



GOVERNMENT OF SIERRA LEONE

Cost benefit analysis of student loan scheme

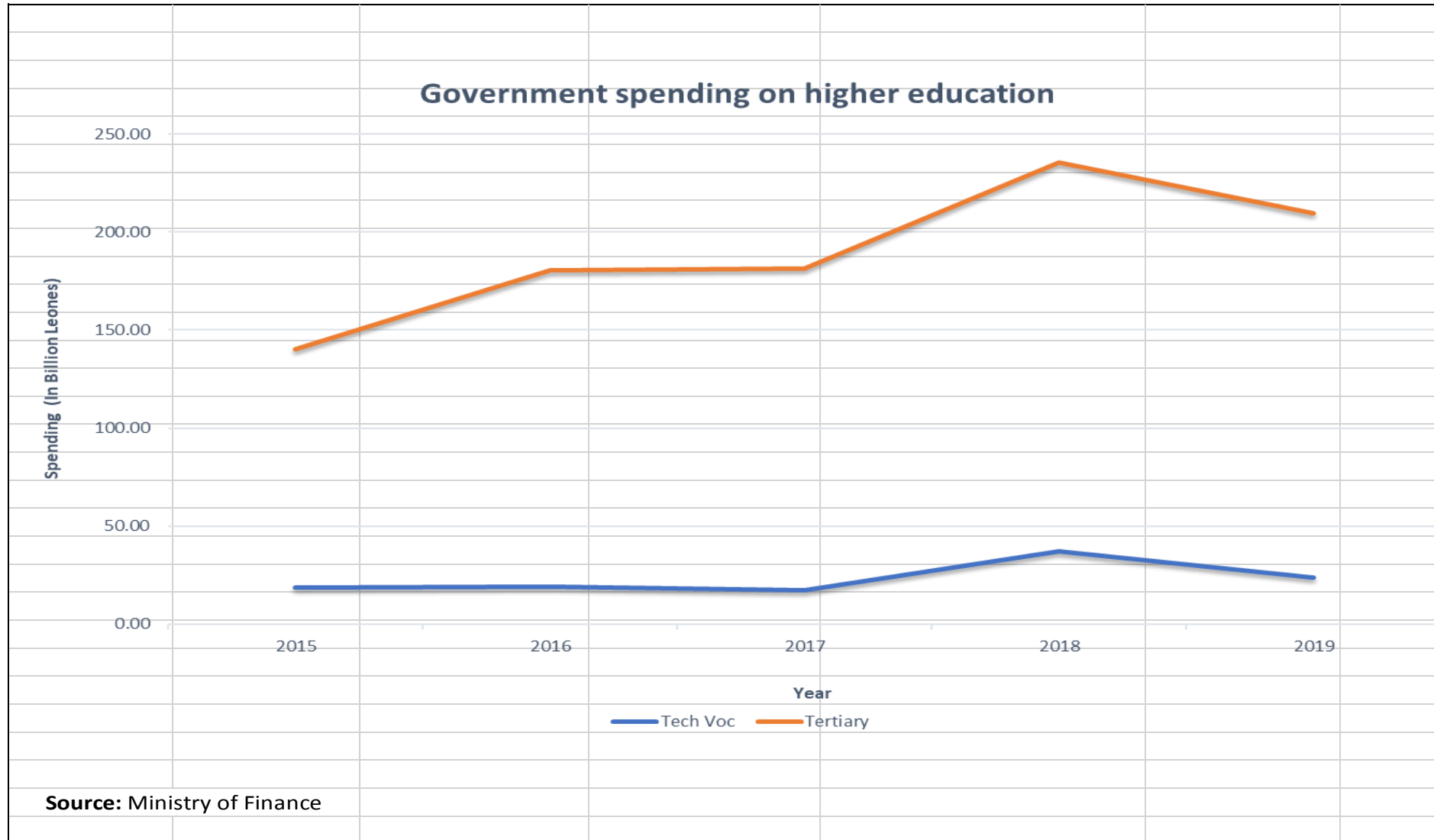


General Description

- ❖ The student loan scheme supports the outcomes of the free quality education program for primary and secondary schools by accommodating the resultant increase in higher education enrolments. The absence of an affordable option for financing higher education will demotivate parents and students to continue secondary school education and result in drop-outs at this critical level;
- ❖ The Student Loan Scheme model will ensure equitable access to higher education in Sierra Leone by increasing access for students from poor households and rural or underserved communities all over the country, who would otherwise not be able to gain such access due to prohibitive costs, poor infrastructure, limited information.
- ❖ It will reduce pressure on scholarship programmes, including the grant-in-aid, which would now be primarily targeted to support truly indigent students.
- ❖ Estimating the long-run cost to the government for issuing student loans is essential: policymakers need to be aware of the financial implications of any policy decisions they make, even if the total effect on the public finances will not occur for some time.
- ❖ However, estimating this long-run cost may be challenging since it requires sophisticated modelling of future graduates' uncertain incomes and repayment behaviour.



Analysis of Government spending on higher Education





Analysis of Government spending on Student Grant in Aid





Cost of the student loan scheme

Estimated Cost of the Student Loan Scheme (yearly)					
Programs	Cost per student (le)	Course Duration (yrs)	Quantity (Numb)	Total Cost per Course for Student	Total cost
Undergraduate	5,850,000.00	4.00	10,000	23,400,000.00	234,000,000,000.00
Masters	19,500,000.00	2.00	1,000	39,000,000.00	39,000,000,000.00
PHD	26,000,000.00	3.00	100	78,000,000.00	7,800,000,000.00
Grand Total	51,350,000.00		11,100	140,400,000.00	280,800,000,000.00



Estimated return on investment

Estimated return on investment								
Programs	Quantity (Numb)	Cost per student (le)	Course Duration (yrs)	Total Cost per Course for Student	Total cost	Interest rate of 2% per yr	Return on investment after 10yrs of repayments	Total ROI
Undergraduate	10,000	5,850,000.00	4.00	23,400,000.00	234,000,000,000.00	4,680,000,000.00	46,800,000,000.00	280,800,000,000.00
Masters	1,000	19,500,000.00	2.00	39,000,000.00	39,000,000,000.00	780,000,000.00	7,800,000,000.00	46,800,000,000.00
PHD	100	26,000,000.00	3.00	78,000,000.00	7,800,000,000.00	156,000,000.00	1,560,000,000.00	9,360,000,000.00
Total Cost	11,100	51,350,000.00		140,400,000.00	280,800,000,000.00	5,616,000,000.00	56,160,000,000.00	336,960,000,000.00



Repayment Model

- ❖ To estimate the long-run cost to the government of providing student loans to a particular cohort of students, we need to know; the value of the loans issued to each individual in that cohort over the course of their degree (i.e. their stock of debt); the gross annual income of each individual to whom a loan was issued; this enables us to calculate: (a) the interest rate that graduates face on their loans each year (b) the amount that they should repay each year; and hence (c) the loan repayment period.
- ❖ We calculate the interest rate subject to a real interest rate of 2% per year (that is, 2% on top of inflation, as measured by the consumer price index (CPI)). After this point, the interest rate payable will vary depending on a graduate's income.
- ❖ Graduates with income below Le 13million per annum will face a 0% real interest rate. The real interest rate then increases linearly with income of 2%, reaching a maximum of 4% for graduates with income of Le 60million, or more.
- ❖ The loan period is subject to income-contingent repayment: graduates must repay 20% of gross income monthly for a 'repayment threshold'. Government calculations will assume that this repayment threshold will be increased each year in line with the national average earnings of undergraduates.



Cost-Benefit Analysis

Cost Benefit Analysis							
	Current Year (CY)	CY +1	CY +2	CY +3	CY +4	CY +5	
Costs							
Undergraduate	234,000,000,000.00	234,000,000,000.00	234,000,000,000.00	234,000,000,000.00	234,000,000,000.00	234,000,000,000.00	
Masters	39,000,000,000.00	39,000,000,000.00	39,000,000,000.00	39,000,000,000.00	39,000,000,000.00	39,000,000,000.00	
PHD	7,800,000,000.00	7,800,000,000.00	7,800,000,000.00	7,800,000,000.00	7,800,000,000.00	7,800,000,000.00	
Admin/ Operational cost	1,794,700,000.00	1,794,700,000.00	1,794,700,000.00	1,794,700,000.00	1,794,700,000.00	1,794,700,000.00	
Total Costs (Future Value)	Le 282,594,700,000.00	Le 282,594,700,000.00	Le 282,594,700,000.00	Le 282,594,700,000.00	Le 282,594,700,000.00	Le 282,594,700,000.00	
Total Costs (Present Value)	Le 282,594,700,000.00	Le 277,053,627,450.98	Le 271,621,203,383.31	Le 266,295,297,434.62	Le 261,073,821,014.34	Le 255,954,726,484.64	Le 1,614,593,375,767.89
Benefits							
Undergraduate	Le 280,800,000,000.00	Le 280,800,000,000.00	Le 280,800,000,000.00	Le 280,800,000,000.00	Le 280,800,000,000.00	Le 280,800,000,000.00	
Masters	Le 46,800,000,000.00	Le 46,800,000,000.00	Le 46,800,000,000.00	Le 46,800,000,000.00	Le 46,800,000,000.00	Le 46,800,000,000.00	
PHD	Le 9,360,000,000.00	Le 9,360,000,000.00	Le 9,360,000,000.00	Le 9,360,000,000.00	Le 9,360,000,000.00	Le 9,360,000,000.00	
Total Benefits (Future Value)	Le 336,960,000,000.00	Le 336,960,000,000.00	Le 336,960,000,000.00	Le 336,960,000,000.00	Le 336,960,000,000.00	Le 336,960,000,000.00	
Total Benefits (Present Value)	Le 336,960,000,000.00	Le 330,352,941,176.47	Le 323,875,432,525.95	Le 317,524,933,848.97	Le 311,298,954,753.89	Le 305,195,053,680.29	Le 1,925,207,315,985.58
Present Value Discout Rate	2%						

Cost Benefit Analysis	
Total PV Benefits	Le 1,925,207,315,985.58
Total PV Costs	Le 1,614,593,375,767.89
NET BENEFIT	310,613,940,217.68



Qualitative Benefits

- ❖ Social benefit: it will help produce the country with the skilled workforce needed for social and Economic growth.
- ❖ It will promote equality of opportunity for access to higher and tertiary education.
- ❖ It will reduce government spending on subsidies to universities, and students grant in aid.
- ❖ The government will recover more than half of its cash investment: from a previous survey conducted, it is estimated that at least 60% of the student loan recovery rate is recorded.
- ❖ It will increase revenue for higher learning institutions: because the government will pay the fees of Students benefitting directly to those institutions.
- ❖ A loan is a serious commitment, and this commitment could improve the sense of responsibility in the young graduates, resulting in a more focused approach to seeking and retaining employment and prudent financial management behaviour.
- ❖ It will inspire students to pursue their dreams and academic ambitions to their highest potentials, sparking creativity, innovation and growth in our young people and communities.



Conclusion

- ❖ Experience in countries like the USA, England and Ghana just to name a few, shows that student loan schemes do work, although critics predicted that students would not be willing to borrow and that loans would discourage low-income students and women who would be frightened by the idea of a "negative dowry", there is evidence that loans are popular with students; there is no evidence that they discourage women or students from low-income families.
- ❖ Evaluations of educational credit in Latin America show that student loans have been successful in increasing enrolments in many countries and have enabled poor students to enrol who could not otherwise have afforded higher education before.
- ❖ Experience with loan schemes show that there are no quick savings to be gained from introducing loans. This would be true even if loans were accompanied by the introduction of fees, since it takes many years for loan repayments to build up sufficiently to contribute substantial revenue. However, long-run savings should not be despised because there are no short-run benefits. Calculations in Canada, show clearly that there will be long-run savings if loans are used, rather than grants.
- ❖ Loan repayments already contribute a quarter of Sweden's student aid budget, which reduces the burden on public funds. American experience also shows that in a developed country the commercial banking system can contribute significantly to the funding of student loans, thus reducing the burden on public funds.