FUNDING GRADUATES, NOT GAPS

A fiscally sustainable student-financing model for South African higher education

Research question: *How can South Africa build a fiscally sustainable student-financing model that enhances access to higher education? Refer to global experiences in your analysis.*

ENTRY #598

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Introduction

In September 2026, South Africa's Minister of Higher education conceded publicly that the student-funding model is "unsustainable". The admission matters as proof that the National Student Financial Aid Scheme (NSFAS), which was created to widen access to education, is now threatened by its own costs, and needs change. In this essay, I ask how South Africa can build a fiscally sustainable student-financing model that enhances access to higher education.

This essay proceeds in four sections. In Section 1, I examine why the present model strains the budget and where funds are lost. Section 2 provides a review of supporting economic theory and the experiences of the United States, Australia, England and Chile. Section 3 concludes my research, and in Section 4, I make set of recommendations, tested against a simple model.

1. THE SOUTH AFRICAN PROBLEM

1.1 The budget constraint

The first source of budget strain is that demand for aid grows faster than the budget. The NSFAS shortfall of R15 billion may reach R33 billion by 2019 (Havergal: 2026). A larger aid bill can therefore only be met if government wishes not to cut spending elsewhere, it can only raises tax or borrow more. However, in May 2025, Treasury withdrew a planned R20 billion tax increase (National Treasury: 2026), which leaves borrowing.

If government borrows more, then government debt, D, grows by spending, plus interest on past debt (i is the interest rate) minus tax collection, tY, where t is the tax share of income:

$$\Delta D = G + iD - tY \quad (1)$$

Equation (1) shows that if government borrows more, its debt will grow because interest is paid on past borrowing, so each rand borrowed at present will enlarge future iD. This is not feasible, given that about 20% of revenue already pays for debt interest (National Treasury: 2026).

1.2 Eligibility standards create a cliff

In South Africa, grant eligibility explains why it is so costly. Since 2017, grants are offered to students from households with an annual income below R350 000 (BusinessTech, 2017). While this upper income limit is set by government, the state cannot control how many households fall beneath that level or how many children actually qualify. Further, grants lower the price of a service in limited supply to zero. This causes a cliff: a household earning just below the line pays nothing, while one just above faces fees with almost no aid. Kahn (2026) shows how amongst the "missing middle" households who earn R350 000 to R600 000,

approximately 1500 or 0.2% of NSFAS's total student base had received only about a loan each by late May 2026. Hence, the line, not one's need or ability to repay, decides funding.

2.3 A rand of aid funds too few graduates

Finally, even the money spent on grants funds too few graduates, which links the fiscal problem to the access one. Studies show the completion rate – the share of entrants who graduate – is low; only 56% of graduates in the 2010 university cohort had graduated within six years (Marwala and Mpedi: 2022). Practically, an entrant is still funded by grants for a period regardless of whether they eventually graduate or not. This means that each drop-out symbolises government expenditure with no graduate – that is, money wasted.

And leakages add to this, as investigators in early 2026 recovered R1.7 billion in misallocated funds and losses from overcharging and "ghost beds" in residences ((SAnews, 2026; Daily News, 2026). This reflects the principal-agent problem in funding as NSFAS (the principle) pays intermediaries like institutions and landlords (the agents) whose conduct it cannot fully monitor. The problem is therefore less the size of the budget than the low yield of each rand.

2. LITERATURE REVIEW: THEORY AND GLOBAL EXPERIENCE

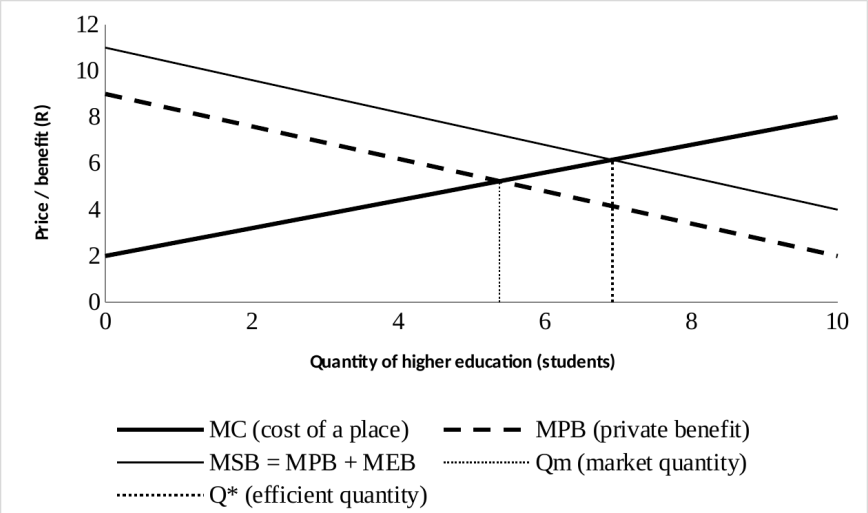
2.1 Why the state should fund higher education

Economic theory offers two reasons why the state should fund student at all. First, education creates a positive externality: graduates raise productivity and pay more tax, so the special benefit exceeds the private benefit:

$$MSB = MPB + MEB \tag{2}$$

where MSB, MPB and MEB are the marginal social, private and external benefits. Secondly, poor students face a credit constraint, as they cannot borrow against future earnings without collateral (Lockner and Monge-Naranjo: 2012). Figure 1 shows the welfare loss.

Figure 1: The positive externality of higher education



Source: author's construction in Microsoft Excel, based on standard welfare theory.

The figure shows that when left alone, students choose Q_M which is where MPB equals the cost of a place (MC)m whilst society prefers the higher Q*, where MSB equals MC. This gap justifies public funding in the interest of the socially efficient quantity. However, theory does not necessitate grans; loans that remove the credit constraint may just close the gap at a cheaper cost. International cases test this idea.

2.2 United States and Australia: who carries the risk?

In the United States, mortgage-style loan requirements for fixed instalments mean that low earners owe as much as high earners, which has contributed to widespread default on student debt (Barr, Chapman, Dearden and Dynarski: 2019). In contrast to this, countries like Australia avoid defaults by collecting a share of graduates' income above a threshold through the tax system (Australian Taxation Office: 2025). This is known as an income-contingent loa (ICL). ICLs also become insurance: such a loan ensures that repayment is a percentage of income above a threshold, so graduates who own little only pay little. For South Africa, the insight is when graduate unemployment is as high as 12.4% (Statistics South Africa, 2026; NYDA, 2026), a loan that asks nothing of the unemployed is far less risky than a fixed instalment.

2.3 England: hidden subsidies

England has adopted a similar strategy, but its experience shows the associated fiscal risk. Britton and Crawford (2015) estimate that about 43p of every £1 lent under England's 2012 system would never be recovered, because debts are written off after 30 years and interest is charged below the government's borrowing cost. As such, the unrecovered share is in fact a subsidy - a grant hidden within a loan which protects low earners. The risk, however, is that

the subsidies surface decades later as write-offs, outside the annual budget, so loans look cheaper than they are. A subsidy in South Africa would likely need to be larger, given higher unemployment, and must be budgeted when each loan is issued to avoid postponing overruns.

2.4 Chile: free places without capacity

Chile's experience shows the limits of making education free. In 2016, when Chile made tuition free for the poorest 60% of households, most continuing beneficiaries already received aid, while enrolment growth was capped (Delisle and Bernasconi, 2018). In this case, the spending that replaces earlier funding lacks additionality, meaning that it creates no new access. The concern here is that when a good is free but limited in supply, price cannot allocate it, which requires the enforcement of admission standards, which can raise competition and unfarily disadvantage poorer students. Thus, funding students without increasing capacity does not really widen access to education.

3. CONCLUSION

This essay has investigated so far how South Africa can finance higher education sustainably whilst widening access. I first analysed the local problems: a budget that cannot stretch, an eligibility cliff that raises costs and excludes the missing middle, and low completion rates. I then reviewed theory and four international cases to show that public support need not take the form of grants. Further, loans must be income-contingent and budgeted to avoid default risk, and funding without places fails. My research therefore concludes that access and sustainability are not opposing goals: both improve when each rand produces more graduates.

4. RECOMMENDATIONS

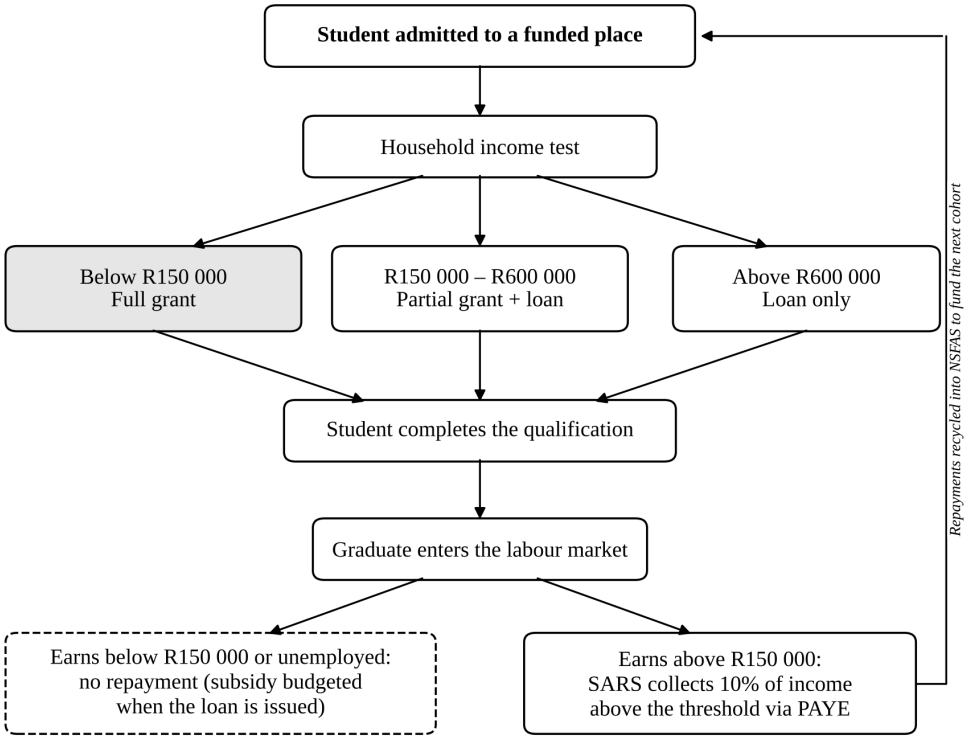
4.1 The proposed design

In my opinion, South Africa cannot continue to offer free education through grants. Instead, I recommend that government adopts some of the systems used internationally through a tapered hybrid model, in a step-by-step format. First, NSFAS must ensure that completion rates are higher, because a lower C_g makes every later reform more effective. It should therefore publish completion rates and the cost per graduate for each institution pay institutions and accredited landlords directly against verified enrolment, which reduces the principal-agent leakage identified earlier, and fund academic support for students at risk of dropping out.

Once completion begins to rise, the R350 000 cliff should be replaced by a taper. Because repayment depends on income, the loan lowers s without placing the risk of low earnings on

the student, which the United States case shows is essential for processing access. SARS should collect repayments through PAYE, as in Australia, and the expected loss on each loan should be budgeted when it is issued, as England's experience warns Finally any extension of aid should be tied to new places, especially at TVET collected, since Chile shows that money spent without capacity extended raises costs without raising access. Figure 2 shows how this system would work.

Figure 2: How the proposed tapered hybrid model works



Source: Author's construction; R150 000 – R600 000 bracket adopted from Kahn (2026).

4.2 Why this recommend hybrid model can work

A simple model can demonstrate whether the hybrid saves money and widens access. The following assumptions in Table 2 are made:

Table 2: Model Assumptions

Variable	Value	Basis
Budget; cost per year (c)	R54.3 billion; R54 300	±1 million students (Inside Education: 2026; Ho Hip: 2026)

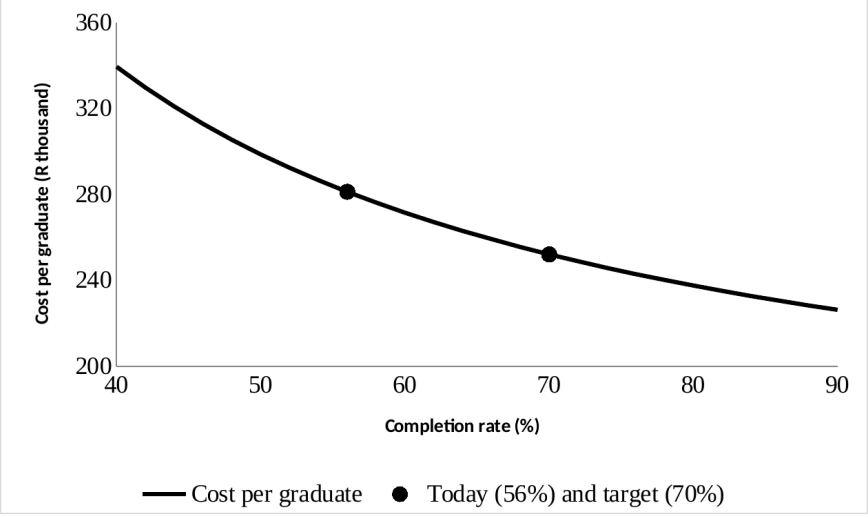
Variable	Value	Basis
Completion rate (p)	56% basis; 70% target	Marwala and Mpedi: 2022
Years funded (T_g; T_d)	4 per graduate (n+1); 1.5 per drop-out	Illustrative
Loan repayment	10% of income above R150 000	Based on Australia

Public money for education seems to depend on the completion rate, p, which is the share of students who finish a degree. At p = 56%, for example, we get that 56 of 100 entrants graduate and 44 drop out. Because drop-outs also use funding, the true cost per graduate must include their years of study too. Thus, if a student-year costs c, then we assume a graduate is funded for T_g years and a drop-out for T_d, so cost per graduate equals:

$$C_g = cT_g + cT_d \frac{1-p}{p} \tag{3}$$

Figure 3 plots this. Using the assumptions above, we see that when the completion rate increases from 57% to the hypothetical 70% target, the cost per graduate falls to ~R245 000. The curve decreases because a higher p would spread the cost of drop-outs over more graduates.

Figure 3: Cost per graduate at different completion rates



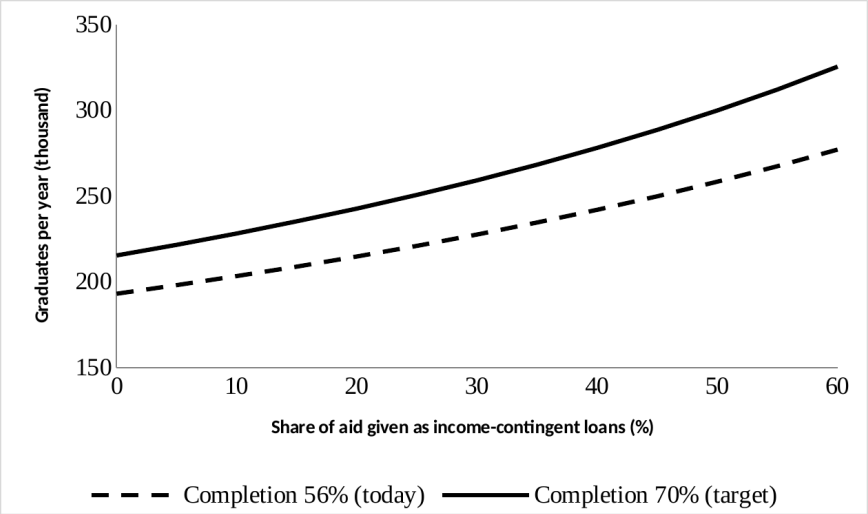
Source: Author's calculations in Microsoft Excel

The model then adds loans. Let *s* be the share of each rand the state loans but never recovers (*s* = 1 for a full grant, *s* = 0.5 for a loan). If a budget *B* can pay for everyone's study years, then graduates per year, *N*, equals *B* divided by net cost of a graduate:

$$N = \frac{B}{sC_g} \tag{4}$$

Equation (4) shows that a fixed budget funds more graduates in two ways: when each graduate costs less because fewer students drop out, or when the state recovers more of what it spends because some aid is repaid. Figure 4 below shows the second effect by plotting how many graduate R54.3 billion funds as a larger share of aid is given as loans.

Figure 4: Graduates per year funded by R54.3 billion



Source: Author's calculations in Microsoft Excel.

Both curves slope upward because each rand lent partly returns and can be lent again. More importantly, the gap between curves widens as the loan share grows, because only students who graduate can earn enough to pay. Completion and loans therefore reinforce each other. This is explained by equation (4): given the denominator has two levers (the share of aid never recovered and the cost per graduate), a grant-only system can work only on Cg, since s is fixed at one. Furthermore, a loan system that ignores completion would lower s, but drop-outs repay nothing, so much of the gain is lost. The denominator thus shrinks fully only when both levers move together in the correct order.

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