....	74
Table 4-2:	Model fitting information for the NIDS data set.....	76
Table 4-3:	Classification table for the NIDS data set.....	76
Table 4-4:	Multinomial logistic regression model parameter estimates for the NIDS data set.....	78
Table 4-5:	Variable abbreviation and variable list for the Alumni data set.....	79
Table 4-6:	Model fitting information for the Alumni data set .....	81
Table 4-7:	Classification table for the Alumni data set .....	81

Table 4-8:	Multinomial logistic regression model parameter estimates for the Alumni data set .....	84
Table 4-9:	Cross-tabulation results for the NIDS data set (INC*HID).....	86
Table 4-10:	Cross-tabulation results for the Alumni data set (INC*HID) .....	88

## List of Figures

Figure 1-1:	Growth in gross domestic product at market prices and growth in public expenditure on tertiary education in South Africa.....	1
Figure 1-2:	Public spending on education as a proportion of total government spending, and of GDP, selected countries.....	2
Figure 1-3:	Employment and unemployment by highest level of education, first quarter 2011.....	3
Figure 1-4:	Adults by income group and highest level of education, 2009 (proportions).....	4
Figure 2-1:	Private benefits and costs of education: An illustration .....	14
Figure 2-2:	Monthly earnings by highest level of education in South Africa, 2010.....	15
Figure 2-3:	Predicted Wage in Relation to Years of Education .....	25
Figure 2-4:	Predicted Wage in Relation to Years of Education, Controlling for Experience (OHS '97) .....	31
Figure 3-1:	Individuals according to highest level of education obtained .....	49
Figure 3-2:	Gender of tertiary educated individuals.....	50
Figure 3-3:	Gender of individuals according to highest level of education obtained .....	51
Figure 3-4:	Age brackets of individuals according to highest level of education obtained .....	51
Figure 3-5:	Population group according to individuals' highest level of education obtained.....	53
Figure 3-6:	Marital status according to individuals' highest level of education obtained .....	53

Figure 3-7:	Occupation according to individuals' highest level of education obtained .....	54
Figure 3-8:	Average weekly work hours according to individuals' highest level of education obtained.....	55
Figure 3-9:	Income according to individuals' highest level of education obtained .....	56
Figure 3-10:	Individuals according to highest level of education obtained .....	57
Figure 3-11:	Gender of tertiary educated individuals.....	58
Figure 3-12:	Gender of individuals according to highest level of education obtained .....	58
Figure 3-13:	Age brackets of individuals according to highest level of education obtained .....	59
Figure 3-14:	Marital status according to individuals' highest level of education obtained .....	60
Figure 3-15:	Year of matriculation according to individuals' highest level of education obtained.....	60
Figure 3-16:	Field of study according to individuals' highest level of education obtained .....	61
Figure 3-17:	Employed while studying according to individuals' highest level of education obtained.....	62
Figure 3-18:	Occupation according to individuals' highest level of education obtained .....	63
Figure 3-19:	Occupation according to individuals' highest level of education obtained .....	63
Figure 3-20:	Years of work experience according to individuals' highest level of education obtained.....	64

Figure 3-21: Average weekly work hours according to individuals' highest level of education obtained.....	65
Figure 3-22: Province of employment according to individuals' highest level of education obtained.....	66
Figure 3-23: Monthly income bracket according to individuals' highest level of education obtained.....	67