



Education Financing In Kenya: Policy Options Based On Simulations And Scenarios

1.0. Introduction and Policy Concern

Since its inception, the Higher Education Loans Board has financed more than 1,126,308 students to a tune of Ksh.117.8 billion pursuing higher education in both public and private universities, technical training institutes and polytechnics. As such, HELB was introduced to cushion students from disadvantaged families against adverse financial difficulties, and to ensure no eligible student drops out of the university due to lack of funds to further their education. Financing of higher education is in line with the government's Big Four Agenda and Vision 2030 which will play a crucial role in transforming the country to a middle-income economy. For the country to move towards the realization of these blue prints, the government must increase funding to expand the knowledge and the required skills of its people to match the demand for the workplace. This begins by investing in quality and affordable education for its citizens.

The goal of HELB is to ensure that every eligible Kenyan gets the funding for quality education, while allowing the beneficiaries to pay back loans gradually at affordable interest rates. To meet this goal, HELB is guided by its mission of providing affordable loans to Kenyan's pursuing higher education through adequate mobilization and prudent management of resources. This mission is in line with Article 43 (1) of the Constitution of Kenya which stipulates that "every person has the right to education".

However, HELB faces a number of challenges in ensuring it achieves its mandate fully. Some of these include:

- Inadequate budget allocations by the exchequer towards Higher Education Financing
- Increased demand for the loans against reduced supply
- Challenges with the loan recovery from past beneficiaries.
- Factors related to inflation.

To analyze HELB’s performance this paper looks at two areas:

1. Access to HELB loans
 - Number of students awarded loans
 - Total amounts awarded as loans
2. Sustainability of HELB
 - Interest Rates
 - Loan Recovery

1.1 Access to HELB

1.1.1 Number of students awarded loans

According to Chart 1 below, from the 2014/2015 FY to 2019/2020 FY, HELB managed to offer loans to 1,333,626 students to a tune of Kshs.52,412,691,250. The chart also shows that between the FY 2014/2015 and 2019/2020, there was an increase in the actual amounts that were awarded by HELB, as tuition, bursary and upkeep to the students. The number of students who make applications for the loans had also been on the rise for the same years pointing to a huge demand for the loans.

Chart 1: Number of Applicants against those awarded the loan

Academic Year	Number of students who applied for HELB loan	Number of students who were awarded HELB loan	Total Amounts awarded (Kshs)
2019/2020	415,057	347,384	15,119,544,584
2018/2019	477,757	316,126	11,878,902,216
2017/2018	350,287	240,018	9,674,720,450
2016/2017	520,028	148,916	5,432,094,000
2015/2016	445,872	143,382	5,273,391,000
2014/2015	208,280	137,800	5,034,039,000

Source: Higher Education Loans Board

1.1.2 Total amounts disbursed to institutions

In as much as HELB plays a critical role in ensuring access and equitable distribution of finances for students seeking tertiary education, it has not been able to award loans to all the applicants for the years reviewed pointing to the fact that there are glaring differences between what was available and what was needed as shown in chart 2.

Chart 2: Amounts targeted for disbursement against the amounts approved for disbursement

Type of Loan	Academic Year	Amounts Approved for disbursement (Ksh)	Amounts targeted for disbursement (Ksh)	Variance
TUITION	2019/2020	6,270,876,133.01	6,093,091,694.00	177,784,439.01
	2018/2019	5,035,487,287.00	4,742,999,665.00	292,487,604
	2017/2018	4,978,835,884.00	4,715,938,884.00	82,897,000
	2016/2017	4,075,695,730.00	3,991,230,166.00	84,465,564
	2015/2016		2,836,516,300.00	(2,836,516,300)
	2014/2015		2,596,413,670.00	(2,596,413,670)

Source: Higher Education Loans Board

1.2 Sustainability of HELB

HELB is a revolving fund and one of its sustainability strategies is loan recovery. For the undergraduate loan, an interest rate of 4% is charged annually on a reducing balance one year after the beneficiary has completed learning. The interest rate is fixed. This therefore means that the beneficiary will pay the same amount (Principal amount) on a reducing balance throughout the life of the loan, regardless of the inflation rate meaning they will pay the nominal value and not the real value should inflation not be factored.

Chart 3: Amounts recovered by HELB against the targeted amount

Year	Amounts Recovered (Ksh)	Amounts targeted (Ksh)	Variance (Ksh)
2019/2020	4,508,223,488	4,900,000,000	(391,776,512)
2018/2019	4,357,113,799	4,800,000,000	(442,886,201)
2017/2018	4,902,298,932	4,508,408,609	393,890,323
2016/2017	4,142,980,011	4,250,000,000	(107,019,989)
2015/2016	3,986,030,017	3,680,000,000	306,030,017
2014/2015	3,357,367,999	3,300,000,000	57,367,999

Source: Higher Education Loans Board

1.2.1 Inflation rates

Chart 4 shows the annual average inflation rates for the last 9 years. Kenya experienced a sharp increase on the inflation rate in 2017 largely attributed to the drought that was experienced in that year that caused food prices to go up. This was followed by a sharp decline to 4.69% in 2018, a decline of about 4.68% from the previous year.

A rise in inflation means that the cost of living is highlands it would therefore be ideal that the rate is factored when doing costing and budgets. HELB is not exempted from the impact of inflation and to be able to arrive at an effective estimate of financial obligations and requirements, inflation needs to be factored.

Chart 4: Annual Average Inflation Rates (2014-2022)

Year	Average Annual Inflation (%)
2022	7.66
2021	5.62
2020	5.41
2019	5.20
2018	4.69
2017	7.98
2016	6.30
2015	6.58
2014	6.88

Source: Central Bank of Kenya

Inflation being one of the challenges being faced by HELB as financiers of Higher Education, for both the demand and the supply side, this policy modeling simulation will focus on higher education financing in Kenya with the main objective of evaluating the impact of economic inflation on Higher Education Financing.

On the demand side, the simulation will focus on:

- The nominal and real values of the average amounts awarded
- The nominal and real value of the total amounts awarded

On the demand side the simulation will focus on:

- The impact of inflation on the loan recovery focusing on the correlation to changes in inflation and loan repayment
- Impact of inflation on the reach of HELB

2.0 Justification

The sustainability of the Higher Education Loans Board is a major challenge that the Board has been struggling with. This is brought about by inadequate budget allocations by the exchequer towards Higher Education, increased demand for the loans against a supply side which is not growing at the same rate, challenges with the loan recovery for the matured loans, and economic factors such as inflation.

As demonstrated in Chart 5 below, since the FY 2014/15, the loans awarded by HELB have been increasing with exception of the FY2020/21 which saw the amounts awarded drop. This decline is attributed to the fact that government sectors experienced budget cuts as the government was raising funds towards addressing the global health pandemic, COVID-19.

The demand side has experienced growth with the number of applicants increasing with the exception of the FYs 2017/18 and 2021/22. Making a comparison of the demand and the supply side, in as much as the supply side is making attempts to meet the demand side it has not been able to, evidenced by the fact that for the years reviewed, HELB has not been able to ensure that all the applicants are awarded the loans largely because the funds are inadequate to fund all of them.

Chart 5: Number of Loan Applicants Vs Number of loan Beneficiaries and amounts awarded

Academic Year	Number of students who applied for HELB loan	Number of students who were awarded HELB loan	Total Amounts awarded (Kshs - Bn)
2020/2021	376,137	341,606	14.21
2019/2020	415,057	347,384	15.12
2018/2019	422,757	316,126	11.88
2017/2018	350,287	240,018	9.67
2016/2017	520,028	148,916	5.43
2015/2016	445,872	143,382	5.27
2014/2015	208,280	137,800	5.03

Source: Higher Education Loans Board

With regards to challenges of loan recovery, as demonstrated in Chart 3, with exception of the FY 2014/15, 2015/16 and 2017/18, HELB has not been able to surpass the loan recovery targets set. This points to the fact that in as much as there are years it has been able to surpass its targets, it is not consistent pointing out that there are challenges being experienced.

Based on the fact that the annual average inflation rate for 2022 was 7.66%, for purposes of this simulation, the interest rates charged on the loans are lower than the overall inflation rates, pointing to the fact that the real value of the fund is shrinking since inflation erodes the value of the fund in terms of the nominal values versus the real values. IEA Kenya therefore undertook a simulation to determine the degree to which inflation affects the sustainability of the fund and the loan recovery.

3.0 Methodology

To demonstrate the effects of inflation and its impact on the sustainability of the Higher Education Loans Board fund and also on the loan recovery, the IEA carried out a simulation that led to the development of three scenarios. The scenarios were built to postulate the possible outcomes of the effects of inflation on the fund. Scenario 1 shows the possible outcome, should inflation have been factored in on the amounts that were awarded as loans to students for the FY 2021/22. In this scenario, IEA-Kenya constructed a deflator with 2015 as the base year. Scenario 2 shows the possible outcome, should the inflation rate be factored in on the loan recovery. Scenario 3 shows the possible outcome, should the 4% interest rate be adjusted to the Annual average inflation rate of 7.66%. For the three scenarios, the baseline (Picture of Now/Starting Point) that is used is the total amounts that were awarded to students for the FY2021/22. The data used for the purpose of this simulation was secondary data obtained from the Higher Education Loans Board data base. The inflation rate used is from the Central Bank of Kenya's Inflation Annual Average inflation rate for the year 2022 with the assumption that all the loans for the FY 2021/22 had matured for recovery in 2023.

4.0 Simulations and scenarios

4.1 Baseline (Picture of Now)

Chart 6: Base: Picture of Now, 2021/2022 (Amount in Kshs.)

Actual Total Amount = 14,079,081,935

Average Amount Awarded Per student	Number of students	Total Amount Awarded
41,087	342,667	14,079,081,935

Source: IEA-Kenya

The 'Picture of Now' is the baseline for the simulation and demonstrates the status of the loans awarded for the FY2021/22. On average, each of the 342,667 students who were awarded loans for the said year received Kshs.41,087; inflation and interest rate is not factored in.

4.2 Scenario 1

Chart 7: Inflation is factored (Amount in Ksh.)

Actual Total Amount in 2022= 14,079,081,935

Base year: 2015

(2015) Average Nominal	Total Nominal Awarded	No. Of Students
36,532	5,034,039,000	137,800
(2022) Average Real Value	Total Real Value	No. of Students
61,632	21,119,108,624	342,667
(20,545)	(7,040,026,689)	
(2022)Average Nominal	Total Nominal Awarded	No. of Students
41,087	14,079,081,935	342,667

Source: IEA-Kenya

Scenario one in chart 7above shows the possible outcome, should inflation have been factored in on the amounts that were awarded as loans to students for the FY 2021/22.

To demonstrate the effects of inflation and how much it erodes the fund, IEA-Kenya constructed a deflator with 2015 as the base year. The Average amount of Ksh.36,532 that was awarded in 2015 is equivalent to Kshs61,632 in 2022. This therefore means that the average of 41,087 does not match the current buying power.

HELB is making strides to meet the demand but adequacy is sacrificed because the available funding has to be spread and this therefore means that for it to have efficiently financed the 342,667 students who were awarded the loans in the FY2021/22, at the buying power of 2015, the funds needed to be increased by 7,040,026,689Kshs.

4.3 Scenario 2

Scenario two in chart8 below looks at:-

- i) The interest rate without factoring in inflation and
- ii) The interest rate with inflation factored in.

The assumption is that, if the total amount awarded was to be recovered in 2023, the interest accrued would be **Kshs.563,163,277** which is equivalent to funding an extra 13,706 students. Should the inflation rate be factored during recovery, then the interest accrued on the total amount would be **Kshs.1,641,620,954** which is equivalent to funding 39,955 students. The variance for not factoring in for inflation which is **Kshs 1,078,457,676** is adequate to fund 26,248 students assuming the average amounts remain at a constant of Kshs.41,087.

Chart8: Inflation and interest rate factored (Amounts in Ksh.)

Actual Total Amount in 2022 = 14,079,081,935

2022 Annual Inflation Rate = 7.66% (CBK)

Actual Amount Awarded	Interest rate	Repayment Period	Amount recovered with interest	Inflation rate	Amount recovered with inflation and interest factored	Variance
14,079,081,935	4%	1 year	14,642,245,212	-	-	563,163,277
14,079,081,935	4%	1 year	-	7.66%	15,720,702,889	1,641,620,954
The variance between amounts recovered without inflation factored and with inflation factored						1,078,457,676

Source: IEA-Kenya

4.4 Scenario 3

Scenario 3 assumes that the interest rate is increased to match the annual average inflation rate for 2022. Should HELB consider the 2022 Annual Inflation rate as the interest rate, an additional Ksh.515,294,399 would be recovered which is equivalent to funding 12,541 more students assuming the average amounts awarded remains constant.

Chart 9: Inflation Rate as the New Interest Rate

Actual Total Amount in 2022 = 14,079,081,935

2022 Annual Inflation Rate = 7.66% (CBK)

Actual Amount Awarded	Interest rate	Repayment Period	Amount recovered with interest	Inflation rate	Variance
14,079,081,935	4%	1 year	14,642,245,212	-	563,163,277
14,079,081,935	7.66%	1 year	15,157,539,611		1,078,457,676
The variance between amounts recovered between the 4% interest rate and the 7.66% interest rate.					515,294,399

Source: IEA-Kenya

5.0 Conclusion

As a conclusion, it is evident that the demand for education loans will continue to grow rapidly because of demographic pressures and this presents the challenge of the fiscal sustainability of the HELB fund in terms of meeting the demand. On the whole, the medium-term challenge is ensuring that:

- Loans recovered remain high since recovery funds about 33% of the Students budget.
- The interest rates applied are adjusted accordingly and by working in collaboration with Parliament in seeking to change the funding model from the current accounting approach to a model that is in line with the changing economic times.
- That the policy conversation be extended to demonstrate to the legislature that education access and provision depends on increased funding to match the demand for education loans in Kenya and the demographic factors on the supply side of the education market.
- HELB should consider a recovery strategy that is sensitive to the economic changes such as inflation which is the biggest challenge.

References

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NOTES

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