# Beyond expectations: Progression of poor students through university



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A good education is the only reliable way of escaping from poverty, but this is seldom available for South Africa's poor. Most poor children attend schools where the quality of teaching and learning is extremely weak, even when compared to much poorer African countries. Those who do well in matric then face financial constraints to further studies. Thus, almost two decades after the political transition, the largest population group, black Africans, is still poorly represented at university because of weak schools and the cost of university.

Government has tried to address the financial constraints poor students face through the National Student Financial Aid Scheme (NSFAS). This essay sets out some surprising results of a study¹, financially supported by NSFAS, of the progression of five cohorts of students through the higher education system. The study *inter alia* compared the progression of first year students supported by NSFAS for at least one year to those students who never obtained such support, and found the cumulative performance of the NSFAS students to be better than that of the unsupported students.

After a short discussion of the importance of university qualifications and a brief description of the NSFAS system, the essay turns to the presentation and discussion of the results of our study. This is followed by some thoughts on the implications for policy.

# Why are degrees important?

University qualifications are important both at the level of society and the economy and at the level of the student, household and community. South Africa needs the scarce skills that drive economic progress. For first-generation university students, successfully completing their studies brings an immense gain in self-confidence compared to those who drop out, as well as economic rewards. The probability of employment amongst those aged 25-30 rises from 69% for those who hold only a matric certificate to 88% if they have a degree. It is also associated with much higher earnings. The average employed graduate in this age group earns more than

four times as much as a matriculant, and this gap is even larger amongst the black population.

Of course, the higher incomes earned by people with degrees may not only be because university degrees make them more productive. Attributes that the labour market rewards – motivation, dedication, intelligence – could perhaps also bring academic success. Put differently, the attributes correlated with the academically more able may be the same attributes that are associated with better job performance, in general. However, academic learning itself probably also does bring some skills valued in the labour market, such as how to persevere, or knowing how interest rates are determined, or how to communicate well in written form.

Education beyond matric has a very important additional benefit also. It helps to break the cycle of weak education and poverty. Children of parents with university education are far more likely to receive a good education themselves, to be employed, and to hold good jobs when they grow up. Education offers the most consistent lifeline out of poverty, in our society as in many others. University education offers, to many, an opportunity to break out of the low income and low education cycle. Only 2.5% of graduates find

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themselves amongst the poorest half of South Africans. And as will be shown, it appears that NSFAS funding has made a large contribution in this regard, despite some operational and other problems that have plagued this institution through much of its existence.

### NSFAS and the funding of universities and students

The state subsidy per student to universities has steadily declined for decades: for instance, it fell by a third in real terms from 1987 to 2003. Universities typically responded by increasing tuition fees, which increased the costs of attending university and made university education even less affordable to poor students. By the early 1990s, outstanding student debt to universities had risen strongly. Some mechanism was required to assist poor students and thereby to reduce the inequality of opportunity in university access. Providing financial aid to needy students was seen as central to the imperative of deracialising universities and also the top end of the labour market. The Tertiary Education Fund of South Africa (TEFSA) was thus established in 1991 by the Independent Development Trust as a not-for-profit company to provide loans to students. In 2000 TEFSA was reconstituted as NSFAS – a statutory agency with a board appointed by the Minister of Education to represent all major stakeholders in higher education. It receives allocations from the state as well as donations from local and international donors to financially support students.

Financial support to students largely takes the form of student loans (though some donors insist on only funding bursaries), on the understanding that the individual student has much to gain from such studies and that the task of NSFAS is largely to make up for the lack of a viable credit market for university education. To be eligible for a NSFAS loan, a student must be judged to have the potential to succeed and must be financially needy. Once funds have been allocated to universities by NSFAS, based largely on the racial composition of their student bodies, universities administer the selection of the loans using customised means tests to suit their

specific context. Within each institution no racial distinction is drawn in allocating available funds: students meeting the means test criteria receive NSFAS awards irrespective of race. Means tests usually consider family income, household size and composition (whether parents are divorced, the needs of other dependents), and the cost of living. The universities grant the bursaries or loans and report to NSFAS on the progress of these students.

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The need for financial assistance is massive. Even in 1996, 223 000 students applied for loans, but only 70 000 could be assisted. By 2005 the number of students supported exceeded 100 000 for the first time, and by 2009 it exceeded 135 000. Awards paid out increased substantially from only R154 million in 1995 to R3.2 billion in 2009. Whereas government itself contributed a mere R40 million to NSFAS (then TEFSA) in 1995, in 2011 R5.4 billion was budgeted. Women typically constitute a slight majority of recipients (around 54%), while the vast majority (91%) are black and only 5% coloured, 2% white and 1% Indian. In 2010, the maximum loan that could be allocated was

R47 000. Even this maximum loan is not enough to support students fully during their studies. Of the maximum (which not many students get), between one third and one half would typically go towards university fees, leaving an inadequate amount for covering other living expenses, particularly for those students who have to leave home to attend university.

Loan recipients only start repayments once they are employed and earning at least R30 000 per annum. A student will then be liable to pay 3% of his/her income as a premium on the loan, thus only R75 per month. This percentage increases on a sliding scale to 8% of income for persons earning R59 300 (thus just under R400 per month). Up to 40% of the loan can be converted into a bursary, depending on the student's academic results. Interest paid on the loan is relatively favourable to students.

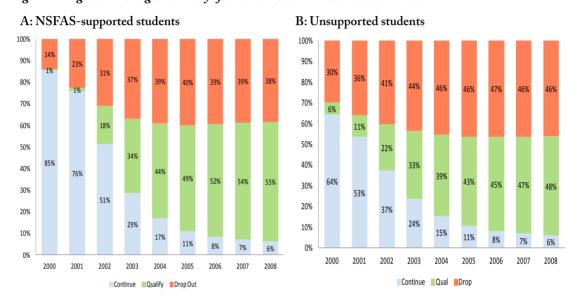
NSFAS has reported that students passed on average 74% of the courses for which they enrolled over the period 1996-2009, which seems inordinately high. In contrast, in 2010 a Ministerial Committee reported that only 19% of all the students NSFAS had funded over the years had completed their studies successfully, that 33% were still studying, and that 48% had dropped out. But these reports are based on limited investigation of the data. Our report provides one of the first systematic assessments of the success of NSFAS awards in assisting students through university.

## The performance of NSFAS-supported students

The data we could extract from the EMIS and NSFAS records were for the period 2000 to 2009, i.e. ten years of data. However, for comparability purposes it was decided to investigate the performance of only new first year students in each of the years from 2000 to 2004, and to follow these cohorts through time. This allowed us to observe the performance of the oldest cohort of first years, those starting in 2000, for nine years, but the cohort starting in 2004 could only be observed for six years, 2004 to 2009 inclusive. As will become apparent, one needs long periods to observe students' performance, as many students remain in the university system for several years.

Panel A of Figure 1 below shows how the 2000 cohort of NSFAS-supported students performed. Unfortunately it is not possible from the data to separate the performance in terms of certificates, diplomas and degrees, as students often initially enrol for one but then convert during the course of study, often from a degree to a diploma. Fortunately, deeper digging into the data shows that this does not matter too much in terms of the assessment of the success of students. Interestingly, at the end of the period of observation, 43% of the 2000 cohort who had obtained a qualification had completed a degree, and this had risen to 55% for the 2004 cohort.

Figure 1: Progression through university of students who started their studies in 2000



Panel A of Figure 1 shows that at the end of 2000 (the first year), 1% of the 15 345 NSFAS students had obtained a qualification, 14% had dropped out of university, and 85% were continuing their studies (though some might already have changed courses or even universities). After three years, the cumulative qualifications had increased to 18% of those who had started, but by that time dropouts had increased to 31% of those who started, leaving 51% still continuing their studies. As can be observed in the graph, the proportion who obtain a qualification rises quite sharply in the fourth and fifth year of studies, so that by the end of five years 44% of NSFAS students had obtained a qualification, while 17% still remained in the system, trying to obtain a first qualification. It is apparent that after high early dropouts, there is virtually no further dropout occurring from the end of the fourth year and there are even some drop-ins from time to time, i.e. students who had left university who returned. (This explains the occurrence of even some small reductions in cumulative dropouts between years.)

At the end of the nine year observation period, i.e. at the beginning of 2009, 55% of NSFAS students had received a university qualification. For this cohort, that was 8 678 students who had been supported by NSFAS for at least a year (most were supported much longer). Interestingly, something our study did not emphasise was second qualifications – 2 450 of the successful students, or about one in six, had also obtained a second qualification in the observation period.

On its own, the information in the figure may not seem encouraging. There is much dropping out amongst NSFAS students, and many take very long to obtain a qualification. However, in comparison with students never supported by NSFAS, the supported students perform surprisingly well. There are many reasons why NSFAS students can be expected to perform below average. Application of the

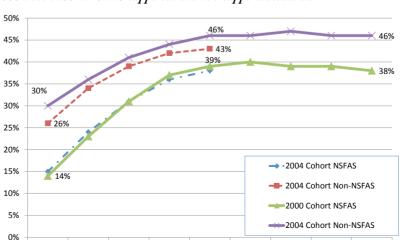
The South African university system — like most around the world — is not very efficient in how students progress through the system. Students learn and get degrees, but generally this does not happen very quickly.

means tests ensures that NSFAS students are drawn from amongst the poorer parts of the student body. Many unsupported students would also be poor, but among them there would also be a good many from middle class, especially white, households. So NSFAS students should generally have an educational disadvantage, in terms of the quality of schools they attended, parental support and home circumstances, and being predominantly first generation university students. Yet, remarkably, after the first few years at

university, the cumulative performance of the NSFAS students is better than that of the unsupported students. At the end of the nine years, 55% of NSFAS students had attained qualifications, as against only 48% of the non-NSFAS students; and more of the latter had dropped out (46%) than of the former.

The performance of NSFAS students in terms of how long it takes to get a university qualification is not very good, but that of non-NSFAS students is even worse, as Panel B of Figure 1 shows. The South African university system – like most around the world<sup>2</sup> – is not very efficient in how students progress through the system. Students learn and get degrees, but generally this does not happen very quickly. That is a subject requiring further attention in its own right, but here we focus on the relative performance of NSFAS-students.

Newer cohorts do not appear to perform all that differently, at least among NSFAS students. In fact, over all the years observed, the performance of NSFAS students has remained remarkably stable. There has been some improvement in the dropout rate of the non-supported students, though, as Figure 2 shows. Dropping out amongst such students has declined over that period, but is still higher in the first year than amongst NSFAS students.



Year 5

Year 6

Year 7

Year 9

Figure 2: Cumulative dropout amongst cohorts of students who started their studies in 2000 and in 2004: NSFAS-supported and non-supported students

Year 3

Year 4

Year 1

Year 2

# Discussion: What explains why NSFAS students outperform others?

If NSFAS students outperform others in terms of our simple measure of performance, the proportion obtaining a qualification, how can this be explained? One possibility is that early dropouts may be less likely to be identified as NSFAS supported students, if they drop out before loans have been awarded. But this can at best explain a small part of the gap in first year dropouts. Also, after the first year supported students do no worse than unsupported students in terms of dropping out.

In our study, we have also tried to statistically control for other factors that may affect the differential performance, insofar as the data allow, in particular the universities at which students study. But these factors do not statistically explain the NSFAS advantage.

Thus we can only speculate, based on the little that we know. Although NSFAS students are supposed to be selected by universities on the basis of need and academic promise, we know from experience and conversations with university and higher education officials that academic potential does not feature strongly in the way universities allocate NSFAS loans. The only criterion is financial need, as reflected in the means test. Selection of students thus does not provide an explanation for the NSFAS-advantage. Neither

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does the NSFAS advantage appear to be the result of easier courses attended, or specific universities that may set lower standards: controlling for these does not explain the gap either.

The only conclusion that we have been able to draw is that the NSFAS advantage arises from a stronger incentive to complete their studies among NSFAS students. Despite the odds being against them, NSFAS-supported students achieve more than other students do, largely because they are less likely to drop out of university. This may be related to the incentives they face: repaying the loans they have received is likely to be more difficult if they have not obtained a degree or diploma, and there would be more to repay, because the loan has not been converted to a bursary. Thus loan repayment provides the incentive to make NSFAS students more likely to succeed, despite the fact that they are more likely to have been from the lower end of school performance.

It is ironic that repayment of the loan should have such a large effect on the behaviour of NSFAS students. Internationally, such schemes face a large problem of loan repayment after recipients leave university. This is also true for NSFAS. Though employers are obliged by law to report when they employ NSFAS students, most problems are experienced in tracking debtors to their place of employment. NSFAS records of what they are owed and what part of it is being recovered are weak. Capital repayments grew from R30 million in 1998 to R636 million in 2009, which is not an insubstantial amount, but it is unclear whether South Africa is doing any better than countries elsewhere that use a similar type of scheme. What is clear though is that the bulk of the loans are never recovered and, in the assessment of those administering the funds, repayment is quite low. So the threat of having to repay may have an influence on behaviour, but once repayment is required, many do not repay their loans, which are thus *de facto* simply converted into bursaries.

### Policy implications

What do these results imply for policy? In the first place, they show that the funds allocated to NSFAS have made a substantial difference. More of the same is likely to bring even greater benefits. That is indeed what government is planning, judging by the rapidly growing medium term budget allocations to NSFAS.

A policy area to explore is what mechanisms can help to better identify student potential, so that loans can be targeted at those poor students who are more likely to be successful. Academic support programmes at universities have long tried to measure academic promise, with limited success, so not too much faith should be put into any attempt to improve on targeting in this way. It is simply extremely difficult to predict who will successfully make the transition to university.

Finally, what the remarkably successful record of NSFAS students shows, is that a loan, rather than a bursary scheme, is a very good way of providing an incentive to poor students, who are often from weak academic backgrounds, to persevere. While time is often considered the enemy of university completion in developed countries (i.e. as the length of time at university increases, so does the probability of dropping out), for the South African situation it appears that keeping capable students at university beyond the initial difficult adjustment period from school is crucial for ensuring that they fulfil their potential. By enabling this, NSFAS has provided a lifeline out of poverty for many.

NOTES

Pierre de Villiers, Chris van Wyk & Servaas Van der Berg. 2012. The First Five Year Project – a cohort study of students awarded NSFAS Ioans in the first five years 2000-2004. Stellenbosch: Bricolage & University of Stellenbosch. In the USA, only 58% of full-time students complete a four year bachelor's degree within six years, and 61% within eight years. (See College Completion USA, Graduation rates bachelor's degrees, at http://www.completecollege.org/state\_data/).