National Student Financial Aid Scheme

Policy Briefing Paper - 2017

Means testing as a targeting mechanism for assessing financial eligibility for NSFAS

Summary:

This policy brief advances the need to adopt a composite proxy index for the differentiation between those students for whom it is not necessary to undertake a full means test, and those that need to be fully means tested. It also provides the context for the updating of the household subsistence allowance tables.

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Executive Summary

The NSFAS financial means test has come under scrutiny since before the Ministerial Review of 2010. Many of the critiques of this financial means test related to its ineffectiveness in determining a true assessment of the actual ability of the family to contribute to the costs of study, the outdatedness of some of the tables, the reported "humiliation" of students in needing to evidence their poverty and the concern about the reliance of student-submitted affidavits and documents, without validation with administrative data sets used by government.

As such, a review of the means test needed to find better ways of using administrative data to improve the student experience, to increase the reliability of the means testing process, and to reduce the burden of proof for the student. Through research undertaken independently on behalf of NSFAS, five different scenarios for means test proxies were suggested, each one presenting different pros and cons from a reliance, accuracy and effectiveness perspective. Over and above this, the research provided different tables that could be used for the updating of the means test parameters themselves.

This policy brief presents an overview of the conceptual framework for means testing, the policy options available to NSFAS, and the final adopted means testing principles.

Framing the Policy Challenge

It has long been recognised that the current NSFAS means test needed to be reviewed. This was first noted formally in the Ministerial Review of 2010, although NSFAS had already begun engaging the sector and various stakeholders on the core elements of such a revision. The key recommendation here was that NSFAS adopt the use of school quintiles as an indicator of socio-economic disadvantage, amongst others. In the DHET report on the development of a support and funding model for the poor and "missing middle" students released in December 2017, the need to re-think the means testing of applicants was a strong focus. In this report, it is recommended that "means testing will be done on all applicants for financial support to determine the ratio of grants versus loans for qualifying students" and that a "household means test alone (income only, not full affordability) is calculated as part of the determination of whether a student is granted a loan, bursary or a grant"[1].

[1] Pages 23 and 134

Over time, as the student centred model was introduced, provision was made for the adoption of proxies in the means-testing of students, not only to reduce the burden on students to evidence their poverty but also to ensure that administrative data could be more effectively used. For this, NSFAS introduced two proxies for means-testing – namely, whether or not an applicant has attended a no-fee-paying secondary school (based on a quintile system in which schools in quintiles 1 - 3 were deemed no-fee paying) AND/OR is the beneficiary of one of three social grants (child care grant, disability grant, old age pensions). If the applicant meets these two conditions, NSFAS does not require any further financial/income information from the student.

However, for the balance of the applicant population, NSFAS still undertakes means testing using the pre-existing means test which calculates an expected family contribution based on the parental income, family size and where they live (used to determine an estimated cost of living – the household allowance table), and the number of students studying at post-school level. As an outcome, the means test produces an EFC, which is used to determine how much the student's parents must contribute and places the student in a ranked order of financial need. Students who have met the proxy criteria are allocated a 0-value EFC. However, the household allowance values of the means test have not been updated and re-valued over time, with the exception of an annual adjustment for inflation.

The main rationale for means testing applicants for financial aid is to offer differentiated financial aid support packages to students dependent on their level of need, prioritising those assessed as coming from poor households. As student financial aid within the current fixed budget cannot be made generally available or universal, it becomes re-distributive, and is undertaken on the basis of "verified means testing" in which the applicant reports the key targeting variable (parental income) and administrative procedures are in place (evaluation of supporting documents currently) to validate and verify the reported variable. As one of the weaknesses of the existing means test is the ability to provide full assurance of the income reported against the documents provided, and having recognised that the cost effectiveness of full verification may not result in significant shifts in the distribution of aid, the alternative of proxy means testing (school quintile, social grant benefits) has been adopted. However, recent research undertaken by NSFAS demonstrates that the adoption of single (or two) input indicators may still be yielding significant errors of inclusion and exclusion.

On this basis, several elements for policy review and adoption should be considered, and these will be fully explored in this policy paper.

Critical constructs

Means testing as a targeting mechanism

Means testing, a form of subsidy targeting, attempts to distribute at least some of the higher educational subsidies, such as low or no tuition fees, grants or subsidized loans, and/or access to low or no cost food and accommodation, on the basis of the student's or his/her family's need, or its estimated ability to pay for some of the underlying costs of higher education. Such subsidies "fill in" for what would be a parental contribution from families with more substantial means. In student financial assistance, a means testing system may play a targeting role by providing a benefit to which the student/family unit is either entitled or is not. It can also play an allocating role by awarding financial benefits that reduce with increasing income or measured family means. The means test can also be used to allocate limited financial assistance by ranking applicants according to their need and allocating awards from neediest to least needy until all funds have been exhausted[2].

Means testing as a determiner of family contribution

Means testing can be further divided into those means tests that allocate financial aid based on a student/family's need and those that do so based on a family's income. In the former, a family's expected contribution, calculated using a formula that generally includes data on household income, assets and composition, is subtracted from total higher education costs (including tuition fees, other educational expenses and living costs) to arrive at a student's need. In the latter, the amount of assistance is directly tied to family income and does not take educational cost differences into account. Germany, South Africa, and the United States are examples of countries that use the means test to determine a student's eligibility for aid and then to calculate the amount that the family can be expected to contribute (generally based on income, assets and number of dependent children in the household). This expected family contribution (EFC) is then deducted from total costs to arrive at the amount of financial assistance to which the student is entitled[3].

Means testing in South Africa – The Social Grant Programme

Income is the most commonly used indicator in South Africa and is used in the means tests for the Child Support Grant; the Older Person's Pension; the Disability Grant; and the Care Dependency Grant. The means test for the Child Support Grant is the most complicated of all the targeting mechanisms employed by the Department of Social Development, differentiating between urban and rural households as well as the materials used in the construction of the caregiver's dwelling[4].

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[2] Marcucci, P. & Johnstone, B.D (2016) Targeting Financial Assistance for Students in Higher Education: Means Testing with Special Emphasis on Developing and Transitional Countries

[3] Ibid

[4] Samson, M., Mc Quene, K., Niekerk, I., Kaniki, S., Kallmann, K. & Williams, M. (2007). Review of Targeting Mechanisms, Means Tests and Values for South Africa's Social Grants. Economic Policy Research Institute

Typographies of means testing in student financial aid globally[5]

Given the critical importance of tertiary education, coupled with the very high levels of poverty and unemployment, NSFAS continues to play a central and irreplaceable role in the South African society.

Canada

In Canada, a student's student loan entitlement is based on the ministry's calculation of the amount of money that the student should have available to pay for educational and living costs taking into account a student's pre and study period income and assets and parental (or spousal) income. After calculating the financial need by subtracting this expected contribution from total expenses, the ministry determines the amount of funding to which the student is entitled (up to maximum of $350/week for a dependent student).

Germany

In Germany, the means test calculates a family's income (student income/wealth plus parental monthly taxable income) and deducts from it expenses for social insurance, taxes that have actually been paid, special expenses of home owners, a basic allowance and an allowance for other children in the family to arrive at net income from which 50 percent is deducted and then 5 percent per each additional sibling to calculate ability to pay per month. A family's ability to pay per month is deducted from its total need per month to calculate the grant and loan to which the student is entitled.

Hong Kong

In Hong Kong, a table called the Ready Reckoner, was developed to indicate the level of assistance to which an applicant is entitled according to his/her income. The Adjusted Family Income (AFI) is calculated by dividing parental income and a portion of the income from unmarried siblings living at home by the number of family members plus one. The AFI is then used to determine the amount of the maximum grant and loan to which the student is entitled using the Ready Reckoner table.

United States

The EFC calculation used in the United States Federal Need Analysis Methodology is significantly more complex. The parental and student contributions, calculated based on their income and assets minus allowances, are added together to arrive at a family's EFC. The EFC is then subtracted from the student's cost of attendance to arrive at the estimation of a student's financial need.

[5] Marcucci, P. & Johnstone, B.D (2016) Targeting Financial Assistance for Students in Higher Education: Means Testing with Special Emphasis on Developing and Transitional Countries

Policy framework

Non-negotiable principles for means-testing by NSFAS

From its inception, the NSFAS Act has mandated the development criteria and conditions for the granting of loans and bursaries to eligible students. NSFAS uses a combination of proxies and income to determine eligibility for funding and the size of the award. NSFAS uses proxies to determine whether a student should get full funding automatically or whether they will be means-tested. If they are means-tested then income and family composition information is collected to determine the amount of the NSFAS award, should they be eligible for funding.

The NSFAS national means test determines an expected family contribution (EFC) on the following basis:

- Gross family income is totalled
- Tax on earnings is deducted from the gross income (on the basis of the SARS determined tax thresholds) = nett income
- A family subsistence allowance based on the family size (to a maximum of 8 people) and the home address of the family is deducted from the nett income
- The disposable income for the family then factors in the number of students studying at any tertiary institution.

Means testing – Adopting the use of a proxy index

Calculating an EFC that is too high will exclude many families from being able to send children to university because of a lack of funding. However, if the EFC is too low, then the system is at risk of serious leakage and exploding costs. In some countries, proxy means variables are used to corroborate income data, but not used to determine eligibility for financial assistance. These variables are often country specific and therefore could vary widely. A case in point is China and Kenya where a corroborative proxy approach is used. In the former, the variables used to corroborate income include parents' education and occupation, household structure, dwelling type and automobile ownership. In the latter, while secondary school attendance and single/dual parent household information are used as proxies in the mean test, information of parents' education and occupation, and household structure are used to corroborate income data. The main advantage of

this approach is that it allows for verification of income data when it is not easily attainable by other means[6].

The proxies used by NSFAS in the first years of implementation of the student centred model to determine who is means-test-waived and who is means-tested were "secondary school attended" and whether the student lives in a household with a member who is a recipient of a government grant (any one of the four listed above). Applicants who attend a Quintile 1 – 3 schools or whose households are a recipient of a SASSA grant are means-test-waived and receive full funding. If this proxy test is not passed, then the applicants proceed to the income-based means test to ascertain their level of funding need[7].

Means testing – Assessing the extent of the financial need and the family contribution

The NSFAS means test aims to determine the size of financial assistance for a particular family based on their annual household income. More specifically, NSFAS tries to estimate what a family can reasonably be expected to contribute towards their child's tertiary education, and then covers the difference should it exist. This 'reasonable expectation' is based on the family's disposable income. Whilst it is relatively simple to verify income in South Africa, it is impossible to verify disposable income. NSFAS therefore estimates household disposable income for each applicant. This is the second step in NSFAS's funding system. In this step, to arrive at disposable income NSFAS collects gross household income and subtracts tax and a predetermined amount which is based on household size, household composition and region. This predetermined amount is calculated by determining a set of necessary items ranging from food and water, to electricity and housing.

Arguments for updating the NSFAS means test

Central to the roll-out of the student-centred model in 2017 was the requirement to undergo a review of the NSFAS means test. The purpose of this review is not only to determine how NSFAS can accommodate for the "missing middle" through differentiated loan and grant products, but more critically to ensure that the output produced by the means test accurately assesses the extent to which the family of the student can reasonably afford to contribute to the cost of study.

[6] DPRU

[7] Ibid

Such a review would need to interrogate the key principles that should be adopted by the Board in determining the conceptual framework for future means testing, in addition to a technical review of the core inputs and outputs of the means test itself.

Principles that require further interrogation include determining the value of retaining the expected family contribution for both ranking students and determining the value of the actual loan or bursary awarded and/or the adoption of an income threshold linked to poverty data and thresholds (different income bands linked to different product types) and/or the efficacy of using the quintile system as a proxy for poverty in the means-test waiving process. Technical elements of the review must by necessity include a whole-scale review of the basket of goods used to calculate the household subsistence level data by region/municipality, whether or not the EFC produced accurately predicts what a family can contribute based on their income and family expenditure, and finally, the extent to which the data supplied in the means test can be auto-populated into the calculation through interfaces with other data sources through counter-parting arrangements with SARS, SASSA and DHA.

Some of the specific parameters that may need review include:

- Extending the means test parameters to consider a wider range of socio-economic indicators of need/proxies eg. if the geographic area that the student resides in is an identified poverty node (Presidency), family expenditure patterns (e.g assets owned etc);
- Improving the validation and verification of information supplied/requested of students by negotiating access to data that is administratively-system driven and not applicant-driven. In 2009, a project driven by SASSA (NISIS - National Integrated Social Information System) provided a solution that had integrated databases from a wide range of public sector data sources including Home Affairs, SASSA, UIF. However, this has been replaced by a project called the National Integrated Social Protection Information System (NISPIS). Other options may exist through private firms/credit bureaus that have access to a wider range of data and have the functionality to determine a reasonable socio-economic indicator;
- The tables for the determination of a reasonable living allowance needs to be completely revised – both in terms of structure and in terms of the determination of what goes into the basket of goods that has been costed: ito structure – for the scale indicating size of family to be adjusted (instead of 1 -4, 5, 6, 7, 7+ to have something like 1 – 4, 5 – 7, 7 – 10, 10+), and for the geographic regions detailed to mirror either municipal or district boundaries so that NSFAS can pull in StatsSA data and municipal data on socio-economic status; and
- Reviewing the documentary evidence for the means test – moving this from paper-based documents and affidavits submitted by students to using income information derived from SARS directly, and information which will enable verification of address and contact information.

One of the discussion points at NSFAS in the early days following the Ministerial Review was the introduction of a model which more closely tied income (and which tax bracket the income of a student's family falls into) with a pro-rata proportion of the recommended award. In other words,

- For a student whose family income falls below the minimum income deemed as taxable by SARS, the EFC can either be automatically 0 and therefore the NSFAS recommended award = actual cost of study;
- For the next level of the income bands, the NSFAS recommended award can be = 80% (or whatever research indicates it should be – just using 80% as an example) of the actual cost of study;
- For the next level of the income bands, the NSFAS recommended award can be = 50% of the actual cost of study;
- For the next level of the income bands, the NSFAS recommended award can be = 30% (or otherwise determined value).

Tied to this though would need to be some thinking about how far the allocation would go – would there be sufficient funds to fully fund all the students in that first category before "rolling over" some funds to the second category, and then to the next and the next – how far you can "roll over" the funds would then depend on how much is made available unless the DHET determined up front that of the entire allocation to an institution – a certain proportion must be ring-fenced for each level of the income band and students are then ranked and funded up until that point at which the allocation is fully spent.

Recommendations for consideration by EXMA

Much of the arguments that have been made suggest that there are a number of policy or practice recommendations that could be considered as NSFAS moves forward, and these are highlighted briefly in the following section. The idea is to ensure adequate coverage for the poorest in our student applicant population - the people that the social protection policy aims to reach, through the adoption of a wider variety of proxies to broaden the targeting mechanism for the new academic year.

NSFAS commissioned two independent pieces of work, both ultimately undertaken by the Development Policy Research Unit, that aimed at i) identifying a composite proxy index for the first stage test waiver; and ii) updated the household subsistence values for the full means test itself. The full reports are attached as annexures to this policy paper.

Since the introduction of the student-centred model, NSFAS has employed a two-stage financial eligibility assessment – the first stage is the use of proxy indicators to differentiate those students that are from households in relative poverty, and the second stage is the actual full means testing against household income for the remainder of the applicant population. Students that meet the proxy indicators are considered means test waived (MTW), and no further assessment of the parental/student incomes is undertaken. These students were allocated a default expected family contribution (EFC) of R0. If students did not meet the proxies, a full means test was done to determine the EFC.

What was recommended and adopted in the 2018 academic year was an amendment to the indicators and data points for these two stages. These differences are tabulated below for ease of reference:

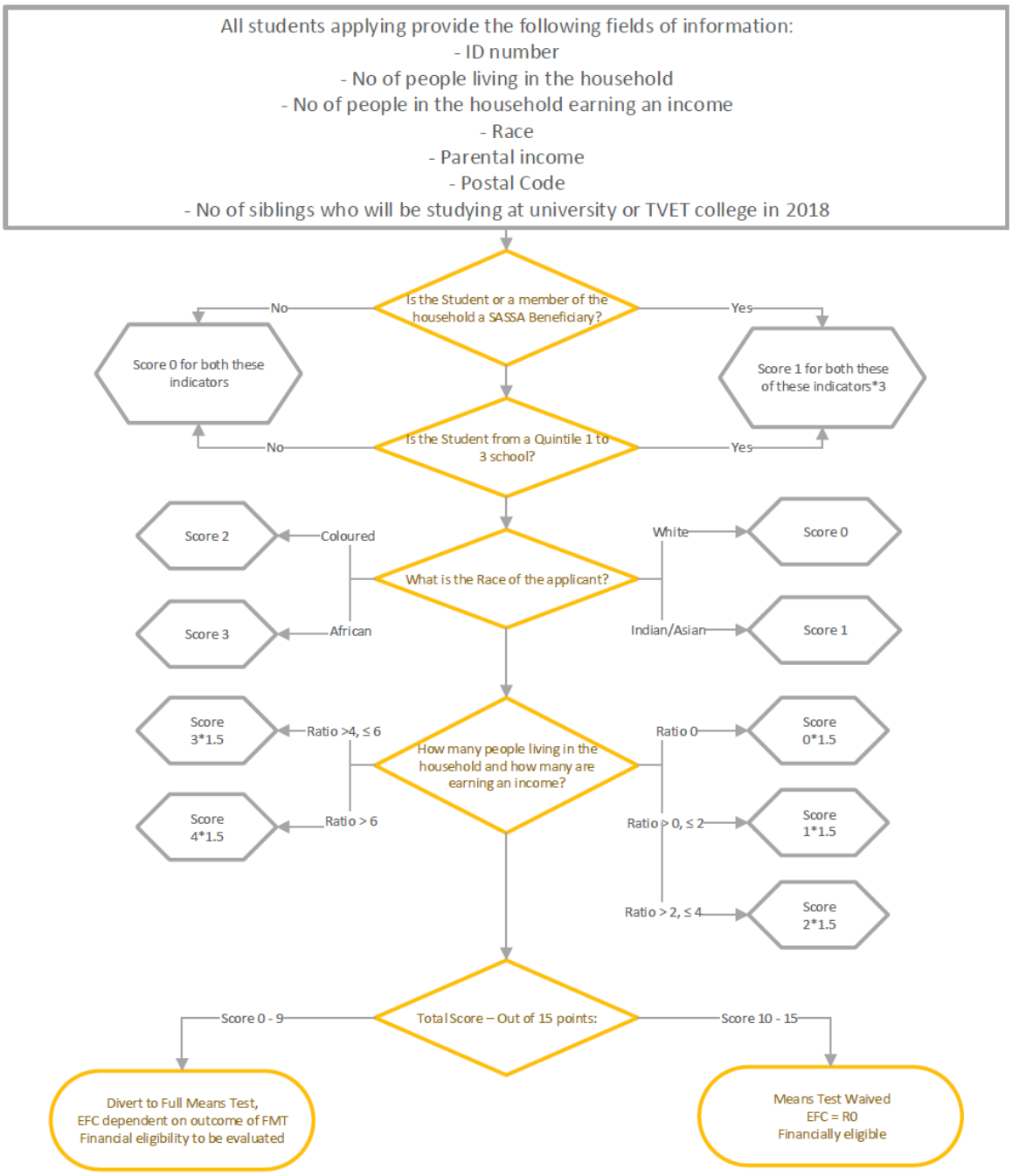
	2017 Academic Year	2018 Academic Year
First stage – Means Test Waiver (MTW status)	The system was designed to only use the Q1-3 indicator to MTW. With the announcements at the beginning of the year, NSFAS used three data points: quintile 1-3, SASSA and income under R120k. Applicants who met any of these criteria were deemed means test waived, and allocated an EFC of R0.	Four indicators are being used in a weighted composite proxy: yes/no for Q1-3, yes/no for SASSA beneficiary (applicant or parent), race and dependency ratio (number of people earning to the number of people being supported). This composite index produces a score between 0 and 15. See decision tree attached as Appendix A. If the applicant scored between 10-15, then they are MTW. Applicants scoring lower than 10 will be financial means tested, and their income will be verified and used in the EFC calculation.
Second State – Means Testing	Used the old household allowances tables that have not been updated since 2004 (other than the annual inflation adjustment). Old table used regions determined in 2004. Used a categorical indicator for family size (1-4 family members, 5; 6; 7+ family members).	Have updated the basket of goods and incorporated the new provinces – with a differentiator for rural and urban. Uses a continuous scale for the number of people in the household – 1 to 8, with an amount per additional person in the household.
Validations	Only validated against DBE (with a SASSA integrated data set)	Validating against DBE, SASSA, DHA and a credit bureau.

Conclusion

The reports submitted by the DPRU offered NSFAS five different scenarios for alternative proxies for means testing, and a variety of options to choose from in updating its household allowance tables. This policy paper has shown the different components of means testing and possible proxies that can be employed by NSFAS.

The intent in adopting these new measures is to ensure that NSFAS reduces wastage (by not funding students that may have better financial resources), increases coverage (funds more targeted students adequately and as per their need), improves the efficiency of means testing and, as far as possible, removes the stigma associated with means testing by using a wider variety of administrative data points.

Appendix A: Means test proxy decision tree



Additional Annexures

Annexure B – Round Table Discussion Paper 1: Reviewing the NSFAS Financial Means Test

As presented to the Research Round Table on 5 April 2016 and the Senior Management Forum on the 4 May 2016

Annexure C – Targeting Rules for student financial aid: suggested guidelines for NSFAS

Research undertaken by the Development Policy Research Unit (DPRU) on behalf of NSFAS

SCMN046 / 2016

Final Report submitted 31 August 2017

Annexure D – Revision of the parameters of the NSFAS means test – recommendations on household allowances

Research undertaken by the Development Policy Research Unit (DPRU) on behalf of NSFAS

RFQ 077 / 2016

Draft Report submitted 3 March 2017