

The Nexus between Socio-Economic Status and the Amount of Loan Awarded by HELB to Diploma Students in National Polytechnics in Kenya

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Abstract: The need to access higher education in Kenya is increasing especially with the introduction of free primary education in the norm of Education for All. Higher education in developing countries, however, is faced with a myriad of challenges such as lack of accessibility and affordability given the limited government funding. Responsively, some countries have adopted the cost sharing mechanisms in terms of subsidized tuition fees, food, grants and provision of student loans to expand the quality of higher education. The discussions in this paper are anchored on a study that sought to analyze the nexus between the Socio Economic Status (SES) of student recipients and the amount of loan awarded to diploma students in National polytechnics in Kenya. The study adopted an ex post facto research design targeting Eldoret Polytechnic, Kisumu Polytechnic and Kenya Technical Training College (KTTC). The target population comprised 8,202 second year diploma students who were beneficiaries of higher education loans; three Academic Registrars and three Deans of Students in the selected national polytechnics. The 30% rule of thumb was used to select the three national polytechnics out of 10 national polytechnics in Kenya. Proportionate simple random sampling was used to sample 330 loan recipients. In addition, all the three Academic Registrars and three Deans of Students were purposively sampled, making a total sample of 336 respondents. Data was collected using a questionnaire for higher education loan recipients, interview guide for the polytechnic officers and document analysis for loans and bursaries disbursements. A pilot study was conducted in one of the polytechnics in the country. Research instruments were validated using face and content validity while testing reliability involved the use of a test-retest technique at $r = 0.7$. Descriptive and inferential data was analyzed using means, percentages, principal component analysis and Gini coefficient, respectively. Correlation analysis was carried out using Pearson Correlation technique which revealed that there is no significant relationship between SES and the amount of loans being awarded to polytechnic students (r value was .010 and p value of .871). Consequently, this implied that the amount of loans being awarded to national Polytechnic students is done regardless of their socio-economic status in the society.

Keywords: Higher Education, Loan Allocation, National Polytechnics, Socio-Economic Status, HELB

Date of Submission: 15-07-2017

Date of acceptance: 05-08-2017

I. Introduction

Education is entrenched in international declarations to which Kenya is a signatory. Article 26 of the Universal Declaration of Human Rights clearly states that everyone has the right to education and that higher education shall be equally accessible to all on the basis of merit. This implies that higher education is not a privilege of some sections of the society. In reality, higher education should be equally accessible to the populace irrespective of their socio-economic status, gender or region so long as prospective students meet minimum university entry requirements.

In an effort to equalize access to university education, developing countries have adopted mechanisms of financing students enrolled in both public and private universities through provision of loans. However, this initiative has been faulted on account that it exacerbates inequalities in the provision of higher education. Mohamad [1] observes that the new financing methods that encourage privatization in higher education have also failed to achieve greater access for students with a low Socio-Economic Status (SES) in developing countries. Furthermore, Espinoza's [2] study found that in Chile, the implementation of student aid program in the 1990s failed to reduce the access gap between the bottom and the top quintile groups.

Around the globe, countries have introduced loan schemes to address access and equity concerns to finance needy students' access to higher education in both public and public universities. These loans are majorly meant to cater for student's tuition and living expenses. However, despite efforts to provide subsidized

education at primary, secondary and university, the provision of tertiary education is faced with equity concerns in both developed and developing countries [3]. Commenting on this, Boit [4] is of the opinion that access and equity issues in higher education largely affect students in the low socio-economic cadres.

Conversely, student loan schemes have also been alleged to perpetuate inequality in higher education. Comparisons of equity in access to higher education loans is always made on the basis of program of study, university enrolment, regional gender, ethnicity and socio-economic background of the eligible population. Equity in loan allocations, therefore, relates to differences in the access to education loans for different groups of socio-economic status. According to Albrecht and Ziderman [5], some student loan schemes have been generally successful whilst others have been disappointing in extenuating inequality in the provision of higher education. Albrecht and Ziderman [5] adopted three main forms of loan scheme mechanisms viz.: mortgage loan scheme which allows the repayment of loans over a specified period with fixed monthly repayments, interest rate and maximum length of repayments; graduated nominal loan scheme which requires borrowers to pay equal rather than nominal amounts, thus ensuring that the first payments are not necessarily large in real terms in relation to others; and income contingent loan scheme which requires that loans be paid as a portion of a graduate's income each year. The latter is popular with graduates with lower incomes.

Mohamad [1] observes that even though the loaning scheme targets to assist the disadvantaged students in both higher education and upper-secondary general and vocational schooling, it has continuously favoured mostly the non-poor. Similar experiences have been reported in Malaysia by Salmi and Hauptman [6] who observed that the Malaysian student loan scheme does not factor family income as a condition for eligibility hence it has constantly benefited students from high income families.

There is also considerable literature on the impact of socio-economic status on college choice. Walpole [7] suggests that there is a strong correlation between family income level and the decision on whether or not students attend college and the types of institutions they select. Other scholars have shown that there are significant disparities in college access and choice among students from different socio-economic groups [8]. According to Walpole [7], whether to enrol into private or public university highly depends on SES and students from low-income background are disproportionately represented in either of the institutions.

Yang [9] has noted that, though a Normal University cost in China is heavily subsidized by the national government and runs a loan scheme to aid needy students, the population does not reflect a full complement of the national population. The study results indicated skewed enrolments in favour of the urban and well-connected students. The results of the study suggested that loans promote inequalities in access to higher education in China. On the other hand, Zhao [10] found out that student loan schemes have resulted to segregation of students in terms of university status and program undertaken. Another study by Kasozi [11] showed that the need-based scholarships designated to provide coverage to 20% of all the university students in China is subject ranked to the tier (32%) and second tier (27%) national universities at the expense of the third tier. According to Knight [12], mostly, access to higher education loans depends on socio-economic status of the students and that in many Sub-Saharan African countries, participation in universities and other institutions of high education is dominated by students from the highest income quintiles despite the existence of students' loan schemes. It is further explained that, often, public funding mechanisms act to intensify such inequities by providing free higher education to the "best" students who invariably come from the wealthiest households.

Carrol's study which compared the socio-economic status of students admitted under the Private Entry Scheme (PES) to those admitted under the government scholarship scheme at Makerere University, showed that the PES has entrenched, rather than increased, existing inequities in participation at the university [13]. Kasozi [11] is also of the same opinion, postulating that majority of students accessing Ugandan universities and whose expenses are paid by the state come from wealthy families. Successive studies in the 1990s showed that some 60-80% of Ugandan students who enter public universities, including those for whom tuition and accommodation is paid by the state, come from wealthy families. Lillis and Tian [14] mention that the cost of higher education limits the choice of institutions available to students from low-income groups, further restricting available educational opportunities. However, this situation is redeemable. Baum and McPherson [15] argue that educational opportunities for low-income students could increase through more effective targeting of student financial aid. It is apparent that as college costs continue to rise, the availability of financial assistance becomes gradually important, especially to students from low-income families.

In Kenya, the delivery of higher education is faced with equity issues. For example, a benefit incidence analysis of educational spending in Kenya by Deolalikar [16] shows that the poorest quintile constitutes only 7.54 percent of higher education students against 67.03 percent of the rich and richest quintiles. In addition, a recent study on the dual track admission system in Kenya [17] reported that when university students were classified by estimated family income levels, cumulatively, 78.3 percent reported being from high income/high middle income and middle income families, while only 21.7 percent reported being from low income families. The data indicates that the richest 40 percent accounts for up to three quarters of all university students in the country, despite the poor being the majority in the Kenyan population.

The introduction of students' loan to finance needy students in public universities by the Kenyan government in 1991 was aimed at enhancing access and equity in the provision of higher education. This was geared towards equalizing opportunities to address socio-economic status, gender and regional disparities in higher education mainly attributed to cost sharing. This initiative required students and/or their parents to cover both modest tuition fees and contribute to the costs of maintenance [18]. Therefore, alongside this policy, a University Students Loans Scheme (USLS) was established to enable needy students access higher education [4, 17, 19]. According to Cheboi [20], the funding policy at the inception only required an admission to a public university as a qualification for a loan award. However, as a result of high default rates, inadequate funds and equity concerns, the scheme was reorganized resulting in the establishment of the current Higher Education Loan Board (HELB) in 1995. Cheboi [20] is of the opinion that, unlike USLS, the new scheme utilizes means testing to identify and target only needy students based on socio-economic status, family status and marginalization. There are two levels in the HELB means testing criteria. The first is the socio-economic status criteria based on household earnings. For example, an applicant from a two parent household earning less than Ksh 250,000 per year is eligible for a loan of Ksh 45,000, while an applicant, whose parents earn between Ksh 250,000 and 600,000, is only eligible for a loan of Ksh 40,000. The second principle is the secondary school attended which is used to modify the amounts proposed. If, for example, the applicant attended a high cost private school, the maximum loan to which he would be privy would be Ksh 35,000 no matter how little was earned by his/her parents [20]. Initially, in 1995, HELB awarded recipients a maximum of Ksh. 42,000 but later revised the amounts upward to Ksh. 55,000 in the 2005/06 financial year and Ksh. 60,000 (US\$ 687.29) in 2008/09. A phone call made to HELB Personnel confirmed the figures given above to be applicable also to TVET students. The latter was as a result of HELB funding self-sponsored students [21]. For the government sponsored students, HELB pays Ksh 8,000 directly to the university to meet student's tuition costs. The balance is deposited in a recipient bank account to take care of their food and lodging costs and other living expenses. Unlike their counterparts who qualify for the loans upon receipt of an admission, the self-sponsored students can only qualify for consideration at least after enrolling. The perception of HELB funding is that at least 40 percent of the tuition fee is taken care of. The loans are loaned at a rate of four percent and payable upon employment [20]. Nonetheless, despite the presence of the Kenyan student loan scheme to assist needy students' access higher education, studies done by different researchers [16, 17, 22, 23] on access to higher education in Kenya have generated debate on whether the government loan scheme enhances equity in access to higher education. Some scholars [17, 22] have argued that the higher education loan scheme is mal-distributed such that it benefits those who need it least. It has also been demonstrated [16] that bursaries and loans in higher education benefit inexplicably the more affluent groups. Thus the mode of financing education in Kenya has been argued to be deteriorating in that it aggravates inequality. From the foregoing, and based on the hypothesis that "recipient's socio-economic status has no statistically significant effect on the amount of loan awarded to diploma students in national polytechnics in Kenya", this paper sought to establish the nexus between the socio- economic status of students has had on the loan award being granted by Higher Education Loans Board.

II. Materials And Methods

Ex-post facto research design was used for the study, which according to Kerlinger and Howard [24], Cohen, Manion and Morrison [25] and Marilyn and Jim [26], is an empirical enquiry where the independent variables cannot be manipulated. In this case the HELB recipients' SES is a historical condition that has already occurred naturally so is the amount of loan award. The study targeted National Polytechnics in Kenya among which Kisumu Polytechnic, Eldoret Polytechnic and Kenya Teachers Technical College that existed after the TVET Act 2013 were selected. The study population comprised 8,202 students in the 2014/15 cohort who at the time were second year direct entry diploma students for the academic year 2015/16 and recipients of higher education loans. Six polytechnic officers in the three national polytechnics namely, Academic Registrars (3) and Deans of Students (3) were also targeted. Therefore, the sample size of diploma HELB recipients in the three national polytechnics used in this study was determined using the formula cited by and Musera [27] as follows:

$$n = \frac{\left(\frac{p(1-p)}{\frac{A^2}{Z^2} + \frac{p(1-p)}{N}} \right)}{R}$$

$$n = \left\{ \frac{\left(\frac{0.5(1-0.5)}{0.05^2 + \frac{0.5(1-0.5)}{8,202}} \right)}{0.9} \right\} = 330$$

Where:

n = sample size required

N = number of people in the population

P = estimated variance in population, as a decimal: (0.5 for 50-50, 0.3 for 70-30)

A = precision desired, expressed as a decimal (i.e., 0.03, 0.05, 0.1 for 3%, 5%, 10%)

Z = based on confidence level: 1.96 for 95%, 1.6449 for 90% and 2.5758 for 99%

R = estimated response rate, as a decimal

In addition, three (3) Academic Registrars and three (3) Deans of Students from the three national polytechnics were purposively sampled to participate in the study. Therefore, the study sample added up to 336 respondents. Questionnaire, interview schedule and document analysis check list were used to solicit information for the study.

Multiple regression analysis was employed in the study to test the null hypothesis that “a recipient’s socio-economic status has no statistically significant effect on the amount of loan awarded to diploma students in national polytechnics in Kenya”. Three models were employed in the analysis thus; model 1 assessed the effect of a recipient’s socio-economic status on the amount of loan awarded; model 2 assessed the effect of a recipient’s socio-economic status on the amount of loan awarded while controlling for recipients’ gender, polytechnic and county; while model 3 measured the effect of recipient’s socio-economic status on the amount of loan awarded controlling the student’s background information (gender, polytechnic enrolled and home County) and students perceptions on bursary allocations.

III. Results And Discussion

3.1 The Effect of the Recipient’s SES on the Amount of Loan Awarded

To establish the effect of the recipient’s socio-economic status on the amount of higher education loan awarded to diploma students in national polytechnics in Kenya, the null hypothesis which stated that “there was no statistically significant effect of the recipient’s SES on the amount of higher education loan awarded to diploma students in national polytechnics” was tested using Multiple Linear Regression Analysis (MLRA). A pair-wise correlation between the outcome variable (amount of loan awarded) and its covariates was run to establish which variables to pursue in the regression model. The results are presented in Table 1.

Table 1: Correlation Matrix between Loan Allocation and its Correlates

Variable		a51	swi32	swi33	a132	a133	a16	a178
a51		1						
swi32	a	-0.128	1					
	b	0.040						
swi33	a	0.167	-0.499	1				
	b	0.007	0.000					
a132	a	0.323	-0.014	0.204	1			
	b	0.000	0.828	0.001				
a133	a	-0.421	-0.008	-0.175	-0.511	1		
	b	0.000	0.901	0.005	0.000			
a16	a	0.174	-0.069	-0.011	0.105	-0.108	1	
	b	0.005	0.273	0.859	0.093	0.085		
a178	a	-0.217	-0.128	0.067	-0.167	0.328	-0.142	1
	b	0.001	0.053	0.310	0.011	0.000	0.031	
a1715	a	-0.130	0.011	-0.011	0.031	0.127	0.036	-0.114
	b	0.050	0.864	0.872	0.646	0.055	0.591	0.086
a1716	a	0.190	0.046	0.119	0.248	-0.427	-0.056	-0.162
	b	0.004	0.484	0.071	0.000	0.000	0.402	0.014
a1717	a	0.170	-0.083	0.153	0.346	-0.213	-0.027	-0.077
	b	0.010	0.209	0.020	0.000	0.001	0.683	0.243
a482	a	-0.123	-0.014	-0.105	0.134	0.056	-0.051	0.024
	b	0.049	0.820	0.094	0.032	0.373	0.412	0.714
a486	a	0.153	-0.009	0.062	-0.087	-0.179	0.019	-0.033
	b	0.014	0.891	0.326	0.166	0.004	0.760	0.616
a615	a	0.135	-0.001	-0.060	0.065	-0.057	-0.035	0.054
	b	0.039	0.987	0.361	0.325	0.390	0.596	0.433
a621	a	-0.132	0.085	-0.028	-0.030	0.134	-0.031	0.063
	b	0.045	0.198	0.676	0.652	0.041	0.641	0.365
a691	a	-0.184	-0.026	-0.069	-0.054	0.345	0.037	0.200
	b	0.007	0.710	0.315	0.434	0.000	0.588	0.006
a6101	a	-0.158	0.038	-0.046	-0.067	0.290	-0.138	0.120
	b	0.021	0.585	0.502	0.328	0.000	0.043	0.099
a6104	a	0.140	-0.058	0.106	0.133	-0.159	0.192	-0.072
	b	0.041	0.400	0.123	0.052	0.020	0.005	0.320

Note: a=Pearson correlation coefficient; b=p-values ($\alpha=0.05$); Pair-wise correlation: ≤ 0.35 = Weak correlation; 0.36-0.67 = Moderate correlation; 0.68-0.89=Strong correlation; ≥ 0.90 = Very strong correlation; Adapted from "Interpretation of correlation coefficient, " by R. Taylor, 1990, Journal of Diagnostic Medical Sonography, 6(1), p. 37

The results indicated in Table 1 show that the correlation coefficient of covariates of loan allocation ranged between 0.123 and 0.323, suggesting a weak correlation except for a133 (0.421) with a moderate correlation. The variables swi32, a133, a178, a1715, a1717, a486, a615 and a6104 were significantly positively correlated with the outcome variable at $\alpha = 0.05$. The results suggest that the recipients associated with these variables received higher loan awards. However, this relationship was weak. Similarly, the variables swi33, a132, a16, a1716, a482, a621, a691 and a 6101 were significantly negatively correlated with the outcome variable at $\alpha = 0.05$. Loan recipients associated with these variables received lower loan awards. Surprisingly, the variable swi33 (low SES) indicated recipients received lesser amounts yet they should be the highest beneficiary. This may suggest that HELB loans in national polytechnics benefits those who do not deserve. These variables were used in the regression model to assess their effect on the amount of loan allocation to students in national polytechnic in Kenya.

In the multiple linear regressions, the value of the coefficient indicates the amount of loan awarded for 2013/14 and 2014/15 academic years. The positive sign of the coefficient indicates increased amount of loan award to the loan recipient while the negative sign indicates decreased amount of loan award. The significance of the relationship between a given independent variable and the dependent variable is tested at $p=0.05$. The result of the multiple regression model is presented in Table 2.

Table 2: Multiple Linear Regression Coefficients of the Effect of Student's Socio-Economic Status on HELB Loan Allocation for 2013/14 & 2014/15 Academic Years

Variable	Variable label	Model 1 (a51)			Model 2 (a51)			Model 3 (a51)		
		U.Coef	P	B	U.Coef	p	β	U.Coef	p	β
swi32	Middle SES	-3105	0.414	-0.06	-7495	0.053	-0.14	-6282	0.130	-0.12
swi33	Low SES	7147	0.054	0.14	-700	0.848	-0.01	-1899	0.607	-0.04
a132	Kisumu Polytechnic				9823	0.005	0.19	10091	0.007	0.20
a133	Eldoret Polytechnic				-12715	0.004	-0.25	-6872	0.167	-0.14
a16	Male student				6490	0.028	0.13	10120	0.002	0.21
a178	Uasin Gishu				-10190	0.151	-0.11	-9584	0.207	-0.11
a1715	Siaya				-7893	0.084	-0.11	-3845	0.396	-0.06
a1716	Kisumu				592	0.870	0.01	5834	0.125	0.11
a1717	Homa Bay				2384	0.653	0.02	11087	0.037	0.11
a482	Full-time wage/Salary earner				-4156	0.239	-0.07	-5063	0.179	-0.09
a486	Conducting own business				3159	0.415	0.05	4891	0.239	0.08
a615	Strongly Disagree							18201	<.001	0.25
a621	Strongly Agree							-2630	0.518	-0.05
a691	Strongly Agree							-5042	0.182	-0.10
a6101	Strongly Agree							2944	0.473	0.06
a6104	Disagree							3374	0.360	0.05
Constant		88488	<.001	n/a	93232	<.001	n/a	86468	<.001	n/a
N		257			230			186		
R ²		0.0305			0.2758			0.3464		
F Statistics		F(2, 254) =4.18			F(11, 218)=7.63			F(16, 169)=6.35		
Root Mean Squared Error (RMSE)		24315			21621			20142		

Note. U.Coef=Unstandardized Coefficient; RMSE=Standard deviation of the regression model (the closer to zero better the fit).

The results of MLRA, as shown in Table 2, shows that the constant of regression was significant for both model 1, 2 and 3 at $p<0.01$, $p<0.01$ and $p<0.001$, an indication that the model captured all the pertinent variables that explained the variations in the amount of loan award. The F-statistic (F (2,254) =4.18, $p<0.001$), F (11, 218) = 7.63, $p<0.001$) and (F (16, 169) =6.35, $p<0.001$) for model 1, 2 and 3 respectively indicate that the R² for the three models were significantly different from zero at $p=0.05$. These imply that all the coefficients in the model were significantly different from zero and were important in explaining the variation in the amount of loan awards to diploma recipients in national polytechnics in Kenya.

It can also be discerned from Table 2 that the MLRA results in model 1 indicate that the student's SES is not associated with loan amounts awarded to diploma loan recipients in national polytechnics in Kenya. The results further indicate that the middle SES tertile is associated with up to Kenya shillings 13, 104.651 ($p=0.414$) less compared with the other tertiles. In addition, the low SES tertile is associated with up to 71, 46.922 ($p=0.054$) shillings more compared with the other tertiles. The model's constant is statistically significant [88, 488.37 ($p<.001$)]. The overall model was statically significant, $p=0.0164$.

In model 2 controlling for the student's characteristics, SES is still not associated with loan amounts awarded to diploma students in national polytechnics in Kenya. This suggests that loan amounts to diploma students in national polytechnics are not awarded based on the recipients SES. The results in model 2 further indicate that over the two academic years at the 95% level students enrolled in Kisumu polytechnic are predicted to be awarded up to Kenya shillings 9,822.628 more than their colleagues enrolled in the other two polytechnics over the two academic years ($p=0.005$, $\beta=-.1880047$). Similarly, diploma students enrolled in Eldoret polytechnic are predicted to be awarded up to Kenya shillings 12, 715.25 less than their colleagues in the other two polytechnics over the two academic years ($p=0.004$, $\beta=-.2493014$). The results suggest that loan allocations in national polytechnics are not equitable. If loan allocations were equitable, differences in loan allocations across the three polytechnics would not be significant. In addition, male students are predicted to be awarded up to Kenya shillings 6,489.717 more than their female counterparts over the two academic years ($p=0.028$, $\beta=.1311438$). The intercept/constant predicts Kenya shillings 93,232.41 for each student over the two years ($p<.001$). The overall model is significant ($p<.001$) and explains up 0.2758 or 27.58% of the variation in loan amounts awarded to the students over the two academic years.

Although the correlates (a51, a615 a621 a691 a6101 and a6104) in model 3 were focused on loans, its variables are perceptions on bursary amounts thus omitting them collapsed all the post estimation tests which imply the regression would be a misfit invalidating its results. Consequently, the study modelled them as controls. Therefore, controlling for the student's fee-paying person and their responses on a 5-point likert scale, SES is still not significantly associated with loan amounts awarded at the 95% level. Students enrolled in Kisumu polytechnic are predicted to be awarded up to Kenya Shillings 10,091.46 more than their colleagues enrolled in the other two polytechnics over the two academic years ($p=0.007$, $\beta=.2039978$). Similarly, male students are predicted to be awarded up to Kenya shillings 10,119.97 more than their female counterparts over the two academic years ($p=0.002$, $\beta=.2130579$). Students from Homa Bay County are also predicted to get up to Kenya shillings 11,086.61 more than their counterparts from other counties over the two years ($p=0.037$, $\beta=.1101222$). Curiously, students who strongly disagree that they depend on bursary to pay their fees are predicted to be awarded up to Kenya shillings 18,200.51 more than those who think otherwise over the two academic years ($p<.001$, $\beta=.2522911$). It would be natural to expect that these would be awarded less loan amounts since they do not depend on bursary to finance their education. The intercept/constant predicts Kenya shillings 86,468.02 for each student over the two years ($p<.001$). The overall model is significant ($p<.001$) and explains up 0.3464 or 34.64% of the variation in loan amounts awarded to the students over the two academic years. Using the beta values, the predictors of loan amounts are therefore a132, a133 (the polytechnic of enrolment) a16 (student sex) and a615 (strongly disagree on bursary dependence). These meet the $\Rightarrow 0.10$ threshold for standardized coefficients and their p-values meet the 95% level threshold for social sciences.

The study further tested the overall effect of the individual proxies of HELB recipients SES (middle SES and low SES tertiles) on the amount of loan allocation to diploma students in national polytechnics in Kenya. The results of the middle SES tertile and low SES tertiles ($F(1, 169) = 2.32$, $p = 0.1299$; $F(1, 169) = 0.27$, $p = 0.6067$) respectively indicate that a recipient's SES was not important in explaining variations in HELB loan awards to diploma students in national polytechnics. The study therefore failed to reject the null hypothesis that recipient's SES had no statistically significant effect on the amount of higher education loan awarded to diploma students in national polytechnics in Kenya. The result suggests that SES is not important in explaining variations in loan awards to diploma students in national polytechnics.

The results of this work are in tandem with those of Wachiye [28] who observed that only 23.6% of the loan recipients in Bungoma District were from the low socio-economic status, an indication that HELB allocations, to a larger extent, were inequitably in favour of recipients of medium and high socio-economic backgrounds. The results also support the views of various scholars [17, 22] who have argued that the higher education loan scheme is mal-distributed and benefits the rich. Besides, studies done in Sub-Saharan African have also shown that students loan schemes, indeed, contribute to inequalities in access to higher education by the low socio-economic status.

The MLRA results also match those from the Dean of Students and Academic Registrars who observed that:

The loans given to students were not equitable. The polytechnic officers observed that some of the students were getting very high amounts of loan while others were getting very low. They argued that this is a clear indication that the HELB system appears to be biased among the students. Besides, the officers also argued that indeed there existed variations in the amount of HELB loan given to female and male students.

They argued that it seems the criterion is biased in favour of the males. This they argue can lead to gender inequality in access to national polytechnics in favour of the males. The officers also observed that most of the needy students get the lower ceiling of the HELB loan while majority of those from well to do families get the upper ceiling. This is an indication that HELB allocations to diploma students are inequitable.

However, the results differ from a number of studies [19, 27, 29] which have shown that the amount of HELB allocations depends on a student's SES. For instance, the results of a study by Musera [27] on HELB funding self-sponsored students in public universities indicate that the amount of HELB loan awards depends on a recipient's SES and that the awards were in favour of those from low SES. Similarly, Odebero's [19] multiple comparisons results in the year 2001-2004 and composite year 1-4 showed a statistically significant difference in loan allocation by students socio-economic status to be in favour of Low SES ($p < 0.05$).

The results of the present study may be drawn back to the perceived milestones made by HELB in assisting needy students in institutions of higher learning. The results may suggest that HELB loans to diploma students in national polytechnics are just being awarded to recipients irrespective of whether they need them or not. This has a danger in that those who really deserve HELB loans may never get the loans. Besides, such individuals may never enrol in the national polytechnics in the first place therefore widening the already existing gaps in access to tertiary institutions in favour of the rich.

Further, the results indicate that students in Kisumu polytechnic, males and those from Homa Bay County were predicted to be awarded higher loan amounts than their colleagues in other polytechnics, the females and other counties respectively over the two academic years. Therefore, the predictors of loan amounts to diploma students in national polytechnics were found to be the polytechnic of enrolment, the student gender and a strong disagreement on bursary dependence. The overall model explained up 0.3464 or 34.64% of the variation in loan amounts awarded to the students over the two academic years

IV. Conclusion

This paper has demonstrated that the results of the multiple regression analysis after controlling for all variables in the model indicate a recipients' SES was not significantly associated with loan amounts awarded to diploma students in national polytechnics over the two academic years at the 95% level of significance. In addition, the interviews with the polytechnic officers suggested that there is a greater variation in loan allocation to students which may not be explained by their level of neediness. It, therefore, suffices to conclude that the amount of HELB loan awards to diploma students in national polytechnics are not differentiated by a recipient's SES. It is also concluded that HELB loans to diploma students in national polytechnics may not be benefiting the neediest.

V. Recommendations

The discussions in this paper imply that HELB loan allocations to diploma students are not well targeted and may not be necessary benefiting the most needy students. It is therefore recommended that the Higher Education Loans Board should review the loan award criteria to ensure that only those who need loans the most in national polytechnics receive them. In addition, the recommendation by Musera [27] for the need of a national database that captures the background information of all Kenyan children at birth which can aid HELB in vetting prospective applicants is advocated for.

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Aliva Luvaso Elphas. "The Nexus between Socio-Economic Status and the Amount of Loan Awarded by HELB to Diploma Students in National Polytechnics in Kenya ." *IOSR Journal of Research & Method in Education (IOSR-JRME)* 7.4 (2017): 41-48.