The National Student Financial Aid Scheme (NSFAS) plays an important role in increasing the number of opportunities for entry into the higher education system in South Africa. A study offering an overview of the demographics and performance of NSFAS beneficiaries at public universities over the period 2000 to 2012 reveals that the number of NSFAS recipients grew by 260% to cover 20% of all university students. The NSFAS has been particularly successful at targeting women and African, Coloured and Indian students. While historically disadvantaged students have benefited, there are some differences in the size of awards received across races. Trends that are encouraging include a positive association between NSFAS award sizes and student performance, as measured by both the ‘subject pass rate’ and the likelihood of passing all subjects. This trend is slightly stronger at historically black institutions (HBIs) than at historically white institutions (HWIs).

Introduction

While increased access to higher education across socio-economic, gender and racial groups can raise incomes among the previously disadvantaged and thereby reduce inequality, this requires enormous resources. Student fees, private income and government funding are the three primary sources of funding to institutions of higher learning in South Africa. Although the share of funding from the government has been declining over recent years, it still accounts for a significant proportion of total university income. For instance, in 2010, it averaged 41%, but there was a far-ranging variation across the various institutions (with about 41 percentage points difference between the lowest and the highest).
In contrast to this decline, government’s direct financial assistance to students through the NSFAS has been increasing. Since the establishment of the NSFAS in 1999, funding grew from R441 million to R8.5 billion in 2013, making the programme one of the most significant interventions affecting access to higher education for the poor and disadvantaged. In the period 2004 to 2011, government funding to the NSFAS grew at a rate three times higher than total funding to universities. This highlights the increasing importance of the scheme in attempting to improve on, and support, the role played by higher education in ultimately reducing inequality and promoting growth in the country through the targeting of indigent students.

Given this growth in student funding, an evaluation of the performance of higher education is pertinent: this study aimed to gauge whether strides have been made with regard to the first three of the eight goals set by the Department of Higher Education and Training (DHET, 2013), and to shed some light on how the NSFAS has contributed to the achievement of Goal 1 (improvement of opportunities for entry), Goal 2 (increased participation of disadvantaged students), and Goal 3 (increased participation of female students over the years 2000 to 2012). In so doing, the study provides an overview of the demographics and performance of NSFAS recipients at public universities over the period. In addition, the study – within the broader context of the Labour Market Intelligence Partnership (LMIP) – provides some evidence as to how well the programme is working to affect skills acquisition.

The analysis of individuals funded between 2000 and 2012 shows that government funding through the NSFAS has been instrumental in assisting students from minority groups and disadvantaged backgrounds to attend universities. It also reveals that the academic performance of these students, as indicated by subject pass rate and the probability of passing, has been significantly higher when compared with overall student performance. However, performance varies widely across institutions, as well as by amount awarded – an issue that might potentially be addressed when the NSFAS centrally allocates funds to students.

Methodology

The amounts allocated to different higher education institutions (HEIs) by the NSFAS vary widely across the different institutions – an indication of further variation at student level. This study employed a descriptive analysis, interrogating this further by examining the demographic characteristics and subject performance of NSFAS recipients over the period 2000 to 2012. Capitalising on a non-publicly available data set provided by the NSFAS, with a specific focus on universities (traditional, technological and comprehensive), the racial and gender variation of NSFAS recipients over time was investigated. The intention, here, was to determine whether the NSFAS has increased the number of opportunities afforded to students entering universities, and, in particular, if the scheme has enabled greater participation by female and disadvantaged students.

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1 Technical and vocational education and training (TVET) colleges are excluded because the NSFAS only started funding TVET institutions in 2007 and data is only available from that date onwards, and because the NSFAS uses different rules in allocating funds to such colleges.
Results

At the aggregate level, the number of students covered by the NSFAS has increased steadily over time, almost tripling from about 70,000 students in 2000 to 191,000 (which accounts for 20% of total university enrolment) in 2012. An assessment of demographic characteristics reveals that the overwhelming majority of NSFAS recipients have consistently come from historically disadvantaged backgrounds. Over the period 2000 to 2012, the racial composition of NSFAS students remained fairly constant, comprising, on average, 91% African, 4% Coloured, 1.5% Indian and 3% white students. This means that, for every 43 students supported by the NSFAS, 42 were from a historically disadvantaged background, and only 1 was from a historically advantaged background.

At the institutional level, the proportion of black students (where ‘black’ refers to all African, Coloured and Indian students) has increased across the various institutions. The study found that the representation of black students among NSFAS recipients, relative to the general student population, at both HBIs and HWIs has increased, and the increase is especially notable at HWIs. In 2012, the overall student population at HWIs was 70% black, while the proportion of NSFAS recipients at HWIs who were black was 91%. NSFAS awards covered, on average, a larger proportion of the full cost of study (FCS) at HWIs than at other institutions. This suggests that the NSFAS has contributed to enabling historically disadvantaged students to attend HWIs, which tend to have higher fees. A similar trend in the racial composition of NSFAS students and the overall number of students is to be observed at merged institutions, while, at HBIs, it was almost on a par.

An analysis by race similarly reveals an increase in the representation of black students: the majority (over 90%) of recipients were black. A detailed analysis by quartile reveals that the proportion of black recipients in the highest-award quartile was lower than the proportion in the lowest-award quartile, and this difference has not improved over time. This might be explained by the award sizes, which are related to the FCS and the allocation formula used to distribute NSFAS funding across institutions.

The majority of NSFAS recipients were female, and their share increased by 4 percentage points over the period, from 56% in 2000 to 60% in 2012. By 2012, women were slightly over-represented among NSFAS beneficiaries relative to their proportion of the general student body, at all institution types. However, the representation of women has evolved differently across the three types of institutions. Between 2009 and 2012, the proportion of women among NSFAS recipients was 3 percentage points higher than that of all students at both HWIs and HBIs. But, in the same period, their representation at merged institutions declined slightly. In 2012, at least 60% of female recipients were in the lowest and highest quartiles. Thus, the increase in the representation of women among NSFAS beneficiaries was largely concentrated in the lowest and highest quartiles of award sizes.

The NSFAS has always had an incentive mechanism in place, in terms of which an amount of 40% of the loan is converted to a bursary if a student passes all his or her courses; an amount of 20% of the loan is converted to a bursary if he or she passes half his or her courses; and so on. This study analysed the ‘subject pass rate’ (defined as the percentage of subjects passed of those taken in any given year) of NSFAS recipients. The subject pass rate indicates the eligibility of a student to progress to the next level of his or her degree, and is thus related to the likelihood of him or her graduating. In 2012, on average, the subject pass rate was extremely high, with NSFAS recipients passing the majority of their courses. Interestingly, the mean subject pass rate was higher at HBIs, where NSFAS students passed 83% of their subjects, compared with 79% at HWIs and 71% at merged institutions.
NSFAS students performed better than the average student at HBIs, about the same at HWIs, and worse at merged institutions. However, the relatively poor performance seen at merged institutions is again largely due to the performance of Unisa.\(^2\) Half of NSFAS students at HBIs passed all their subjects, compared with 43% at HWIs and 35% at merged institutions. Over the period 2000 to 2012, the average pass rate was higher at HBIs than at HWIs and merged institutions, and, although the year-by-year increases were small (below 1%), the mean pass rate increased by 10% and 6% at HBIs and HWIs, respectively, but declined by 2% at merged institutions.

Larger award sizes could enable students to perform better by providing a greater degree of financial assistance to cover the cost of their studies. Results show that the average subject pass rate was consistently highest in the fourth quartile of award sizes, and lowest in the first quartile. Thus, the average subject pass rate was higher, and grew at a higher rate, in the higher award-size quartiles. This evidence suggests that a higher level of NSFAS funding enables, and potentially incentivises, students to perform better.

Subject pass rate differed both by institution type and award-size quartile. An interaction of these two factors indicates that students with higher award sizes perform better than those with lower award sizes at merged institutions. This suggests that financial constraints might be particularly onerous for those students at merged institutions. Larger award sizes appear to enable those students to perform significantly better. This difference is, however, not seen at HBIs and HWIs. The gap between subject pass rates in the award-size quartiles was, by and large, higher at HBIs than at HWIs. In general, larger award sizes were associated with the largest increase in the subject pass rate at merged institutions, followed by HBIs, and the smallest increase was seen at HWIs. This suggests that the effect of NSFAS funding on student performance is likely to be quantitatively different across HBIs, HWIs and merged institutions.

To put this in context, a R10 000 increase in the award size (which, in 2012, was roughly the difference in the average award size between HBIs and HWIs) was associated with a 2.6 percentage point (6.7 percentage points when Unisa is included) increase in the subject pass rate at merged institutions, a 2.5 percentage point increase at HBIs, and a 1.7 percentage point increase at HWIs. There is a positive relationship between the award size and the subject pass rate, suggesting that higher levels of NSFAS funding might enable students to perform better at university. Students at HBIs are more likely to pass all their subjects, compared with students at HWIs and merged institutions. A R10 000 increase in the award size was also associated with a 4% increase in the probability that a student would pass all his or her subjects at HBIs, a 3% increase at HWIs and a 2% (6% when Unisa is included) increase at merged institutions. The relationship between award size and student performance was strongest at merged institutions and weakest at HWIs.

Key policy implications and recommendations

The NSFAS has played an important role in increasing the number of opportunities for entry into the South African higher education system. Moreover, the majority of students funded by the NSFAS during the period of the study were black, indicating that the programme assisted in increasing the representation of historically disadvantaged individuals. Yet the analysis shows that more black and female students received awards of lower value. Although this is a function of both the FCS and allocation formula employed by the different institutions, it indicates a negative bias towards black

\(^2\) Unisa’s low performance is potentially attributable to the fact that it mainly offers distance learning.
and female students. This should not be the case in a programme that sets out to correct historical disadvantage and cater for minorities, in this case women and the disabled, in institutions of higher learning. The move to a centralised system should reduce these differences in award allocation, as funds will follow the student and not the institution in this new model. There therefore needs to be a deliberate and conscious effort in the award process to eliminate this bias.

The study offers persuasive evidence that the loan incentive – which offers to convert part of the funding into a bursary, subject to academic performance – is working. A large proportion of students funded by the NSFAS had a high subject pass rate, and their probability of passing all subjects was equally high. This suggests that a higher level of NSFAS funding enables, and potentially incentivises, students to perform better. It would therefore be in the interest of the scheme to maintain the incentive and, furthermore, to increase the amounts awarded.

Conclusion

These results suggest that the NSFAS has been successful in helping to achieve three of the key goals of the country’s higher education system. It has been successful in targeting black and female students. Relative to the racial composition of the overall student body, black students were over-represented among NSFAS beneficiaries at HWIs and merged institutions, and equally represented at HBIs. However, the proportion of black recipients in the highest-award quartile was lower than the proportion in the lowest-award quartile, and this difference has not improved over time. This difference in award sizes by race is due not only to differences in the FCS, but also to the allocations formula used to distribute NSFAS funding across institutions. The NSFAS has also been successful in improving participation by female students and, by 2012, 60% of supported students were female. Relative to the overall student body, women were slightly over-represented as NSFAS beneficiaries at HWIs and HBIs, and equally represented at merged institutions. There is initial evidence of a positive relationship between NSFAS award sizes and student performance, as measured by both the ‘subject pass rate’ (defined as the percentage of courses passed out of those taken) and the likelihood of passing all subjects (i.e. having a subject pass rate of 100%). The results suggest that the positive relationship between NSFAS award size and student performance was strongest at merged institutions, including Unisa, and weakest at HWIs. This positive relationship is present across all institution designations, although the strength of the relationship does vary by institution type.
References and useful resources


