

# Perceived Returns as a Determinant of Private Demand for Postgraduate Studies in Selected Universities in Kenya

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## Abstract

Despite witnessing a consistent rise in private demand for postgraduate studies at universities in Kenya, recent trends show a decline in postgraduate enrolment. This downturn poses potential obstacles in achieving both the university objectives and Kenya's Vision 2030. Reviewed literature reveals that the decision to pursue postgraduate studies is often determined by a variety of factors, one of which is the perceived returns associated with obtaining an advanced degree. Given this framework, the primary objective of this study was to assess the extent to which perceived returns, as a determinant of private demand for postgraduate studies, affects private demand for postgraduate studies at the selected universities in Kenya. By adopting an explanatory sequential mixed methods design, the study combined quantitative and qualitative approaches to comprehensively examine effects of perceived returns on private demand for postgraduate studies in selected universities in Kenya. The target population comprised all the 60,515 students enrolled in Master's and PhD programmes across both public and private chartered universities in Kenya during the research period. The study employed a systematic random sampling method to select 395 Master's and PhD students from a purposefully selected pool of four public chartered universities and three private chartered universities. Data collection involved the use of questionnaires and interviews. Quantitative data underwent analysis using descriptive and inferential statistics, while qualitative data was subjected to thematic and content analysis techniques. The study established that perceived returns (with a regression coefficient of  $B = .57$  and probability level of  $p = .004 < .05$  (at a significant level of  $p < .05$ ), emerged as a significant predictor of private demand for postgraduate studies. The findings shed light on how perceived returns affects private demand for postgraduate studies and offer insights for policy makers and university institutions to align university programmes with the evolving needs and expectations of both the prospective postgraduate students and the labour market. The study recommends that universities collaborate with employers from both the private sector and the public sector as well as other areas in the labour market to enhance accurate information, training and employment opportunities for postgraduate students.

**Keywords:** Perceived returns, Private demand, Postgraduate studies

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## 1.0 Introduction

According to Garba (2010), significant progress in education, science, and technology is only witnessed in countries that have strong postgraduate education systems and contemporary research institutions. Consequently, numerous nations globally have observed a continuous increase in the demand for postgraduate studies over time (Sojkin et al., 2011; Altbach et al., 2019).

In addition to governments offering postgraduate education to achieve societal benefits, individuals also seek postgraduate studies for various personal reasons. Schuller et al. (2004) argue that besides contributing to economic growth, postgraduate education is viewed as a means to improve the quality of life for those who pursue it. It is associated with increased happiness and better health, as well as the likelihood of securing well-paying jobs, attaining influential positions, acquiring wealth and authority, and gaining control over production factors (Psacharopoulos & Patrinos, 2004; Naidoo, 2007; Baum et al., 2013).

Pursuing postgraduate studies involves weighing financial costs against expected benefits. If the benefits surpass the costs, it justifies the investment in human capital. The human capital model views education as an investment, where the expenses incurred in educational pursuits are weighed against the discounted stream of anticipated future returns, primarily in the form of higher earnings (Becker, 1962, 1964). This often involves evaluating the feasibility of investing in further studies (Evans, 2013). Consequently, students aim to maximize the overall value derived from their education, frequently employing cost-benefit analysis (Hossler et al., 1999). In the decision-making process, it is assumed that students carefully weigh the pros and cons of each available option and make rational assessments regarding the potential outcomes of one choice versus another (Hossler et al., 1999). This culminates in an individual student's enrolment decision, which reflects their prioritized choice among the various tuition and employment alternatives (Psacharopoulos, 2014).

However, while a significant body of literature has traditionally assessed the returns to education using earnings data (Altonji et al., 2016; Lindley & Machin, 2016; Altonji & Zhong, 2020), Jensen (2010) emphasizes

that it is the perceived returns as assessed by students and/or their parents that ultimately affect enrolment decisions. This perspective is upheld by Boneva et al. (2019) who highlight that perceptions regarding both immediate and long-term benefits of postgraduate education play a substantial role in determining postgraduate enrolment. As Wanja (2014) points out, individual students tend to make choices based on how much investing in education will yield personal (private) benefits, and the decision to enrol only materializes when the anticipated benefits surpass the expected costs (Vatta et al., 2016). This often translates to a higher likelihood of attaining increased earnings, enhancing employment prospects, and pursuing a preferred career line. Consequently, when the perceived returns from investing in postgraduate studies appear favourable, individuals will find justification in pursuing them, thereby driving the private demand for postgraduate education.

## 2.0 Literature Review

In numerous countries, particularly in the developed world, individuals holding postgraduate degrees continue to constitute a notable distribute of the workforce (Boneva et al, 2019). Additionally, it has been argued that the returns on investment in postgraduate education are substantial and on an upward trend (Burgess, 2016). According to statistics, as of 2018, approximately 15% of employees in the United States and 14% in the United Kingdom possessed postgraduate qualifications, and their earnings were significantly higher than those of individuals with only an undergraduate degree (Lindley & Machin, 2016; Boneva et al., 2019).

Research conducted in Japan indicates that individuals holding a postgraduate degree earn roughly 15% to 30% more than those with solely a bachelor's degree (Morikawa, 2015). Furthermore, the internal rate of return for obtaining a Master's degree is estimated to be approximately 11-12% (Kakizawa et al., 2014).

In South Africa, Nikolov et al. (2020) revealed that each additional year of schooling leads to an increase in earnings ranging from 18 to 20 percent. Moreover, studies in the country have demonstrated that the benefits of higher education are on the rise, as advanced education empowers graduates to access higher-paying jobs and enhanced opportunities for career advancement (Salisbury, 2016; Horn, 2018).

In Kenya, a study conducted by Rugar et al. (2010) indicated that investing in further university education resulted in a 47.8% rate of return. The research also highlighted that while a Master's degree offered a quicker return on investment, a Doctorate degree emerged to be the most paying level of education at the university level.

While research on the returns to schooling has primarily relied on earnings data (Altonji, et al., 2016; Lindley & Machin, 2016; Altonji & Zhong, 2020), studies in both developed and developing countries have however highlighted a widespread lack of accurate information regarding the benefits of education (Jensen, 2010; Wiswall & Zafar, 2015). This has led to investigations into educational choices using expectations about future earnings as a basis (Giustinelli, 2010; Zafar, 2011). These studies have revealed that similar to actual outcomes, expectations are influenced by observable characteristics (Delavande, 2014). Additionally, it has been demonstrated that at the individual level, expected outcomes strongly correlate with future outcomes (Delavande & Rohwedder, 2011). This type of data has been helpful in drawing conclusions about decision-making in various domains (Zafar, 2013; Stinebrickner & Stinebrickner, 2014). Consequently, given that individuals often have inaccurate information about the actual returns to schooling (Jensen, 2010; Wiswall & Zafar, 2015), it is the perceived returns by students and/or their parents that ultimately impact enrolment decisions.

The perceived returns anticipated as a result of investing in postgraduate education encompass both economic and non-economic aspects (Machin & McNally, 2007; Schendel & Oketch, 2014). Economic benefits comprise factors like increased salary, additional allowances, and improved job prospects, while non-economic benefits include enhanced well-being, extended lifespan, elevated social standing, and job satisfaction (Machin & McNally, 2007; Schendel & Oketch, 2014). Consequently, as posited by Gölpek (2012), anticipating a greater return upon investing in education results in increased demand for educational opportunities. The decision to pursue postgraduate studies therefore, hinges on the projected future benefits.

In the U.S and India, perceived returns on education have been identified as crucial predictors in schooling choices, surpassing other traditional educational factors (Jacob & Wilder, 2011; Beaman et al., 2012). Additionally, Boneva, Golin et al. (2019) support this view, emphasizing that perceptions of both immediate and long-term benefits significantly affect decisions regarding postgraduate education enrolment in England.

Nonetheless, while future returns hold importance, Delavande and Zafar (2014) argue that within the context of Pakistan, they play a relatively minor role in determining university choice compared to factors such as financial constraints and the non-economic benefits derived from attending a specific institution.

Kwakwa et al. (2012), in a study carried out at the Akuapem Campus of the Presbyterian University College in Ghana observed that students' decisions to pursue higher education are influenced by factors like the potential for increased earnings, employment opportunities, prospects for advancement, and elevated social status. The study concluded that individuals' anticipated returns greatly influence their decisions in higher education choice. The study was a case study. The current study has been carried out in seven universities in Kenya.

The above studies produce different outcomes of perceived returns and postgraduate studies enrolment and were also done in countries outside Kenya. This study found the need to find out how perceived returns affect

postgraduate studies enrolment in the Kenyan context.

Moraa (2014) observes that in Kenya, obtaining education at the university level offers the highest private returns, at 40%, whereas primary education yields the lowest returns, at 11%. The study concludes that progressing to university is highly rewarding, as it leads to significantly greater returns compared to lower levels of education. However, the study leaves room to establish whether the expectation of higher returns serves as a motivator for the private demand for postgraduate studies in Kenya, and hence this current study.

### **3.0 Research methodology**

The study was carried out in seven purposively selected universities in Kenya and involved Master's and PhD students. An Explanatory Sequential Mixed Methods design consisting of two distinct phases, namely the quantitative phase and the qualitative phase (Creswell, 2014), was employed. Specifically, the follow-up explanations model (Creswell and Plano Clark, 2011), was used where a secondary qualitative phase was used to explain the quantitative results (which were given primacy in the study). The purpose of employing a Mixed Methods research approach was to gain a more comprehensive understanding of the research problem (Creswell, 2014). In addition, by using the Mixed Methods approach, the researchers were able to tap the strengths and minimize the limitations of both quantitative and qualitative approaches, thus enhancing the overall validity and scope of the study (Creswell, 2014). The study adhered to Kumar's (2019) recommendation by selecting 15% of the total 49 public and private chartered universities, resulting in a sample size of 7 institutions. Using Kothari's (2004) proportional allocation formula, the research ensured proportionality in the sample, leading to the selection of four public and three private chartered universities. Purposive sampling was chosen to guarantee diversity in terms of postgraduate programme offerings, as it allows for the selection of specific items that meet defined criteria, as outlined by Alvi (2016). The target population for this study comprised all the 60,515 students pursuing Master's and PhD (Doctor of Philosophy) degrees in both public and private chartered universities in Kenya during the study period. Slovin's formula was employed to determine the sample size of 395 students. Utilizing Kothari's (2004) proportional allocation formula, 343 questionnaires were assigned to Master's students and 52 to PhD students from the participating universities. Systematic sampling was employed to select Master's and PhD degree students from the selected universities. This sampling method ensured that the population was evenly represented, with sample elements spaced at equal intervals within the population (Castillo, 2009). The selection of participants for the second (qualitative) phase was determined by the findings obtained from the quantitative phase (Creswell and Plano Clark, 2011). The selection process focused on identifying extreme or outlier cases that emerged from the quantitative analysis in the first phase (Creswell, 2014). Out of the initial sample of 395 Master's and PhD students selected for the study, a total of 345 postgraduate students successfully completed the questionnaires during the quantitative phase. The study sampled 10% (Sekaran & Bougie, 2016) of the respondents to participate in the second phase of the study. Subsequently, 35 participants, comprising 30 Master's and 5 PhD students, were selected for the qualitative phase using the proportionate allocation formula recommended by Kothari (2004). Since the idea was to select participants who would best answer the research questions (Patton, 2015) and who were "information rich" persons on the effects of perceived returns on private demand for postgraduate studies, the sample was purposefully selected. Quantitative data from the postgraduate students were gathered using questionnaires, whereas qualitative data were obtained through interviews. The quantitative data was analyzed using descriptive and inferential statistics, while qualitative data were analyzed through thematic and content analysis techniques.

### **4.0 Discussion of findings**

The study aimed at establishing the extent to which perceived returns affects private demand for postgraduate studies. During the initial quantitative phase of the study, the effect of perceived returns on private demand for postgraduate was analysed through descriptive statistics. Additionally, regression analysis was employed, specifically utilizing the coefficient of determination ( $R^2$ ), to infer and draw conclusions regarding the effect of perceived returns on private demand for postgraduate studies.

In the subsequent qualitative phase, content and thematic analyses were employed to provide further insights and explanations regarding the quantitative findings.

#### **4.1 Postgraduate Students' Perceptions on the Effect of Perceived Returns on Private Demand for Postgraduate Studies-Quantitative Findings**

The postgraduate students were asked to select perceived return factors that they believed affected private demand for postgraduate studies and share their perceptions on how perceived returns affected private demand for postgraduate studies. Subsequently, a regression analysis was conducted to show the extent to which perceived returns predicts demand for postgraduate studies.

##### **4.1.1 Perceived Return Factors affecting Private Demand for Postgraduate Studies**

A survey was conducted among the postgraduate students to find out the factors they perceived as affecting

postgraduate studies. The results indicated that three primary perceived return factors affected private demand for postgraduate studies, with 59% citing increased employment opportunities, 57% mentioning salary increments, and 50% noting job promotions as significant factors. Additionally, 19% of the respondents identified various other perceived return factors, including qualification requirements set by employers, enhanced capacity to pursue international opportunities, the acquisition of advanced knowledge and skills in their respective fields of study, non-economic advantages, global competitiveness, and meeting the evolving demands of the labour market.

#### 4.1.2 Postgraduate Students' Perceptions on the Effect of Perceived Returns on Private Demand for Postgraduate Studies

The respondents views on the extent to which they agreed or disagreed with the effect of perceived returns on private demand for postgraduate studies were captured using a five-point Likert scale, which offered response choices ranging from 1=Strongly Disagree to 5=Strongly Agree.

To aid in interpretation and facilitate inferential analysis, respondent answers were transformed into a continuous scale ranging from 1 to 5. This conversion, as well as allowing for more straightforward statistical examination, increased the utility of the data for drawing significant conclusions. Higher scores denoted a very strong agreement, and vice versa. The mean response was computed for individual items within the construct variables, as well as an aggregate mean for each construct variable. These mean values were subsequently interpreted using the scale ranges recommended by Sözen and Güven (2019), as presented in Table 1.

**Table 1**

*Likert Scale Scoring Range for the Level of Agreement*

Numerical Value	Level of Agreement	Mean Scale
1	Strongly Disagree	1.00-1.80
2	Disagree	1.81-2.60
3	Neutral	2.61-3.40
4	Agree	3.41-4.20
5	Strongly Agree	4.21-5.00

Source: Sözen and Güven, (2019)

According to the scale provided in Table 1, any score of 3.41 or higher indicates that the respondents expressed agreement with the statement. Conversely, a score of 2.60 or lower signifies disagreement with the statement.

Standard deviation was employed to illustrate the degree of data clustering around the average, with a lower standard deviation suggesting a greater concentration of data near the mean (Rumsey, 2019). A low standard deviation was defined as ranging from one (1) downwards towards zero, indicating that the majority of respondents were clustered around the mean. On the other hand, a standard deviation of 1.8 or higher suggested that respondents were spread out from the mean, signifying diverse opinions.

The perceptions of the postgraduate students on perceived returns effects on private demand for postgraduate studies was as shown in Table 2.

**Table 2**

*Postgraduate Students' Perceptions on the Effect of Perceived Returns on Private Demand for Postgraduate Studies (n=345)*

Statements for Perceived Returns	Strongly Disagree		Disagree		Neutral		Agree		Strongly agree		MN	SD
	n	%	n	%	n	%	n	%	n	%		
- Attaining postgraduate education enables individuals to earn more than undergraduate degree holders	6	1.7	8	2.3	62	18	162	47	107	31	4.0	.86
- There are a lot of monetary benefits accrued after attaining postgraduate education	12	3.5	46	13.3	67	19.4	128	37.1	92	26.7	3.7	1.10
- Students enrol for postgraduate studies to increase their future earnings	10	2.9	32	9.3	79	22.9	101	29.3	123	35.6	3.9	1.10
- Individuals with higher financial ability are more likely to enrol for postgraduate studies	98	28.4	104	30.1	79	22.9	50	14.5	14	4.1	2.4	1.16
<b>Grand mean</b>											<b>3.5</b>	

Source: Field Data (2022)

As per the data presented in Table 2, the postgraduate students expressed agreement on certain aspects regarding the effect of perceived returns on private demand for postgraduate studies. These include the belief that acquiring postgraduate education leads to individuals earning more highly than those individuals with only undergraduate degrees (78% with a mean of 4.0 and a standard deviation of .86). Additionally, a significant proportion of students indicated that they pursue postgraduate studies with the aim of enhancing their future income (64.9% with a mean of 3.9 and standard deviation of 1.10). Moreover, a considerable percentage agreed that substantial financial gains result from obtaining postgraduate education (63.8% with a mean of 3.7 and standard deviation of 1.1).

However, as outlined in Table 4.5, postgraduate students did not agree with the statement that individuals with greater financial means are more inclined to pursue postgraduate studies (58.5% with a mean of 2.4 and a standard deviation of 1.16). The collective average for postgraduates' perception of the effects of perceived returns on private demand for postgraduate studies was 3.5, indicating a general agreement among respondents that perceived returns do have an effect on private demand for postgraduate studies.

#### 4.1.3 Regression Analysis on the Effect of Perceived Returns on Private Demand for Postgraduate Studies

A bivariate regression analysis was performed to demonstrate the extent to which a one-unit change in perceived returns can predict the shift in private demand for postgraduate studies. The four Likert scale items employed to assess postgraduate students' perceptions of perceived returns were converted into continuous data. These scores were subsequently regressed against the dependent variable, demand for postgraduate studies, which was measured based on the enrolment figures of postgraduate students and their perceptions regarding postgraduate enrolment.

Tables 3 and 4 present the findings of the analysis, showing the magnitude, direction, and statistical significance of the relationship between perceived returns and private demand for postgraduate studies.

**Table 3**

*Model Summary for Perceived Returns and Private Demand for Postgraduate Studies*

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.755 <sup>a</sup>	.57	.47	.352

a. Predictors: (Constant), perceived returns

As depicted in Table 3, the coefficient of determination ( $R^2$ ) is .57. This value signifies that 57.0% of the variation in private demand for postgraduate studies is accounted for by perceived returns, while the remaining 43.0% is explained by factors not addressed by this study. This represents a substantial effect by one predictor on the dependent variable, suggesting that perceived returns have a significant effect on private demand for postgraduate studies in universities in Kenya.

The study subsequently carried out an analysis to determine the coefficients for the effect of perceived returns on private demand for postgraduate studies. The results are as shown in Table 4, which shows the specific coefficients associated with the effect of perceived returns on private demand for postgraduate studies.

**Table 4**

*Coefficients Table for Effect of Perceived Returns on Private Demand for Postgraduate Studies*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.879	.094		9.307	.000
1 Perceived returns	.57	.007	.755	2.907	.004

a. Dependent Variable: private demand for postgraduate studies

According to Table 4, the "Constant," which signifies the predicted value of private demand for postgraduate studies when perceived returns is zero, is .879. Additionally, the analysis in Table 4 shows a regression coefficient ( $B$ ) of .57. According to Hanneman et al. (2012), this unstandardized regression coefficient, also known as the slope, represents the substantial effect of the independent variable on the dependent variable. It quantifies the amount of change attributable to a one-unit alteration in the independent variable, without any standardization or adjustment. Therefore, the regression coefficient of .57 implies that for each one-unit increase in perceived returns, the private demand for postgraduate studies is projected to rise by .57 units. This indicates that the regression model for perceived returns and private demand for postgraduate studies has statistical significance.

As shown in Table 4, the p-value is .004, which is less than the commonly accepted significance level of .05. According to Hanneman et al. (2012), when the p-value is less than .05, it is considered statistically significant, indicating that the variable in question, perceived returns in this case, is a significant predictor of private demand for postgraduate studies.

To provide further insight into these findings, the research undertook the collection and analysis of qualitative data during the second phase of the study.



#### **4.2 Effect of Perceived Returns on Private Demand for Postgraduate Studies in Selected Universities in Kenya-Qualitative Findings**

The research aimed to gather comprehensive information to provide a deeper understanding and explanation of the quantitative results concerning the perceptions of postgraduate students on the effect of perceived returns on private demand for postgraduate studies. In the qualitative phase of the study, a follow-up was conducted with 28 participants who were identified as most capable of providing in-depth explanations of the quantitative results. The selection criteria was determined by factors such as gender, age and discipline enrolled in. The selection criteria also took into account individuals who exhibited particularly high or low scores in their perceptions regarding the effect of perceived returns on the private demand for postgraduate studies. The qualitative data pertaining to postgraduate students' perceptions regarding the effect of perceived returns on private demand for postgraduate studies revealed a diverse range of opinions.

Some participants believed that perceived returns did indeed affect private demand for postgraduate studies, while others held the contrary view. Those who believed that perceived returns had a positive effect on private demand for postgraduate studies cited expectations of higher salaries, opportunities for workplace advancement, and improved access to other employment prospects, including better job positions. They explained perceived returns in terms of attaining better pay, securing improved employment prospects, and enhancing their competitiveness for part-time job opportunities. One participant explained that;

*"...No one would want to waste their money in school if there are no better jobs or better pay. Although most institutions have stopped rewarding graduates, there are other opportunities that people expect to present themselves and this makes them go back for postgraduate studies."*

Participants who expressed lower ratings for the effect of perceived returns on private demand for postgraduate studies explained that individuals engage in postgraduate studies either due to workplace directives or for personal fulfillment. Additional qualitative findings indicated a notable level of uncertainty in employment prospects, with no assurance that possessing a postgraduate degree would necessarily lead to securing a job or attaining a higher salary. A participant expressed his view as follows;

*"...Most people who have pursued postgraduate studies with this mind-set (that perceived gains determines the pursuit of postgraduate studies) have ended up being frustrated because what they thought would be did not happen because of increasing unemployment and lack of employer's recognition of postgraduate employees. For me it is more of achieving my life goal of attaining all levels of education.."*

Some participants provided additional insights based on social motives. The desire to establish a reputable standing in society was emphasized. They believed that obtaining the title of "Doctor" held a certain level of prestige. These sentiments highlight that, for these individuals, the pursuit of postgraduate studies is primarily driven by personal aspirations to accomplish their life goals, rather than solely for economic benefits. These statements also underscore the existence of non-economic factors perceived as valuable gains in the pursuit of postgraduate studies.

The qualitative data additionally highlighted variations in perceived returns based on the chosen field of study and age group. It was observed that the minimum educational requirement for entry into the job market varied depending on the specific career path. Participants pointed out that individuals in middle age brackets tended to place a greater emphasis on the perceived returns derived from pursuing postgraduate studies compared to their younger counterparts. The analysis also yielded additional themes, such as gaining a competitive edge, attaining economic advantages, securing social recognition, and fulfilling career objectives, all of which were identified as perceived returns stemming from postgraduate education.

Overall qualitative results showed that many participants pursued postgraduate studies primarily because of the perceived returns associated with advanced level of education.

#### **4.3 Integration of Qualitative and Quantitative Findings on Perceived Returns as a Determinant of Private Demand for Postgraduate Studies in Selected Universities in Kenya**

The quantitative findings suggest that the most significant factors affecting private demand for postgraduate studies are increased job opportunities, higher salaries, and career advancement. Further, the study revealed that economic considerations played a predominant role in shaping the perceived returns associated with postgraduate studies.

These findings highlight that perceived economic benefits play a pivotal role in driving the private demand for postgraduate studies within Kenyan universities. This aligns with the observations made by Nikolov et al. (2020), who found that pursuing further education led to an increase in earnings by 18-20% in South Africa. Similarly, Netcoh (2016) advanced that education and training contribute to economic gains such as raised wages and an increase in domestic product. This perspective is also upheld by British Council (2014), which advocates for nations to strengthen their GDP by expanding the pool of highly skilled professionals through postgraduate studies offering. Additionally, research by Boneva et al. (2019) established that individuals with postgraduate qualifications in the UK and US tend to earn higher incomes compared to those with lower

educational credentials. Consequently, this has prompted a heightened demand for postgraduate studies, as many employees believe that obtaining such qualifications will lead to an increase in their earnings. Findings by Gunderson and Oreopolous (2020) also underscore that in developing nations, the average annual returns on education range from 5-15%, with notable variations based on gender, educational level, and the type of course pursued.

The desire for job security and an elevated social status were shown to have little effect on the decision to pursue postgraduate studies. Schendel and Oketch (2014) posit that these are non-economic benefits and may encompass factors such as job longevity and overall job satisfaction.

Additional factors contributing to perceived returns encompassed non-economic benefits, global competitiveness, meeting specific labour market demands, fulfilling employer qualification criteria, possessing advanced credentials for potential migration, and gaining expertise and proficiency within the chosen field of study.

According to the Likert scale findings, postgraduate students expressed consensus in several areas. They believed that obtaining postgraduate education leads to higher earnings compared to those with only undergraduate degrees (78% with a mean of 4.0 and a standard deviation of 0.86). Additionally, a significant proportion indicated that they pursue postgraduate studies with the aim of enhancing their future income (64.9% with a mean of 3.9 and a standard deviation of 1.10). Moreover, a considerable percentage agreed that substantial financial gains result from obtaining postgraduate education (63.8% with a mean of 3.7 and a standard deviation of 1.1). These findings are in line with those of Lindley and Machin (2016) and Boneva et al. (2019), who found that in 2018, approximately 15% and 14% of employees in the US and UK respectively held postgraduate qualifications, and their earnings were significantly higher than of those with only an undergraduate degree.

The average perception score among respondents regarding the effect of perceived returns on private demand for postgraduate studies was 3.5. This suggests a consensus among respondents that perceived returns do have an effect on private demand for postgraduate studies.

Bivariate regression analysis demonstrated that perceived returns explain 57% of the variation in private demand for postgraduate studies, as indicated by an  $R$ -squared value of .57. The regression coefficient ( $B$ ) of 0.57 and a  $p$ -value of  $.004 < .05$ , indicate that at a significance level of  $p < .05$  the regression model for perceived returns and private demand for postgraduate studies is significant.

As well as showing that perceived returns propel individuals to pursue postgraduate studies, the qualitative data, in line with the Explanatory Sequential Mixed Methods design used in this study (Creswell, 2014), provided valuable insights that explained more on the quantitative findings. The qualitative data revealed that middle-aged individuals perceived higher returns from postgraduate studies compared to younger individuals. Moreover, the study found that the minimum qualifications required for entry into the job market varied depending on the specific career path, potentially affecting private demand for postgraduate studies.

Overall, this study suggests that whether in the short or long run, perceived returns play a significant role in determining individuals' pursuit of postgraduate studies in Kenyan universities. This finding aligns with the results of Boneva et al. (2019), who observe that perceived returns, be they immediate or long-term, contribute to private demand for postgraduate studies.

## 5.0 Conclusion

Perceived returns, as a determinant of private demand for postgraduate studies, was found to play a major role on private demand for postgraduate studies as it was found to explain a high percentage of the variation in private demand for postgraduate studies. The regression model for perceived returns and private demand for postgraduate studies was also found to be statistically significant. In addition, perceived returns was found to be a significant predictor of private demand for postgraduate studies. It is therefore logical to conclude that perceived returns is a good predictor of private demand for postgraduate studies in universities in Kenya. The qualitative data offered valuable insights that provided a deeper understanding of the quantitative results.

In evaluating the effect of perceived returns on private demand for postgraduate studies, the study concludes that the qualitative data gathered in the follow-up phase significantly enhance the depth of understanding compared to relying solely on quantitative results

## 6.0 Recommendations

The study recommends the following:

- i) That universities collaborate with employers from both the private sector and the public sector as well as other areas in the labour market to enhance accurate information, training and employment opportunities for postgraduate students.
- ii) That a tracer study be carried out to assess the extent to which perceived returns from postgraduate studies have been achieved.
- iii) That a comparative study be carried out to compare the expectations from postgraduate studies by the

freshly enrolled postgraduate students and those of the ongoing postgraduate students in universities in Kenya.

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