What is the appropriate higher education finance model for sub-Saharan Africa?

Moses Oketch

UCL, Centre for Education and International Development

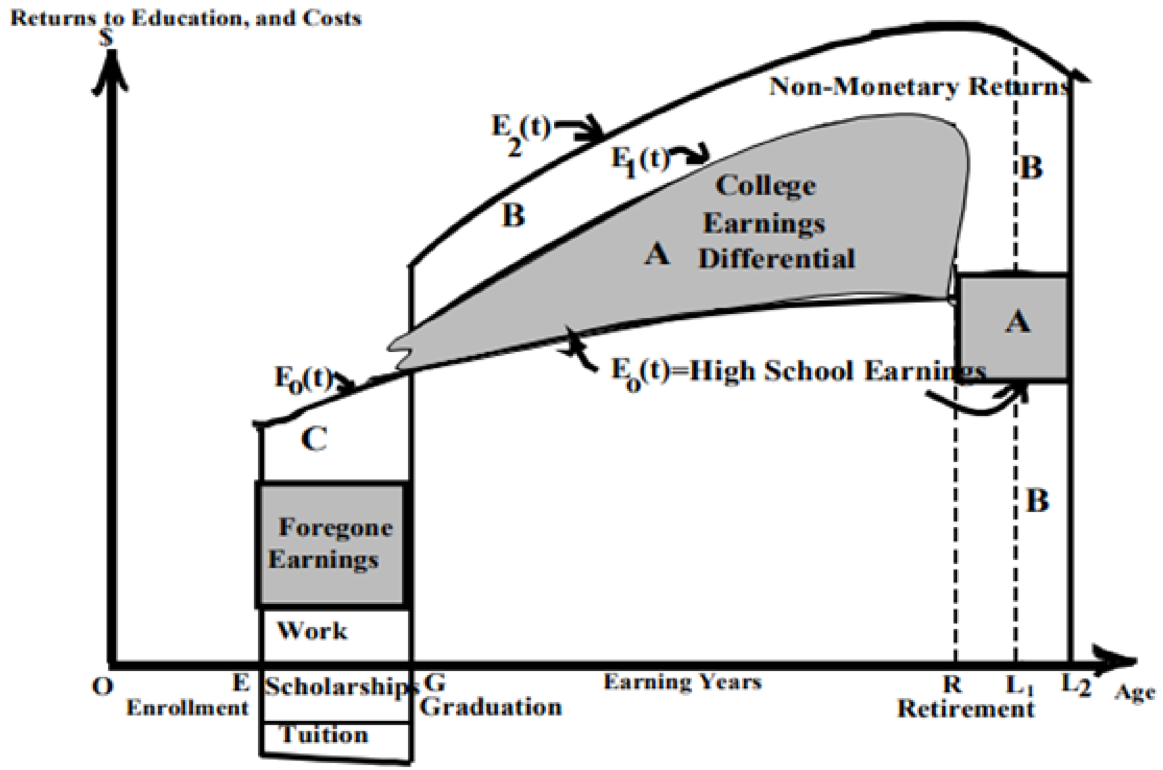
- The following financing models and their application in Sub-Saharan Africa, especially in Kenya are discussed:

1. “Free” taxpayer funded university education
2. Cost sharing modalities (through loan scheme)
3. Direct upfront tuition charges (through parallel tuition paying track)

Conceptual framework

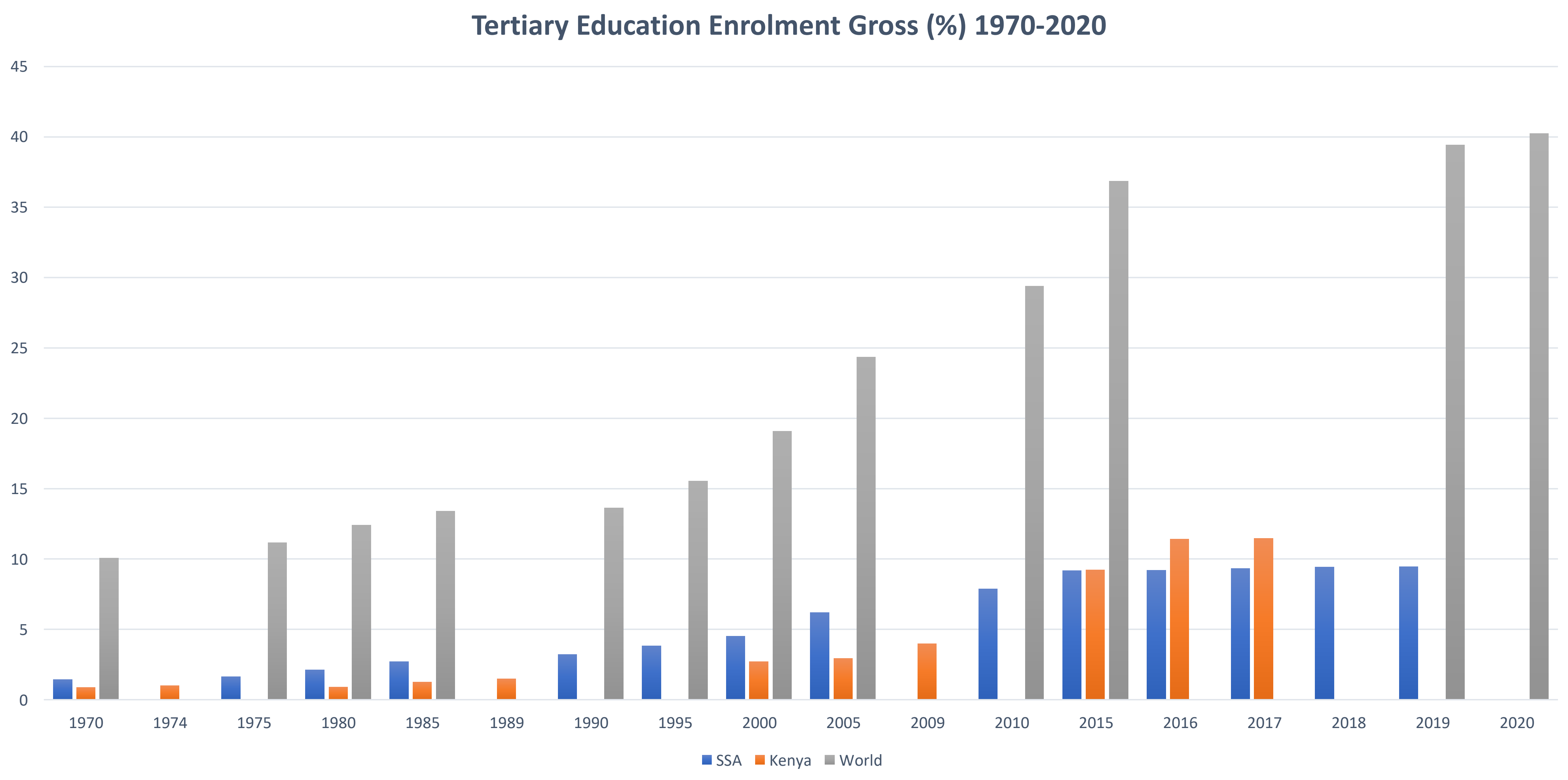
- The discussion draws on human capital theory life-cycle conceptual framework, which includes market earnings, private non-market benefits and social benefits to others, including future generations, and why these are highly important in sub-Saharan Africa.

Below is the HCT life-cycle conceptual framework (source McMahon and Oketch, 2010).



Sub-Saharan Africa context

- In 2020 SSA had a population of 1.136Bn and Tertiary education enrolment of 9.458% (gross) in 2019. This is highly low compared to USA which had a population of 328.330 million only but tertiary participation (gross %) of 87.9. The world participation rate in 2020 was 40.4%.
- The next Figure illustrates this low participation base in SSA.


Tertiary Education Enrolment Gross (%) 1970-2020
45
40
35
30
25
20
15
10
5
0
1970
1974
1975
1980
1985
1989
1990
1995
2000
2005
2009
2010
2015
2016
2017
2018
2019
2020
SSA
Kenya
World

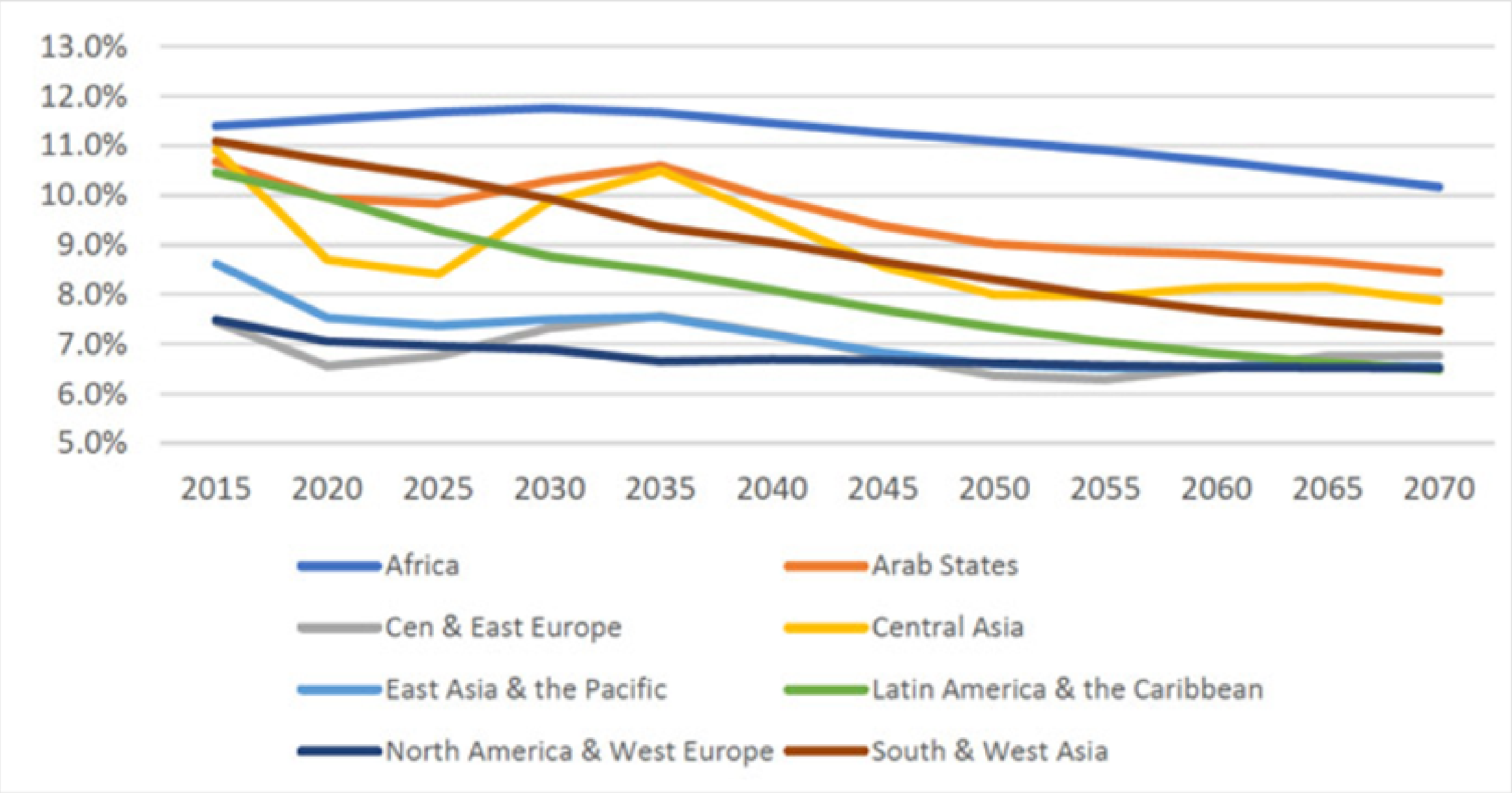
- Current national policies in SSA seek higher enrolment and completion rates to catch up with the rest of the world, but also to cope with pressure from demand.
- At the same time, there is rapid urbanisation in SSA, and the plight of those with less education is continuing to worsen, amidst youth bulge. In 1960, only 14.69% of the population was urban. In 2020, it was 41.252%.
- The advantage of those with better education will be increasing with this rapid urbanisation as rural life becomes undesirable for many young people who then move to urban areas.

- Investment in human capital is a very long-term investment that as noted by McMahon and Oketch (2010), yields returns over approximately 45 years remaining in the labour force.
- Formal employment has not kept pace with demographics. Large informal employment sector has effect on tax revenues and spawned other symptoms that provide the background against which an analysis using the human-capital life cycle can offer some insights on how to finance growing demand for higher education in SSA.
- In the 1960s, the non-market benefits of HE which impact standard measures of economic development beyond earnings were appreciated by the newly independent African governments. For example, universities were to produce graduates to support better government via their employment in the civil service, this in turn would support better life for others and future generations.

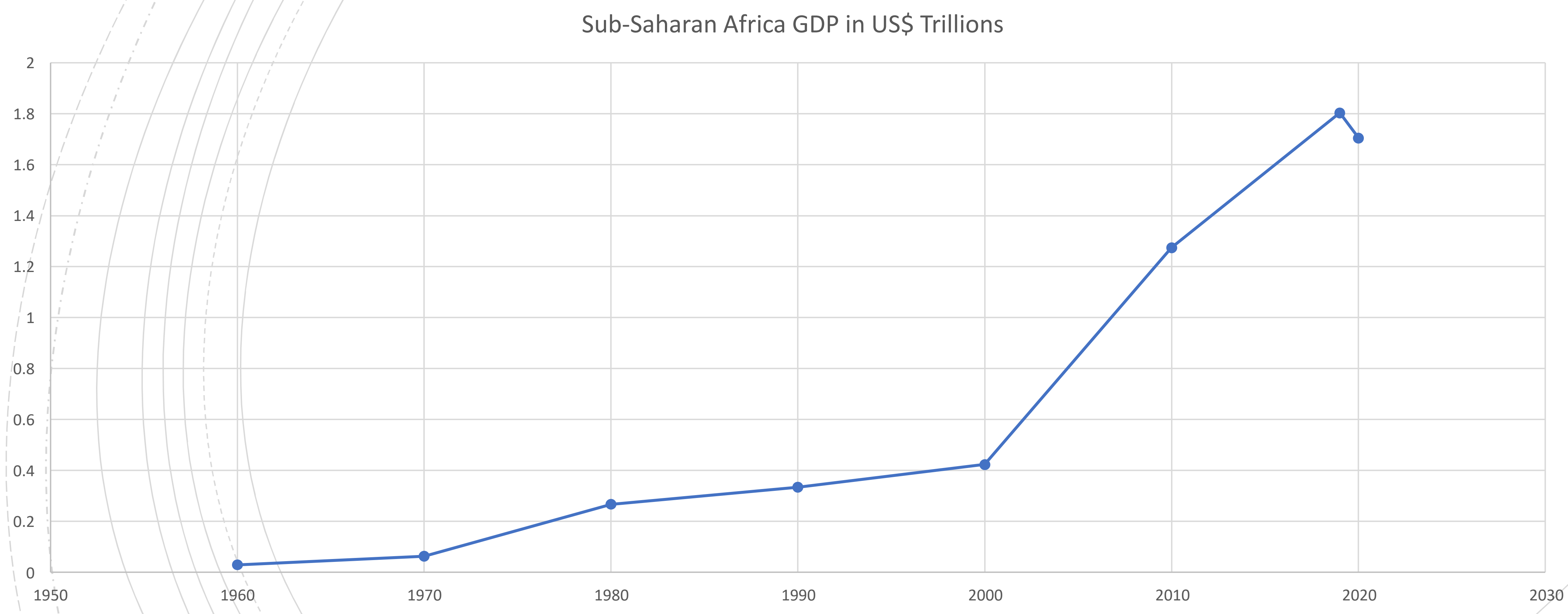
- The process occurs with each family over their life cycle and over several generations in ways that as McMahon and Oketch (2010) noted, lead to different life chances among families.
- Considering non-market outcomes has implications for financing modalities. Non-market benefits arise because the same human capital acquired through HE is used on the job, then it is carried home and used to increase productivity of time in household which generates satisfactions and in many instances, this same human capital is used in community in public service and other community wide activities that benefit others. This means that the market and non-market overlap, yet financing models often do not consider this overlap when advocating cost sharing.
- The are relevant on the projected demographic trends globally and economic performance of SSA.

Share of the world's estimated population of 18-23 year olds by global region, 2015-2070

Source: Calderon, UNESCO. https://monitor.icef.com/2018/10/study-projects-dramatic-growth-global-higher-education-2040/ accessed on 4/4/2022



Sub-Saharan Africa has grown wealthier



“Free” taxpayer funded model

- “Free taxpayer” funded model:
- Since mid 1990s national policies in SSA have been seeking higher enrolment and completion rates to catch up with the rest of the world, but also to cope with pressure from demand.
- As a result, “free” taxpayer funding patterns have become increasingly unattainable and governments have turned to cost sharing mechanisms to support this expansion. This is illustrated by the case of Makerere in the next slide. This model is contested and is perceived by some to have affected the quality and “purpose of higher education”.

Makerere, the quite revolution illustrates this shift

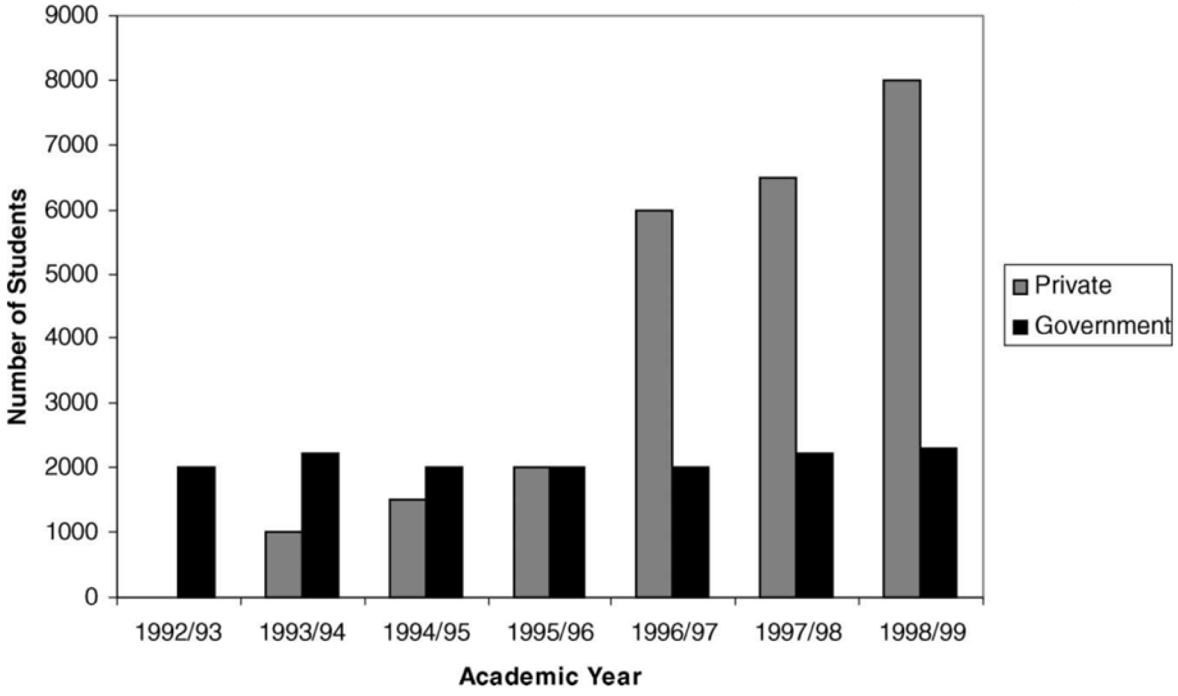


Figure 1. Makerere University private and government admission statistics for private and government-sponsored students. Source of data is Court (1999).

Parallel tuition paying track alongside “free” HE

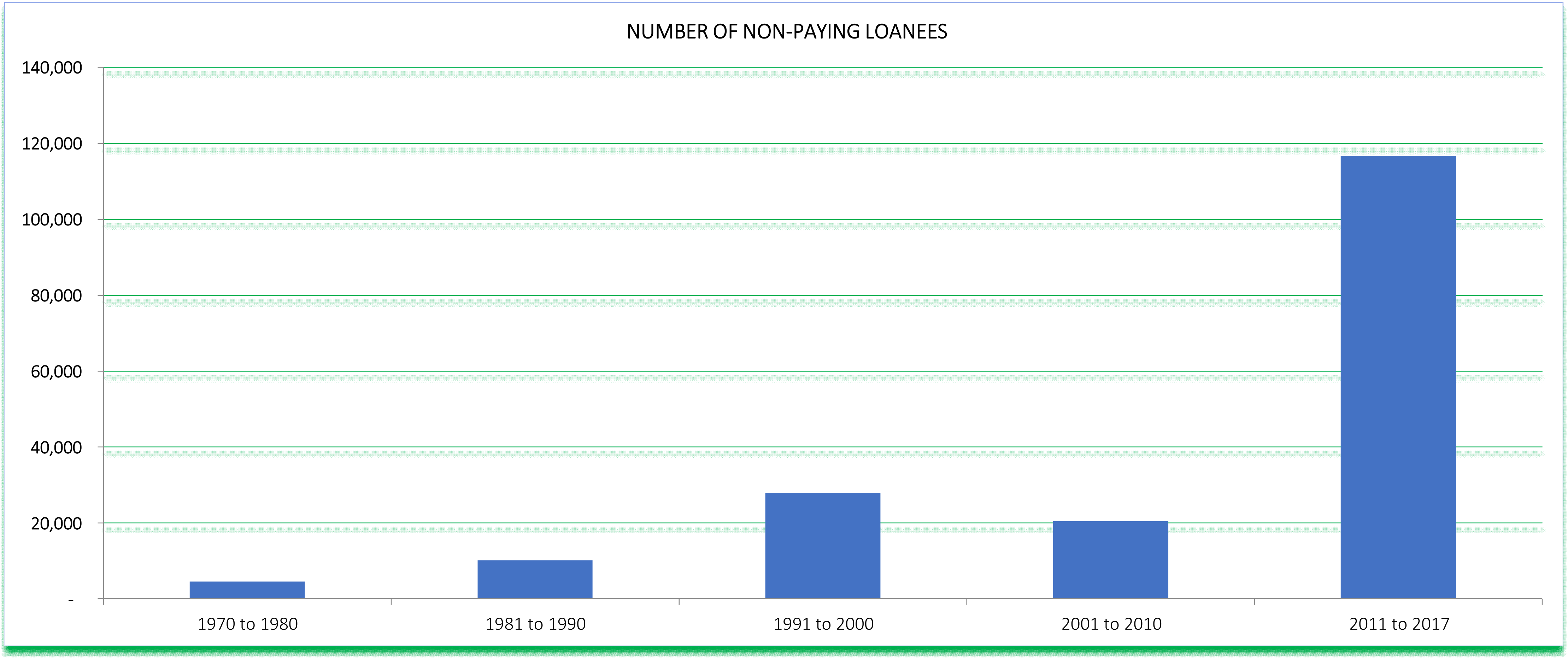
- This model involved adding a parallel tuition paying track while maintaining “free” higher education for regularly admitted stated funded students.
- This model has by far become the common means of cost sharing in sub-Saharan Africa countries.
- As Bruce Johnstone noted, this model appeals to governments because it preserves the political appearance of “free” university education while also allowing the market to play a major role in the public sector.
- There are also loan schemes approach and the case of Kenya will illustrate this.

Kenya Case

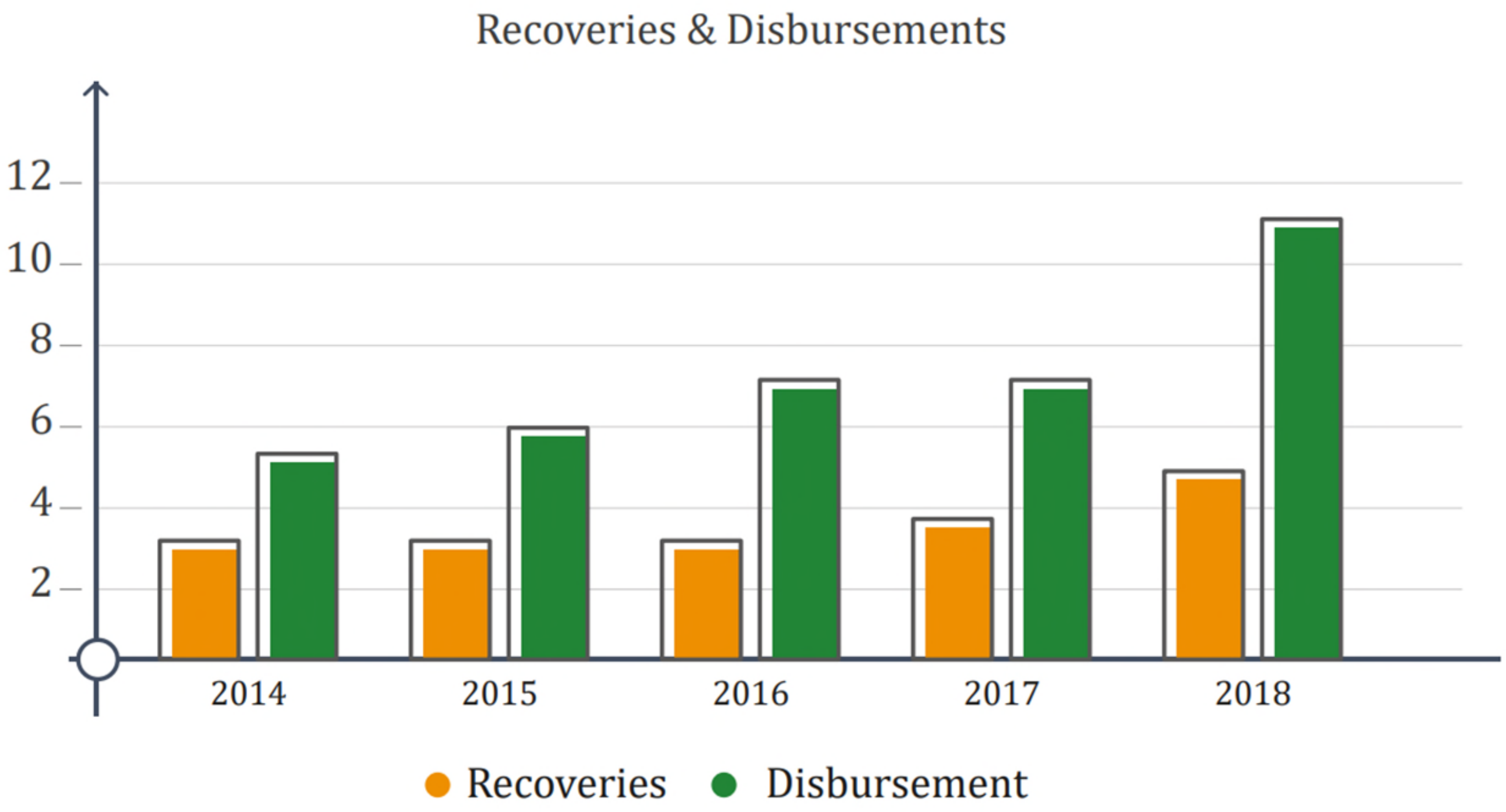
- Following independence Kenya government financed higher education in the form of grants and bursaries administered through higher education loans fund.
- In 1974, loans were added and were distributed by Ministry of Education as loans, bursaries and grants.
- In 1995, the government decided to establish through an Act of parliament, Higher Education Loans Board (HELB).
- HELB was to provide competitive HE financing to all Kenyans pursuing higher education.
- The other role of HELB is to recover all the loans that have been disbursed since 1974. This is to support a revolving fund.
- In 1991, cost sharing was introduced. The total fees was Ksh.120,000. The tax payer financed Ksh.70,000 and the 50,000 balance was financed by the student. The 50,000 was payable to students directly. Currently HELB gives a loan of between Ks. 37,000 and 60,000 per annum. This is determined by means testing criteria based on a student's household income.
- In 1999, Kenya introduce parallel tuition paying track similar to the one Makerere had introduced earlier.
- As of 2018, HELB was supporting 650,000 students.

Source: HELB (2019).

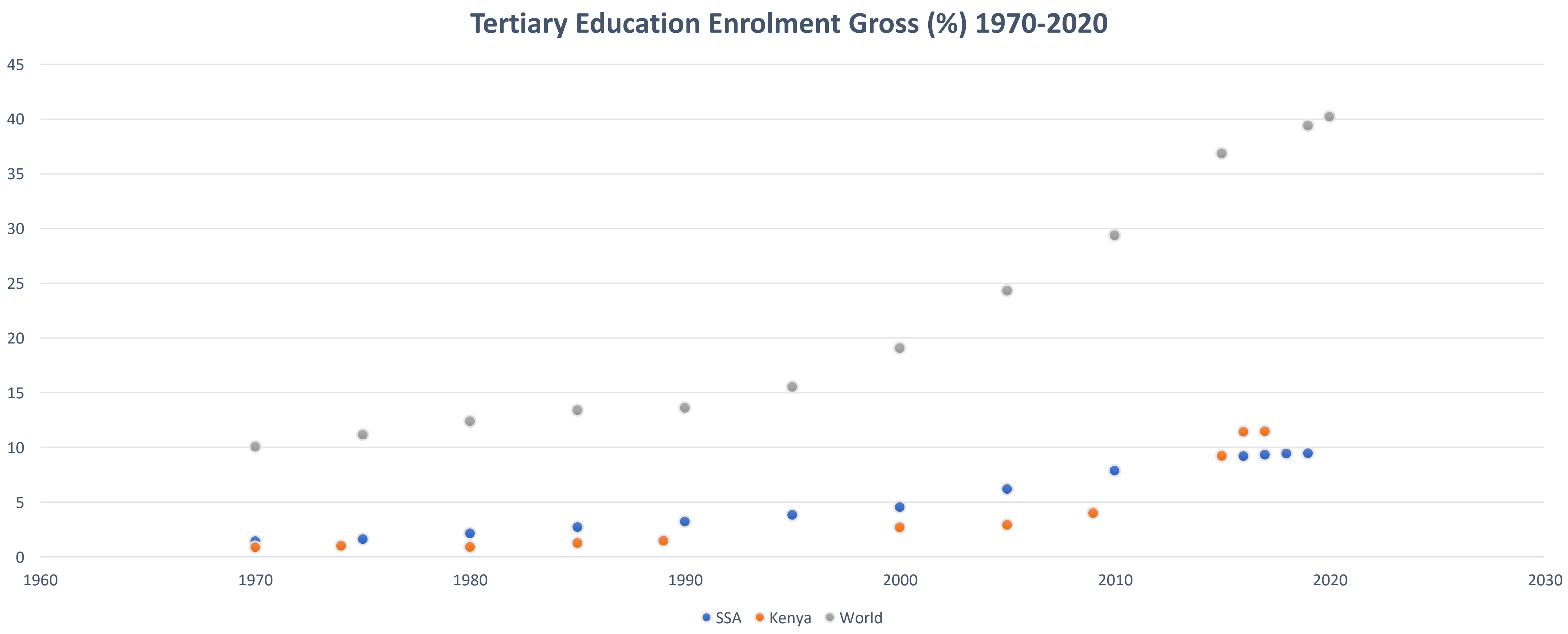
Kenya: Loan Recovery is "weak" but getting better.



Kenya (source: HELB, 2019): Loan recovery "improving" but not keeping pace with disbursement



Kenya: Expansion has been rapid since cost sharing was robustly introduced in 1999/2000

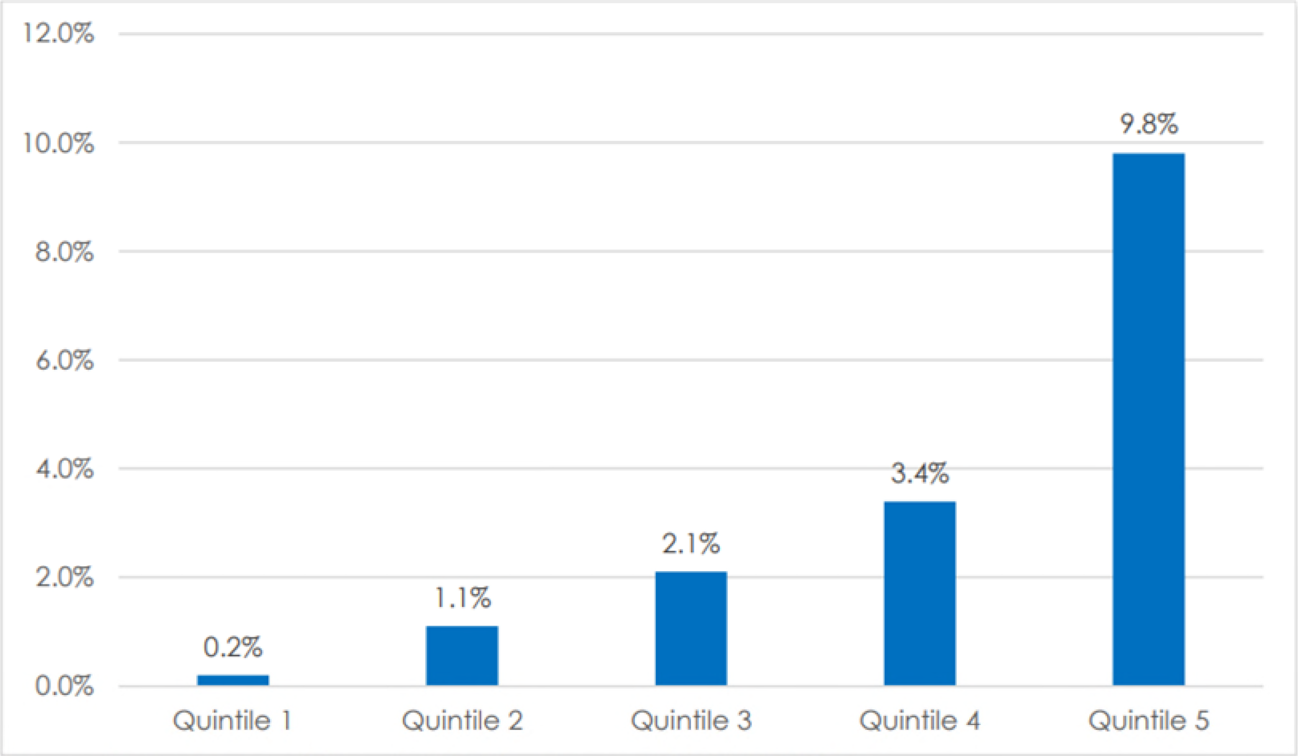


Challenges

- Greater demand than available resources due to the pressure related to demographic trend in Kenya. There are many young people aged 18-23 years who are demanding higher education
- Ksh.37,000 which is the average amount disbursed as loan is not adequate and HELB has been demanding that per-student cost be raised from Ksh. 120,000 to 122,000.
- To illustrate the above two points, in 2017/2018, the amount required was Ksh.19.054 Bn. The government allocated only 60 % of this, which was Ksh.11.4Bn. This is a huge short fall.
- HELB loan attracts an interest rate of 4 % whereas the cost of funds is 8%, which means that recovery is lower than cost and the fund is shrinking in the long run than revolving as would have been expected.

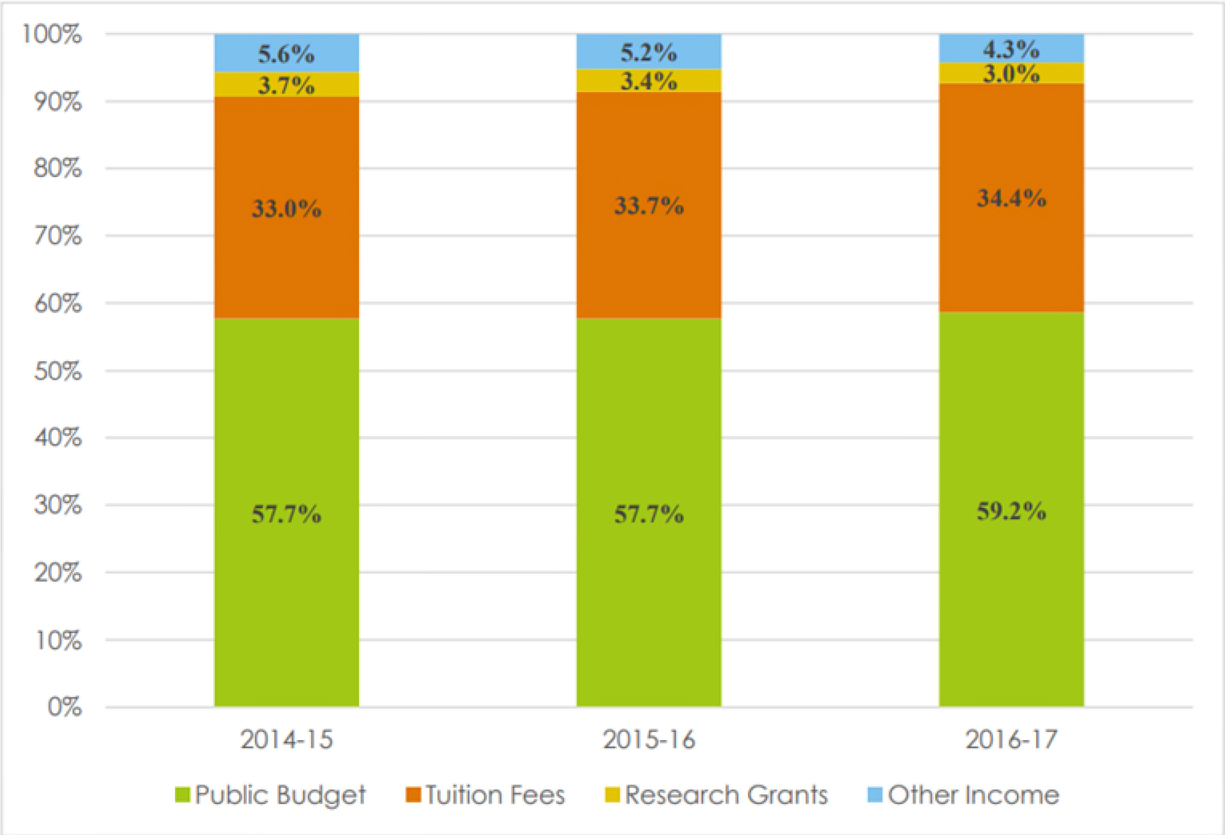
Source: HELB, 2019

Enrolment rate by income quintile- Kenya. Source: World BanK Report (2019), Figure 6.



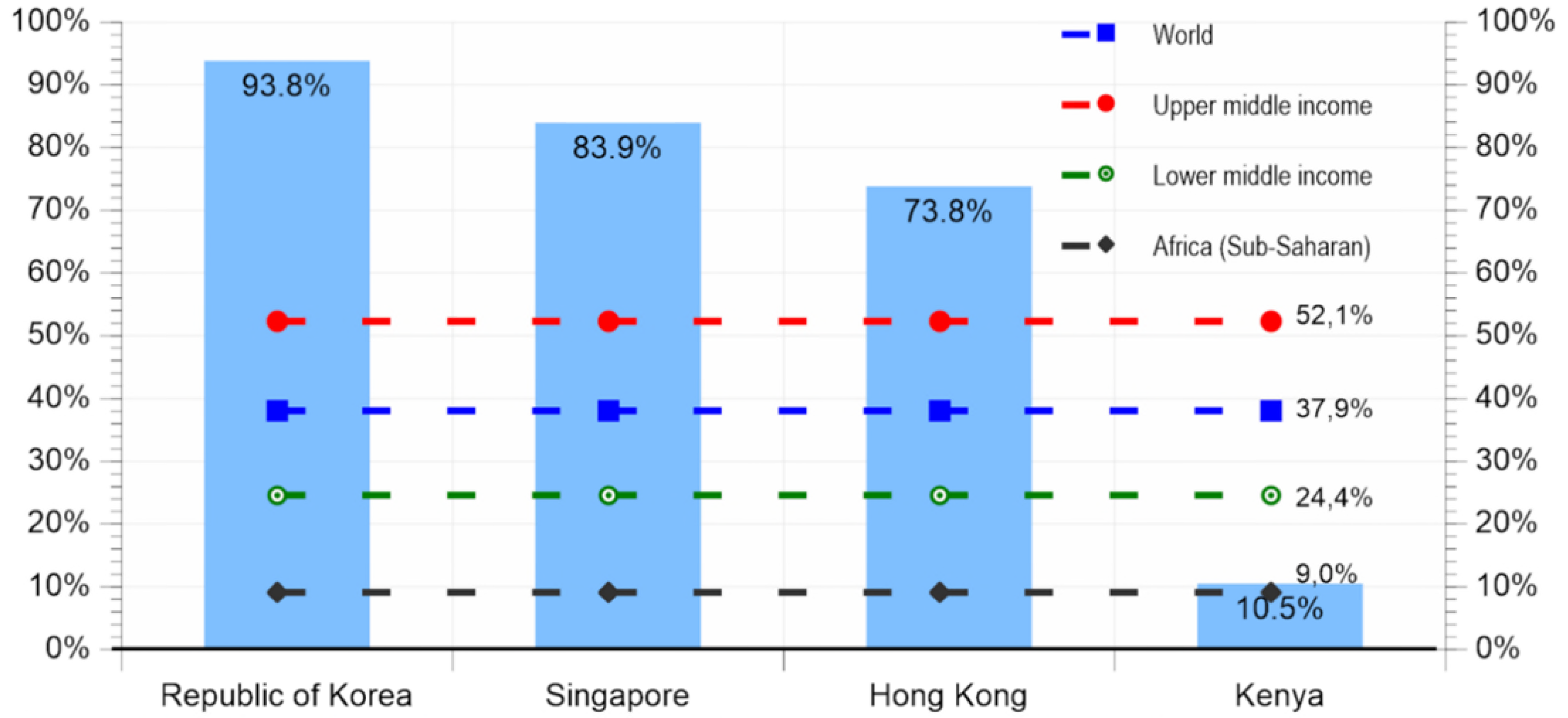
Source: Kenya Integrated Household Budget Survey (KIHBS) 2015/16.

Main sources of funding of Kenyan public universities. (Source: World Bank Report, 2019, Figure 7).



Source: Universities Education Commission.

Gross enrolment in tertiary institutions (source: World Bank Report, 2019, Figure 1)



Source: UNESCO UIS (Institute for Statistics) 2018 and author calculation for Kenya 2018.

Sustainability and equity impact of various cost sharing schemes (source: World Bank Report, Table 12)

Cost-sharing Modality	Financial Sustainability Impact	Equity Impact
Free higher education for all	Very costly	Richer students more likely to benefit
Universal fees	Less demanding on fiscal resources	Equitable if financial aid available
Fees only for parallel students	Less demanding on fiscal resources	Richer students more likely to benefit
TFT	Costly	Potentially most equitable

Source: Elaborated by Jamil Salmi.

Conclusion

- Carefully managed cost sharing can increase access to higher education. They also make the rich contribute to university budget.
- The Kenya context shows that cost sharing through a loan scheme has to be adequately funded in order for it to be effective.
- There is also the recovery problem and this is linked to formal employment not keeping pace with demographics. Large informal employment sector has effect on tax revenues.
- Income contingent loans which take the form of x percentage of earnings and written off after 25-30 years can be relevant in Kenya's context.
- In contexts where "free" HE is difficult, income contingency loans alongside targeted free tuition in public sector and means testing for maintenance grants would be just and equitable in SSA.

References

- Johnstone, D. Bruce. 2004. The Economics and Politics of Cost Sharing in Higher Education: Comparative Perspectives.*Economics of Education Review,* 23. p. 403-410
- McMahon, W.W. and Oketch, M. 2010. Bachelor's and Short Degrees in the UK and US: New Social Rates of Return and Non-Market Effects on Development. Centre for Learning and Life Chances in Knowledge Economies and Societies. LLAKES, London, UK.
- Higher Education Loans Board (HELB), Strategic Plan, HELB Agenda, 2019-2023: https://www.helb.co.ke/wp-content/uploads/2021/02/HELB-SP-2019-2023-BOOKLET-min.pdf
- World Bank. 2019. Improving Higher Education Performance in Kenya: A Policy Report. © World Bank.
- World Bank. 2022. open data source: https://data.worldbank.org/