Working Paper Series 2016

Recoveries mechanisms for public student loan schemes across the globe – what can NSFAS learn from these practices?

Abstract:

This paper presents a broad view of the dynamic nature of the public student loan funding environment, and reflects on the structural elements and institutional characteristics that influence the recovery of student loans across the globe. It identifies three typographies that differentiate how public student loans are administered, and relates this to the influence that this has on how the loan programmes are structured. In the high-level analysis of different countries, some key practices and policy considerations are highlighted, which NSFAS may find of value in taking loan recovery practices into the future, given the need to improve recoveries and grow this revenue stream.

Title	Working Paper 2	Version	1
Compiled by	Research and Policy	Date of publication	2016-12-31

10 Brodie Road, House Vincent, 2nd Floor, Wynberg, Cape Town, 7700 | Private Bag X1, Plumstead, Cape Town, 7800

Tel No.: 0860 067 327 | 021 763 3200 | Email: info@nsfas.org.za

NSFAS
National Student Financial Aid Scheme

Contents

Introduction 4
Critical Constructs 5
Defining the student loan 5
Identifying the costs of student lending 5
Sustainability and cost recovery 7
Typographies of publicly-funded student loan schemes around the world 7
Government-agency administered schemes 7
Revenue-agency administered schemes 8
Bank-linked administered schemes 8
Factors contributing to non-repayment or default 8
NSFAS' performance in loan recoveries over time 8
Measuring recovery and repayment 10
Measuring default 13
Lessons from around the world 15
On the African continent 15
Botswana 15
Ghana 16
Kenya 16
Ethiopia 17
Tanzania 17
Beyond the continent 18
Australia 19
Canada 19
Chile 20
China 20
Malaysia 20
New Zealand 21
Thailand 21
United Kingdom 21
United States 22
Structuring options 23
Income-contingent loan schemes 23
Conventional loan repayment schemes 25

NSFAS
National Student Financial Aid Scheme

Graduate taxes 26
Graduate taxes versus collection through the tax system 28
Requirements for collection through the revenue service (in South Africa) 28
Inherent benefits and challenges of revenue-agency collection for South African student loans 28
Policy and practice considerations 30
Re-designing the NSFAS loan repayments experience for university graduates 31
Reflections on influences on student repayment behaviours 31
Generating new solutions and strategies 32
Conclusion 34
Acknowledgements 34

Annexure A 35
HELB Act amendments binding employers and employees to deductions 35
Annexure B 36
"The NSFAS Collective" 36
Annexure C 37
"The S.O.F.T. Way – Student Oriented Finance for Tuition" 37

Introduction

Due to the growing demand for access to higher education and the ambitious enrolment targets set, against the declining relative value of funding from government for higher education, universities have had to increase student contributions over time. In South Africa over the past 18 months, the financing of higher education to meet these goals has come under fire by students, academics and university administrators. Passing the increased gap between government's contribution and the costs of university education to students through increasing fees has become unsustainable, not only for the very poor, but also for a growing group of students referred to as the "missing middle".

This is not unique to South Africa, and has long been evidenced in studies which have sought to unpack the financing of universities, particularly those in developing countries. In most cases, however, one of the critical challenges which have confronted these governments is the identification of means to balance the cost recovery for higher education with the imperative of increasing access. To ensure that those students (or their parents) who cannot pay fees are not disadvantaged, more than 70 countries operate student loan schemes which are underwritten by sizeable government subsidies. Like NSFAS, most of these systems are subject to repayment default and administrative costs that are not passed onto the students[1].

Student loan schemes are a critical intermediary for countries in which higher education cost sharing is the accepted policy. These countries generally have several policy aims – firstly, to provide an income stream from students for fees to supplement the government contribution (as a mechanism for cost sharing); secondly, to widen participation in higher education for financially excluded, or marginalised students; and thirdly, to "put money into the hands of students (possibly) as a form of income redistribution"[2]. As such, student loans are regarded as equitable as they appear to hold out the promise to the student that 'you can borrow money when you cannot pay for higher education on your own, and repay when you can' – a policy position which advocates for the recovery of an already issued student loan.[3]

However, cost recovery remains the most significant sustainability challenge for student loan programmes[4]. Many of these programmes struggle to effectively fully recover the value of funds disbursed as loans. This is largely because these programmes, like NSFAS, offer discounted interest rates, grace or repayment periods that are too generous, loan forgiveness options, and origination processes that do not sufficiently educate potential borrowers on their repayment obligations. However, it has also been suggested that the gap between loan disbursements and loan recovery in many

---

[1] Ziderman, A. & Albrecht, D. (1995). *Financing universities in developing countries*. Washington DC: The Falmer Press

[2] Johnstone, D.B. & Marcucci, P. (2010). *Making student loans work in low- and middle-income countries: enhancing asset values and tapping private capital*. Draft – Not for Citation. By personal correspondence with authors.

[3] Global University Network for Innovation - GUNI (2006). *Higher education in the world 2006 – the financing of universities*. UK: Palgrave MacMillan

[4] World Bank (2010). *Financing higher education in Africa*. From the Directions in Development: Human Development series 54441. Washington DC. ISBN-13: 978-0-8213-8334-6

countries can additionally be attributed for in terms of inefficiencies in running the schemes resulting in substantial repayment default and the cost of administration of the Scheme.[5]

Therefore, for NSFAS, addressing the question of how to sustainably finance increased access to quality higher education, at a low or negligible cost for not only students but also for citizens (and particularly taxpayers), has become critically relevant. The "cake of financial resources" is limited, and due to the huge disparities existing across a broad range of public services, there are many priorities which must be competed against. Given the nature of the model as it is currently conceptualised, NSFAS will continue to be dependent heavily on government grants to remain viable and expand the number of students funded. However, growth in loan recoveries could provide upwards of 35% of the required funding, given the growth in the number of loans being issued.

Critical Constructs

Defining the student loan

A student loan, as per the definition agreed to by NSFAS, is a form of financial support granted to a student selected by NSFAS to enable the student to defray the costs connected with his/her higher education at a designated higher education institution, and those connected with the board and lodging (accommodation and meals) of that individual for the purposes of attending the institution. These loans need to be repaid by the student, according to the terms and conditions as set by NSFAS and the rules for repayment and recovery of the loans.

In NSFAS's case, the interest rates are set at 80% of the repo rate, interest is not accrued while the student is still studying and for up to 12 months post-exit, the application of the in-duplum rule limited the amount of interest that can be accrue over the life of the loan and interest is only charged on the nett capital loan recognised, after the original cost of the credit has been reduced by a conversion factor based on the academic performance of the student. In recent years, the loan-to-bursary conversion has reduced the effective nett average value of a typical NSFAS loan by up to 44% in the last five years.

Identifying the costs of student lending

In an analysis by National Treasury recently, a number of variables were suggested that directly affected the costs of running NSFAS as a credit-extending entity. Limiting this to the direct costs associated with student lending, these included factors such as the number of students receiving loans for the first time (as debt origination for a first-time debtor costs more – from a resource point of view[6]), the total number of students receiving loans (as this relates to the management of the overall loan book[7]), the number of loan conversions (as this affects the adjustments to the value of the book and the

---

[5] Onen, D.; Ajuaba, D.B.; Ocean, R.O. & Ndaruhustse, G.R. (2015). *Managing the student loan schemes in Africa: lessons for younger loan schemes.* In the International Journal of Education and Research, 3 (12).

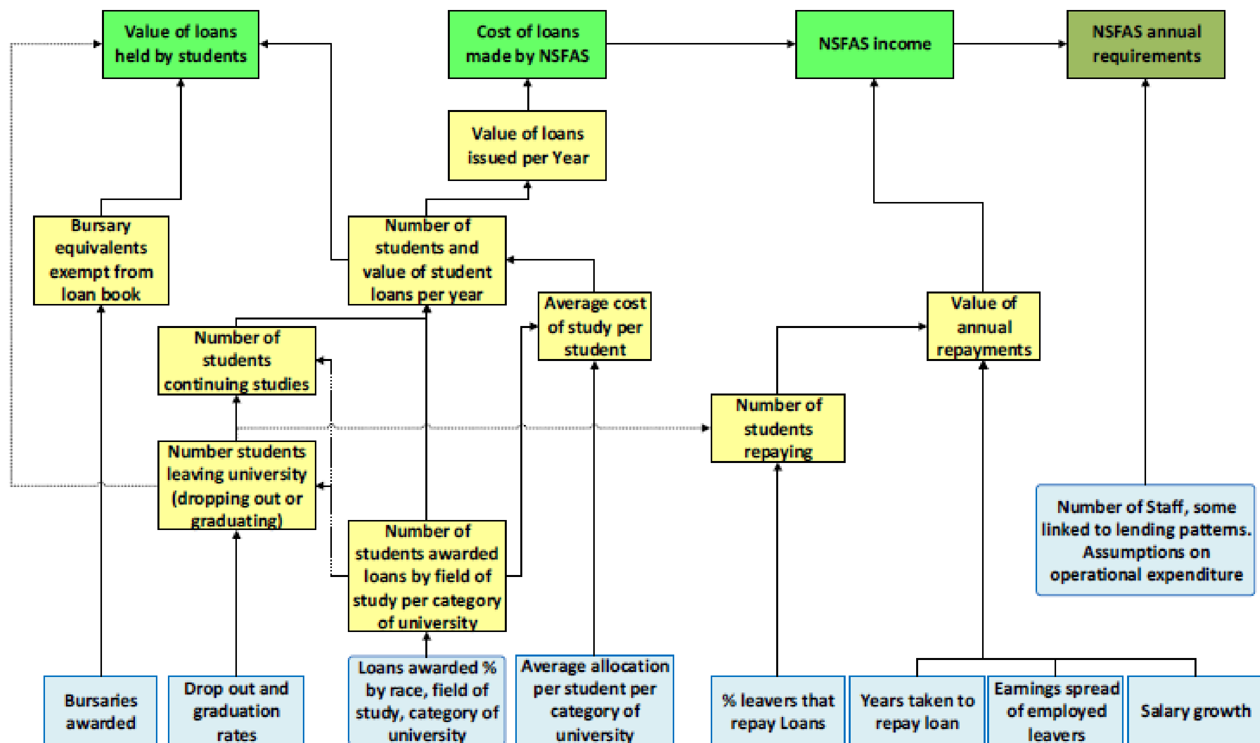
[6] And as the rate of growth of enrolment increases in line with the goals of expanding equitable access, so these variables will increase.

[7] This is impacted by the increase in the size of the average loan awarded and/or full cost of study at institutions (and/or the capping of the NSFAS loan), the number of drop-outs (these are less likely to repay, and this impacts on the repayment rate) and the graduation rate.

value of individual student debt), and the number of debtors and/or the repayment or default rate (as this affects the activity costs for each rand recovered – differentiated between those who are repaying and those who are not). As such, these direct administration costs include the cost of personnel (some of this is linked to these variables, others are fixed), the cost of infrastructure such as ICT hardware and software and facilities, and the cost of services (such as external debt collectors, audit and risk).

This is shown in the figure below:[8]

Figure 19: Overview of the NSFAS Loan Costing Model



These costs are important to understand, not only as a channel for advocating for increasing the recovery rate, but also to determine the best strategies for bringing in higher rand value in recoveries, through the most effective cost mechanisms. Developing business processes that increase the % of students exiting the university system that repay their loans is one avenue, so are minimising the number of years taken to repay the loan (which is within NSFAS' control).

[8] Cornerstone Economic Research on behalf of National Treasury (2015). Performance and Expenditure Review, page 82.

Sustainability and cost recovery

For a student loan programme to be financially sustainable, the view has been expressed that they must work towards meeting the following criteria: i) they must offer a high rate of recovery; ii) they should be able to tap into the private capital market; and iii) they should be able to demonstrate a reduced risk of default by re-payers.[9] Based on the current analysis, and on the grounds that NSFAS is not able to perform sufficiently well against any of these three criteria, NSFAS is not in a position to become financially sustainable. Like NSFAS, most publicly-funded/-mandated loan schemes operating across the globe benefit from sizeable government grants, and also apply significant subsidies to the student borrowers, reducing the effective repayment ratio[10]. Ultimately, these two factors have a significant impact on the ability of a loan scheme to become fully financially sustainable.

Typographies of publicly-funded student loan schemes around the world

It is important from the outset to clarify that publicly-funded loans schemes are recognised in this review as distinct and differentiated from commercially available credit. In reviewing the different models for origination and recovery of state student loans, it is suggested that these fall into one of three typologies – differentiated in terms of the origination and source of the funding and, directly related to this, the mechanisms adopted for the recovery of these funds.[11]

Government-agency administered schemes

NSFAS is a typical example of a government-agency administered scheme – where the source of the funding comes directly from the appropriation from the National Treasury, as an allocation from the department grant. In these cases, many of these government agencies create legislative frameworks and infrastructure through which the origination and recovery of funds is undertaken directly by the agency itself. Unless specific mechanisms to ensure compliance with the loan conditions are introduced, one of the limitations of this model is the perception that there are few/no consequences to the student if they fail to repay, and that the legal sanction that can be enforced is through civil action. Administrative systems that are not effectively geared to track and/or trace students who have exited university and/or found employment also contribute to the failure of this system in ensuring that funds distributed as loans are recovered from debtors.

---

[9] Johnstone, D.B. & Marcucci, P. (2007). *Financially sustainable student loan programmes: the management of risk in the quest for private capital*. Prepared as an Issue Brief for the Global Centre on Private Financing of Higher Education at the Institute for Higher Education Policy, Washington DC. Made available through personal correspondence with the author.

[10] Shen, H. & Ziderman, A. (2008). *Student loans repayment and recovery: international comparisons*. IZA Discussion Paper no 3588. Accessed 16 March 2016 at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1158984

[11] However, it should be noted that this is not the only basis for differentiating types of student loan schemes. Two other elements that could be included is the type of repayment arrangement (income-based repayments, graduate taxes or conventional loans) and/or whether the programme is universally/generally available. What is interesting from the analysis of the types of programmes in existence is that these different categorisations are not associative in nature, and the presence of one condition does not infer sameness of the other element.

Revenue-agency administered schemes

In these models, the tax revenue agency provides funding for student loans as a "study advance"[12] against the future earnings of the student. In the case of the South African Revenue Service, it has been suggested that this could be recovered through several different options which will be explored later in this paper. Essentially, these mechanisms enable the collection of the study advance through payroll deductions, through the bi-annual Pay-As-You-Earn reconciliations and through annual tax assessments. One of the key advantages of adopting a system in which SARS collect repayments against the study loan is the ability of SARS to enforce criminal sanctions as a consequence of the failure to pay, as this falls within the ambit of the Tax Administration Act.

Bank-linked administered schemes

In some countries, state guaranteed loans are administered through the banks, where in many of these cases, the risk for the loan is shared between the state and the bank. In China, for example, state-owned banks, commercial banks and credit cooperatives fund students, with the government subsidising the interest rates while the student remains studying. This is likewise the case in Thailand, with the student loan fund in which the government acted as a guarantor of the loan, and subsidises the interest while the student is still studying, through a mortgage-style loan. In the United States for many years (1964 to 2009) state guaranteed loans – called the Federal Family Education Loan Programme (for example, Stafford Subsidised Loans) – were funded by the federal administration and administered through the banks. The debt was then offloaded to second tier banking institutions for the management, servicing and collection of the debt.[13] As an example, Sallie Mae[14] initially was responsible for the origination of FFELP loans, both as a servicer and a collector, but - since privatisation in 2004 and the subsequent shift to the Direct Student Loan Programme – has become a private lender of significant size in the US. However, what remains in play in the US are state sponsored student loans that are offered by private commercial lenders that have been certified as preferred providers, and they may offer lower interest rates, deferment of loans under particular conditions, and 'friendly' repayment schedules. However, these are not underwritten by the federal government.

Factors contributing to non-repayment or default

NSFAS' performance in loan recoveries over time

From its inception, the NSFAS Act has mandated the recovery of loans to students, with all funds recovered being reinjected into new funding in the following academic year. Over the years from 1999 to 2015, R5,4bn has been recovered by NSFAS – and when measured simplistically as a % of the total value granted in this same time, this represents 10,9%. In a recent study by National Treasury, it is

---

[12] Elfick, C.A.C. & Weber, M.A. (20160. Submission by Learning Strategies (Pty) Ltd to the Commission of Inquiry into Higher Education Funding (The Fees Commission). http://www.justice.gov.za/commissions/FeesHET/submissions/oinst/2016-FHETC-Sub-LearningStrategies.pdf

[13] This was later replaced by the Direct Student Loan Programme, in which all loans are processed and disbursed directly through the US Department of Education (http://collegescholarships.org/loans/guaranteed.htm - accessed 13 January 2017)

[14] http://investopedia.com/terms/salliemae.asp

noted that this loan recovery contributed significantly to the funds disbursed to students in the years between 1997 and 2006, growing from 8,6% to its highest peak at 35,3%[15]. Effectively, this translated to approximately 44 000 new loans in 2006. However, after reaching a high of R636m recovered in 2008, the value recovered by NSFAS dropped to R248m in 2014. From 2006 onwards, the percentage that recoveries contributed to the funds allocated in the following year dropped rapidly, from 35,3% (see above) to 3,7% by the end of 2014, stabilising briefly at 16,7% from 2009 to 2011.

There were several factors – well documented – that attributed to this drop in the recoveries, but NSFAS essentially faces a triple challenge in recovery. These include the growing problem of non-payment amongst debtors, the poor quality of the NSFAS debt with approximately half the debtors being those who have dropped out, and the inefficiencies of tracking and following debtors which has led to the prescription of some debts. The efficiency of the Scheme, and - by this - recoveries are further undermined by the high drop-out rate in the sector and by the longer-than-regulation-time to complete the undergraduate degree or diploma. An analysis of the NSFAS Annual Reports from 2011 to 2015 shows that the percentage of NSFAS debtors repaying their loans has dropped from 35% to 12% resulting in a 61% drop in loan recoveries in this time.[16] Clearly, this impacts on the number of students who cannot be funded due to the drop-in loan recoveries, as all recoveries feed directly back into loan allocations in the medium-term projections. Based on estimates calculated using the growth trajectory up to and including the 2008/09 financial year, NSFAS would have recovered R1,7bn in 2014, effectively funding 51 000 new students, substantially more than the 7 500 students that were funded by the recoveries in the 2014 year.

Does Student Debt Matter If You're Not Going to Pay It Back?[17]

You can accumulate one hell of a lot of debt these days in the UK. Just in an undergraduate degree, fees are £9,000 per year plus you can get another £10,702 in maintenance loans per year of you're studying in London. Over a three-year degree that's £59,106 or a tad over $100,000 (yes, really). So, at face value one can understand the spate of stories coming out of the UK these days talking about how their massive debt loads are going to paralyze them for life, stop them being able to buy housing etc.

Except, wait – these are income contingent loans, not mortgage-style loans. The maximum payment you have to make in any given year is 9% of marginal income over 21,000. And the debt incurred doesn't necessarily need to be paid back. Loans are forgiven after 25 years, regardless of how much you have repaid. Estimates vary, in part because it depends on what discount rates one chooses and in part because the government criminally keeps messing with the terms of the loans, but at the moment it is expected that between 25 and 40% of student loan balances will never be repaid and a higher proportion of students (perhaps 50%) will receive at least some forgiveness on their loans. For those who do not repay their loans, the UK loan system is more like a tax than a loan – a 9% surtax on income over 21,000 which lasts for 25 years after graduation (more on that here).

Despite massive nominal debts, students simply aren't facing massive repayment burden. A graduate making 30,000 is only repaying 810 per year, or about 3.1% of after tax income, which is a heck of a lot less than the amount that the average

[15] Cornerstone Economic Research (2015). Performance and Expenditure Review: National Student Financial Aid Scheme. Research commissioned by National Treasury and the Department of Planning, Monitoring and Evaluation.
[16] Ibid (Cornerstone Economic Research, 2015).
[17] Courtesy of Higher Education Strategy Associates, Alex Usher, Posted 9 December 2016: http://higheredstrategy.com/does-student-debt-matter-if-youre-not-going-to-pay-it-back/

Canadian graduate with student loan debt is paying (our grads pay close to 8% of after-tax income on average). And they're paying that regardless of how big their debt is, which is not true in Canada either: at any given level of income over $25,000 per year, Canadian student loans borrowers' rise along with the amount of debt they have up to a maximum of 20% of family income. (If you're wondering how that works – how UK loans can be so big and yet borrowers repay so little – it's precisely because the government expects quite large losses on the program. Student loan burdens are easy to reduce if you're prepared to go to extreme lengths to subsidize them).

The point of income-contingent loan systems like those in the UK, with their guarantees, their maximum payments and their generous forgiveness systems is precisely to do everything possible to make life easier for borrowers, to ensure that their student loan debts are not going to affect their ability to borrow for other things later on.

But perception is everything. If graduates feel that their large debts constrain their ability to do make certain life choices like buying a house even though (technically) they don't, then can we say the policy is actually working? There's an interesting side point here. When deciding on applications for mortgages or other types of consumer debt, it's unclear whether banks in places like Australia and UK actually treat income-contingent student loan debt differently than Canadian and US banks treat mortgage-style debt. They should, but apparently nobody knows for sure because no one's ever checked – not that banks would necessarily fess up if they didn't.

Now, I'm not saying that these stories coming out of the UK are in fact true; people in opposition to government policies will tend to come up with whatever argument sounds good at a particular moment. But even if such views aren't widespread, the point raised is a good one. Student loan policy wonks have always assumed that if you provide guarantees and limit liability/risk on student loans, then students will be ok with debt. But if the facts of the policy don't change people's attitudes about risk, then the policies will fail, no matter how well they deal with the actual problems at hand.

But what's the alternative? It's a bit of a scary thought.

Measuring recovery and repayment

Over the years from 1991 to 2015, R5,4bn has been recovered by NSFAS, which – against the total R50,4bn in the same period, represents a recovery of approximately 10,9% on the full grant amount allocated by the DHET (for both loans and bursaries)[18]. However, this recovery rate has been calculated on the basis of the full value of funding granted to NSFAS, and so does not reflect the recovery against only the original principal or the nett loans awarded, or the nett loans due.

International research by IZA[19] shows that by factor of being a government loan scheme, a "sizeable portion of the total loans paid out by the loans body will not be received back in repayment". This is not only because of the interest subsidization discussed earlier, but also as repayment default rates are normally high.

In this research paper, three ratios for measuring recovery and repayment are discussed: i) a loan repayment ratio; ii) the "hidden grant" ratio; and iii) the loan recovery ratio. The repayment ratio essentially measures the value of the individual loan the average borrower is required to repay and is defined as the ratio of "required repayments to the loan size received, measured in terms of present values". This value is determined by considering business rules designed into the loan programme,

---

[18] Department of Higher Education and Training (2015), *Are we making progress with systemic structural transformation of resourcing, access, success, staffing and researching in higher education: What do the data say?* Paper prepared for the second national Higher Education Transformation Summit.
[19] Shen, H. & Ziderman, A. (2008). *Student loans repayment and recovery: international comparisons.* ibid. (page 3)

effectively creating a subsidy received by the students, lessening the amount that is required to be repaid. The impact of these financial instruments I the lessening of the loan amount that must be repaid by the student, effectively creating a 'hidden grant". Relating to this NSFAS, these would include:

- The loan-to-bursary grant conversion which reduces the cost of capital, in addition to the treatment of credit balances (unspent funds) as the first repayment against the original capital amount (nett principal loan amount);
- The discounted interest rate (80% of the repurchase rate from the central bank – the South African Reserve Bank), which is a below-market interest rate. In most loan programmes, this is usually the biggest factor in the 'hidden grant'. In NSFAS' financial reporting, this is reflected as the social benefit component of the loan and adjusted for after the fair value recognition;
- The interest break while the student is still studying, and the 12-month post-exit grace period;
- Repayments and the interest rate not being linked to inflation, thereby reducing the future value of the loan to be repaid;
- Longer amortization periods – linked to income thresholds and gross income, and not based on loan value – the longer the length of the loan repayment and the grace periods, the greater the 'hidden grant' component.

At a macro-level, the recovery of loans is impacted by the individual hidden grants, and the administrative efficiency with which the loan programmes can recover the loans – in terms of both the actual cost of recovery and the cost of the extent of the repayment default. Repayment default must include payments in arrears and the non-payment be debtors. For NSFAS, student default is currently measured in respect to the number of NSFAS loans held by debtors who are no longer studying but which are not being paid. Since 2011, the number of debtors has increased from 776 239 to 851 116 (2014), but the number paying has dropped from 275 429 to 100419 in the same time. This represents a drop from 35% to 12%.[20]

Therefore, when calculating an overall recovery rate for a programme, the cost of recovery (administrative costs) and the total loans disbursed must be used as a basis for determining the ratio of the repayments against this outlay: total disbursed repayments (present value) to total discounted (present value) outlays. The research by IZA provides the full formula calculations for these three ratios, and presents comparative data for 44 different countries, grouped regionally. Of these programmes, over 26 schemes had repayment ratios greater than 61%, with the remainder below 60%. The average recovery ratio (including default) in these 26 countries was 49,15%, in most cases falling short of the repayment ratio. In two of the highly-subsidised schemes in Africa, high rates of repayment default had (at the time of measurement) reduced the effective recovery ratio to 5,59% (Kenya) and 10,96% (Ghana). Commonly held views would suggest that repayment default is the most significant factor for low loans recovery, but the evidence from this piece of research by IZA suggests that built-in subsidies affecting the 'hidden grant' ratio for most of the 26 schemes was much more important. The table below presents a snapshot of this comparison, bearing in mind that this exercise was undertaken in 2008:

---

[20] Performance and Expenditure Review (2015).

Country[21]	Hidden grant ratio	Repayment ratio	Recovery Ratio	Country	Hidden grant ratio	Repayment ratio	Recovery ratio
Europe				**Asia (including Australasia)**			
England and Wales	12.19	87.81	-	China	35.37	46.63	56.31
Germany	61.77	38.23	-	Malaysia	43.33	56.67	51.33
Netherlands	1.55	98.45	-	India	19.77	80.23	60.17
Russia	88.27	11.73	10.56	Australia	25.70	74.30	-
Africa				New Zealand	41.12	58.88	-
South Africa[22]	49.53	50.47	35.83	**Americas**			
Ghana	60387	39.13	10.96	USA Perkins Loan	18.51	81.49	-
Kenya	72.07	27.93	5.59	Mexico	50.39	49.01	41.97
Namibia	0.21	99.79	-				

Some different mechanisms employed by these countries that impact on the hidden grant ratio include the following:

- 20 of the 44 loan programmes do not levy interest while studying (see footnote for South Africa in table);
- Some have no interest while studying, but then high interest after studying (prime plus) to encourage repayment (for example, Canada);
- A short repayment horizon is employed in Namibia resulting in a lower hidden grant ratio (number of years funded = number of years to repay); and (amongst others)
- Set minimum monthly repayment for all students, but generous grace periods and long amortization periods encourages faster repayment (Germany) reducing the hidden grant ratio.

---

[21] The countries selected for inclusion in this table have not been selected on any specific basis, but it would be useful to do such a comparison based on size of the higher education sector (or a gross enrolment ratio/participation rate), % of students funded through the loan programme and where loan recovery in income-contingent and time-based. This was not considered as part of the scope of this working paper and could be undertaken as part of a bigger study.

[22] Based on the analysis undertaken by the PER, with the introduction of the final year programme, this hidden grant ratio would have increased. In addition, this exercise was undertaken before the decision was made that while still studying students would not be charged interest, so it is likely that if it were assessed now, this ratio would be much higher.

Based on the recovery ratio and the repayment ratio, a relative efficiency index can be calculated – the higher the relative efficiency ratio, the more efficient the loan programme.

What is critical for NSFAS as it begins to re-think and strategise about its efforts to bolster recovery is the realisation that "that which is measured, gets done". By identifying and determining key ratios or indices that can be used to benchmark against, NSFAS will not have a reference point for the impact of its activities, nor its competitiveness in respect to either other developmental credit such as student loans or in respect to its counterparts on the continent or further abroad.

Measuring default[23]

In the United States, student loan default rates are reported on by all universities and colleges annually, and is known as the cohort default rate. This default rate is a measure of the percentage of students at that college/university that defaulted on their loans, averaged over a three-year period. It is used as a tool to monitor the distribution of loans to institutions where loan recovery is associated with higher risk of default – and in some cases, may limit the amount of funding allocated to an institution based on its cohort default rate, or may influence the eligibility of a student for financial aid if their choice of institution has a higher than permitted default rate (ie. 30% or greater for three consecutive cohorts). Research in this area has shown over time that "student characteristics are strongly associated with educational debt and one's ability to repay student loans (but) … the relationship between institutional characteristics and student loan default" has not been deeply examined.[24] Key amongst these student characteristics is the socio-economic background of the student which, in many cases, influences the choice of institution a student is able to attend.[25] Other significant factors include the academic performance of the student with those that drop-out having higher likelihood of default on loan payments, and the level of debt of the individual debtor (in turn influenced by whether or not the student graduated, and is employed or under-employed)[26]. By contrast though, the outstanding balance of the student loan is not as predictive of repayment delinquency.

---

[23] For a full literature review of studies undertaken in the US between 1978 and 2007, see this article – Gross, J.P.K.; Cekic, O.; Hossler, D.; & Hillman, N. (2010). What matters in student loan default: a review of the research literature. In the Journal of Student Financial Aid, 39 (1). Available from http://publications.nasfaa.org/jsfa/vol39/iss1/2

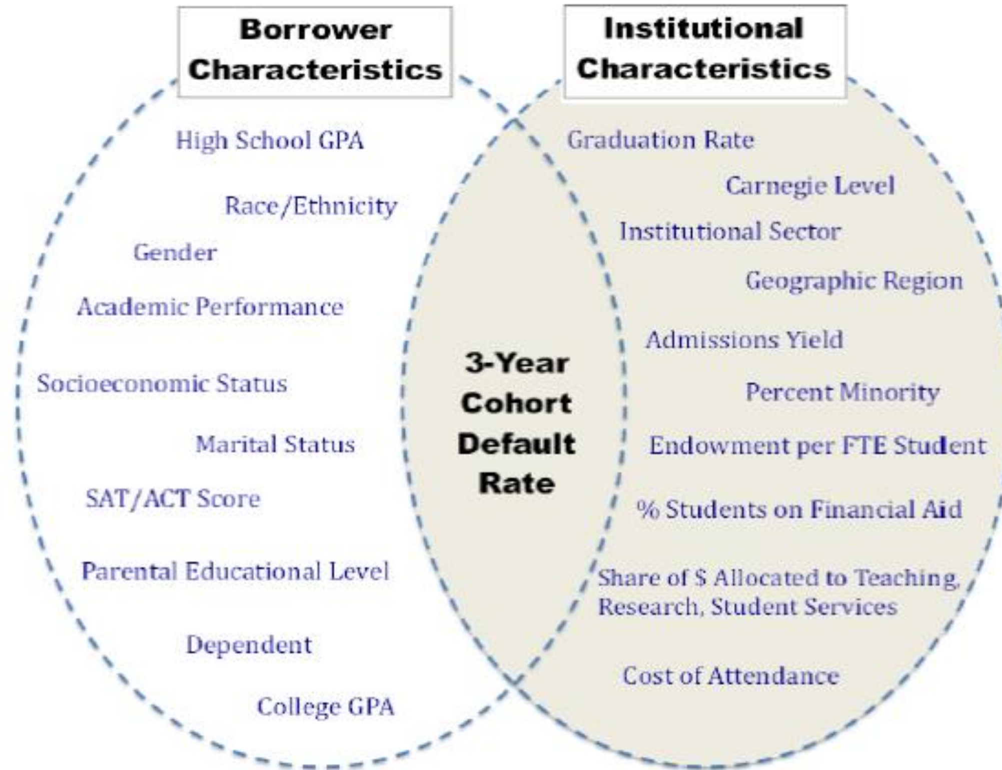
[24] Webber, K.L & Rogers, S.L. (2014). *Student loan default: do characteristics of four-year institutions contribute to the puzzle?* In the Journal of Student Financial Aid, 44 (2). Available from www.publications.nasfaa.org. Accessed 2 February 2017.

[25] Basken, P. (2009). *New measure of student-loan defaults could threaten hundreds of colleges*. In the Chronicle of Higher Education, available at http://www.chronicle.com/article/New-Measure-of-Student-Loan/49484/ accessed on 25 March 2017

[26] Mezza, A. & Sommer, K. (2016). *A trillion-dollar question: what predicts student loan delinquencies?* In the Journal of Student Financial Aid, 46 (3). Available at: http://publications.nasfaa.org/jsfa/vol46/iss3/3. Accessed on 2 February 2017.

The diagram below shows some of these interacting characteristics[27]:

Figure 1. Factors Associated with Student Loan Default



However, evidence has been presented recently that shows that not only are student characteristics relevant, but that there are institution-specific characteristics that should be considered in addressing default as a way of improving recoveries. Some of these characteristics may include the extent to which institutions allocate resources for support services including tutoring and academic advice (orientation, curriculum-based interventions, instructional support), address financial literacy, and invest in programmes specifically to deter default (such as entrance and exit counselling). These may become more and more relevant as institutional types differentiate further, and as funding products become more targeted to specific programmes and/or types of students (for example, a higher grant proportion for no-/low-income students as proposed by the Ikusasa Student Financial Aid Programme; full grants for low-income students attending technical and vocational colleges etc).

---

[27] Webber & Rogers (2014) ibid.

Lessons from around the world

Several of the papers and press articles reviewed suggest different approaches to the mechanisms for recovery, including some of the following: graduate taxes, deferred graduate retirement[28], collection through internal tax/revenue agencies (for example, SARS), employer settlements on behalf of employees as part of the total cost to company, and compliance certification for employment, immigration, new credit etc. Some of these will be further explored in the next section, where reference will also be made to the type of student loan systems that have been implemented. This analysis will not deal in any detail with the criteria for eligibility, parameters for funding or the origination processes, but will focus on the loan infrastructure and sources of capital, loan repayment arrangements and recoveries mechanisms primarily. Substantial work on this has been done and serves as the foundation for much of this comparison[29].

On the African continent

There are several publicly managed and operated student loan schemes on the African continent, although some have been relatively recently introduced and established. Many of these schemes originated from private funding introduced to enable citizens of these countries to study abroad (for example, Lesotho and Kenya). Not all of the schemes have had a smooth journey to get to where they are now. Amongst the first countries to establish national loan programmes in Africa were Ghana (1971), Nigeria (1972) and Kenya (1974). However, over the last few decades, other countries including Tanzania, Malawi, South Africa, Namibia and most recently Rwanda and Uganda have established student loan schemes.[30] Different strategies have been deployed in these systems to boost their recovery of loan funds, and to mitigate the risks associated with repayment default.

Botswana

This grant/loan scheme started operating in 1995, through funds provided by what is now known as the Tertiary Education Development Fund, in partnership with the Department of Student Placement and Welfare. While this funding is generally available to all students, the terms and conditions for the repayment of these loans are dependent on the selection of specific programmes (five categories with pre-determined terms and arrangements), deemed critical by the Department[31]. For these, only a portion of the full cost of tuition or maintenance allowances may be required to be recovered. Debtors who work for the central government have their repayments deducted at source, and for all others, repayments are made by the debtor to the Department of Tertiary Education Financing. A 12-month deferment of repayment is not automatic and is subject to a formal assessment. A separate collection

---

[28] Barakat, B, (2011). *Time is money: could deferred graduate retirement finance higher education?* Paper written for the Vienna Institute of Demography. By personal correspondence with the author. Available at http://oeaw.ac.at/vid/download/WP2011_05.pdf

[29] Available here: http://gse.buffalo.edu/org/IntHigherEdFinance/project_studentmatrix.html

[30] Onen, at al (2015).

[31] The World Bank (2010). *Financing higher education in Africa*. Available at .http://documents.worldbank.org/curated/en/497251467990390368/pdf/544410PUB0EPI01BOX0349416B01PUBLIC1.pdf

function in the Ministry was established as recovery was so low (the Loans Recovery Service Division), with loan collection being outsourced.

Ghana

Ghana operate a loan programme which is means-tested, with some guarantor conditions and offers maximum loan amounts that are differentiated by programme of study. Their students apply online for financial support, at the same time as submitting their application for admission to study. Interest is charged during the during of study at a lower rate, and after a one-year grace period following exit, the interest rate is increased by 2% for the duration of the repayment period. Interest is compounded annually while studying, and semi-annually over the duration of the loan. A loan repayment period of 15 years is given for students on a 4-year programme, and this is not income-contingent. Loans can be repaid by monthly deductions from the debtors' salary by the employer, through direct payments from the debtor to the scheme or by settlement of the total loan amount by the debtor or the employer. In addition, Ghana introduced a student loan protection scheme which covers the debt in the event of the death or permanent disability of the student, and established a specific in-house recovery unit that maintains contact with debtors and encourages early repayment and settlement of loans.

Kenya

Kenya's loan scheme originates in 1952 when loans were issued by the government to students studying outside of the country through an independent entity. In 1974, this was brought under the management of the Ministry of Education. Until 1995, when the Higher Education Loans Board (HELB) was established by an Act of Parliament, a legal basis for the recovery of loans had not been in place, and loan recoveries has been poor. Like NSFAS, it has a sizeable non-performing loan book, but has recently strengthened its partnerships with key government agencies to enable improvement in recoveries. It has a plan in place to launch a media campaign in countries such as the United States, United Kingdom and South Africa to solicit loan repayments from debtors who are seeking work in these countries.[32]

NSFAS undertook a study tour to Kenya in October 2017 to understand their processes and mechanisms in place for the recovery of student loans. From a high-level report, the highlights of this tour for the recoveries function of NSFAS are as follows:

- Empowerment through legislation to get employer to do the recovery function (re-instatement of Section 23 through positive consent)
- Certificates of compliance before a debtor can be employed by government – all graduates need to obtain a clearance certificate from the loan agency before they can secure a job as a mechanism to curb loan default
- Repayment maximum at 25% of salary. Negotiation can be done, but minimum is 10% of salary.
- Maximum term 10 years
- Starts one year after studies completed, irrespective of whether earning an income
- Debt collection fees payable to EDCs are payable by the debtor
- Credit policy in place
- Significant team with approximately 80 individuals working recoveries, from inception to closure and legal – for 85000 default debtors and 100 000 current debtors

[32] http://www.universityworldnews.com/article.php?story=20160323171554503

- All students must apply to the Kenyan Revenue System for a revenue number, from their second year of study, and this is then applicable for the loans for subsequent years of study
- The approach followed by HELB is that they use the revenue service to track debtors, and then enforce the collection of debt onto the employer. Non-compliant employers are prosecuted alongside non-compliant debtors.

Part of its' strategy going forward is to enforce repayment by approaching the guarantors of the loans, reminding them of the obligations under the terms of the loan repayments and by offering an interest amnesty for settled loans[33].

Ethiopia

Ethiopia introduced cost-sharing as a higher education financing mechanism in 2003. Up until then, students in state-funded programmes had their costs of tuition and accommodation covered, with an additional allowance. This cost-sharing mechanism required students to pay fully for their accommodation and food, and a maximum of 15% of the "total instructional cost" for that programme[34.] Enrolment in these programmes required the signing of an agreement with the Ministry of Education to repay these loans once working – there was no separate administrative agency set up to manage the recovery of what is termed a "graduate tax", although the Ministry works closely with the Federal Inland Revenue Authority, the institutions and the employers to recover these funds. While Ethiopia has been cited as implementing a graduate tax, this is not a pure form of graduate tax, and all graduates must pay a tax surcharge of at least 10% on their income for the loan issued, within 15 years (so therefore not for their lifetime of working, as is typically associated with a graduate tax). In a sense, this makes the programme income-contingent rather than a graduate tax, as the students also have the option of settling their loans upfront, with a 5% for early settlement. And for beneficiaries who chose to work in designated sectors (such as teachers, or other professionals "deemed to be of public interest"[35]), they may have their full graduate tax obligation forgiven. Unlike South Africa, these loans are generally available to all, so no means-testing mechanisms are employed. In addition, these educational loans in Ethiopia charge an interest rate that is higher than the inflation rate, so maintaining the future value of the loan repayment, reducing the hidden grant component of the loan.

Tanzania

In Tanzania, the Higher Education Student Loans Board (HESLB) was established in 2004, beginning its full operations in 2005. Like NSFAS and many of the other schemes in Africa, it was established through an Act of Parliament, which mandated it to provide loans to financially needy students and to collect these loans from these students. Annually, it produces a set of guidelines outlining which students will be considered as eligible for funding, and requires that students apply online for their funding. Beneficiaries have a one-year grace period post-graduation before their loan becomes due. Up until late 2016, recipients of the loan funding were required to pay a monthly deduction of 8% of their

---

[33] http://www.businessdailyafrica.com/news/Helb-guarantors-student-loan-recovery/539546-3840004-150p0he/index.html

[34] http://gse.buffalo.edu/org/inthigheredfinance/files/Country_Profiles/Africa/Ethiopia.pdf

[35] Leka, W. & Chalchisa, D. (2012). *Cost-sharing in public higher education institutions in Ethiopia with special emphasis on Addis Ababa and Adama universities*. Forum for Social Studies Research Report 8. Available to view only on Google Books. Accessed 24 March 2017

salary to HESLB. Through an amendment to their Act, this was increased to 15%, and the entity has been corresponding directly with employers to increase the deductions from the payroll to 15% from the beginning of 2017. In terms of their current collections process, employers need to submit these deductions to HESLB by the 15th of every month, or risk the imposition of penalties to the employer for late submissions. In terms of their recovery practice, employers are obliged to notify the HESLB that they have employed a beneficiary of the Scheme within a specified period – failure to do so within a specified period will result in the employer being charged a penalty of not less than TZS 1m. This amendment has also given that those in self-employment must contribute 10% of their monthly taxable income, or a minimum value of 120,000TZS (shilling)[36]. This follows a move by HESLB in 2016 to give 30-days' notice to all former graduated beneficiaries not yet repaying to initiate repayment on their loans (regardless of whether employed), or face prosecution. It has also been suggested that the loans board will begin publishing the names and pictures of defaulting beneficiaries who have not yet come forward to repay their loans.

Beyond the continent[37]

Many OECD countries offer public loans to students where repayments are required regardless of income, not varying by debtor earning thresholds but rather based on the principal amount of the loan over the agreed repayment terms. For many of these programmes, consequences for default may include a downgrading of the debtor's credit rating[38] and a credit listing, reduction in the interest subsidisation, or a restriction to the access to other Social Security benefits (such as in the US)[39].

In some OECD countries like Germany, student loan schemes had been designed primarily as a means of supporting students' living costs, as the costs of tuition were free for all citizens. But with the progressive introduction of student fees as a mechanism for increasing funding revenue to universities as tax revenues could no longer sustainably fund higher education, so has the need for student loan programmes to be conceptualised and introduced. This has been the case in Germany since 2007, and has resulted in a growing market of commercial bank student lending products[40].

---

[36] http://dailynews.co.tz/index.php/home-news/47881-student-loan-beneficiaries-repayment-rate-increased. Accessed 17 January 2017, reported 15 January 2017.
[37] Much of this is taken from existing work done by the International Comparative Higher Education and Financing Project, and can be accessed at http://gse.buffalo.edu/org/IntHigherEdFinance/files/Student_Loan_matrix.pdf
[38] Cherastidtham, I. & Moodie, G. (2016). *FactCheck: Does Australia run one of the most generous student loan schemes in the world?* Accessed on 6 January 2017: http://theconversation.com/factcheck-does-australia-run-one-of-the-most-generous-student-loan-schemes-in-the-world-52696
[39] Webber & Roger (2014). ibid
[40] Chapman, B. & Sinning, M. (2011). *Student loan reforms for German Higher Education: financing tuition fees.* IZA Discussion Paper No 5532, downloaded from ResearchGate on 20 March 2017, https://www.researchgate.net/publication/228292665_Student_Loan_Reforms_for_German_Higher_Education_Financing_Tuition_Fees

Australia

Australia has three main types of student loan programmes in place – the Higher Education Loan Programme (HELP)[41], the Student Start-Up Loan (SSL)[42] and the Trade Support Loan (TSL) for apprenticeships and artisan training. The repayment threshold for HELP loans is currently set at AUS$ 54k (2015/16), at a repayment rate of 4% of the debtor's income at this threshold level, increasing to 8% as incomes increase.[43] These repayments continue until paid in full or 25 years, with the balance then being forgiven. The interest on these loans is indexed to CPI each year, meaning that loans "keep their value in real terms".[44] Loans are issued and recovered through the Australian Tax Office (ATO), such that as debtors lodge their tax returns annually, and their income reaches the minimum repayment threshold, the ATO calculates the compulsory repayment value and includes it in the notice of assessment. As the debtors' income increases, so does the compulsory repayment rate and value due. Some concessions are made for debtors who are married or who have dependents, and if they received government support for health services (medicare levy). It is interesting to note that when this system originated, this threshold value was determined on average industrial wages, and this has shifted annually in line with current income data – an advantage of using the tax system for collection.

Canada

Essentially, Canada and the United States both operate 'technically mortgage-style' loan systems, which are repaid on the same basis as home loans.[45, 46]. However, both have income-sensitive policies which provide for low-income debtors to apply for income-driven loan repayment options. In Canada, this is referred to as the Repayment Assistance Program/Interest Relief, under which no repayment is required if the debtor's income is less than $25k, and restricts payments to a maximum of 20% once the debtor has reached that income threshold. Canada has implemented a partial form of income-contingency in some of the provinces, where payments are linked to income where a debtor has a high debt-to-income ratio, but this payment arrangement does not apply where the debt-to-income ratio is low. Between 1995 and 2000, Canada also explored bank-administered systems, directing some of the funding support through the banks in a risk-shared loan system. In this system, the government paid the bank or credit union a 'risk premium' of 5% of the value of the initial student loan amount, and covered the interest changes occurring while the debtor was still studying or accessing 'interest relief'. The banks were then responsible for the servicing of the loan up to and during repayment, including the applications for loans, handling queries on the loans, and providing information such as statements and

---

[41] This is differentiated into the HECS-HELP for Commonwealth Study Programmes (government-funded enrolment programmes/places and meets the cost of the student contribution, excluding accommodation and books) and FEE-HELP for eligible students in non-subsidised/fee-paying programmes of study to meet the full costs of tuition, and cannot be used for other costs such as accommodation or books.
[42] The Student Start-Up Loan is added to the HECS-HELP loan but is only payable to students receiving a youth allowance paid by the Department of Human Services – it is a voluntary loan for higher education studies which needs to be applied for, and is set to a maximum amount of $1035 paid in two tranches.
[43] https://ato.gov.za/Rates/HELP,-TSL-and-SFSS-repayment-thresholds-and-rates/
[44] Cherastidtham, I. & Moodie, G. (2016). ibid
[45] Usher, A. (2016). One t*hought to start your day: comparing international student loan repayment plans*. November 29, 2016. By email correspondence. Courtesy of Higher Education Strategy Associates.
[46] Chapman, B. & Sinning, M. (2011). (ibid)

balances to the debtors[47]. When Repayment Assistance Program was formally introduced, the banks were no longer involved in the origination and servicing of the loans, and this was replaced by a direct loan system, like that in the United States.

Chile

Chile operates three different student loan programmes. In all three, students are means-tested to determine if they fall under a pre-determined income threshold, but then may either receive loans from commercial banks approved by the banks for each student's tuition needs, or loans offered by the individual universities, or loans offered by private financial institutions. In this system, where banks are originating the loans, they have the right to determine which universities and which programmes of study will be financed. Loans from these banks must be repaid within 15 years, with each bank setting its own interest obligations and grace period concessions. Interest rates are subjected to a maximum authorised by a Chilean government agency (CORFO). In the university-direct-loan programmes, the loans are collected by the universities themselves, on an income-contingent basis, at a relatively low interest rate and over a maximum period of 15 years, after which the balance is written off.

China

China has two public loan schemes for poor students, both of which are funded by commercial or state banks, and local private financial institutions. In this system, the credit risk is shared between the government and the banks, with the interest rates set by the People's Bank of China. Interest on these loans starts at the time of origination of the loan by the bank, although the interest is fully subsidised by the government while the student is still studying. Under the Government-Subsidised Student Loans (GSSL), these loans have relatively short repayment periods of four to six years after graduation, imposing considerable hardship on debtors repaying loans. Payments can be made either monthly or quarterly, but debtors who work in economically under-developed areas can have their loans written off three years' post-exit, as the government then repays 30% of the capital and interest on the student loan in the first year, and then 40% in the second year.

Malaysia

The PTPTN (Malaysian National Higher Education Fund Corporation) is a government-funded loan scheme for students in local universities, universities of technology, polytechnics and private universities, from undergraduate to postgraduate level. While students are means-tested, these loans are generally available, but students must have opened a special savings account designed for higher education (called the SSPN), offered through one of the banks listed by PTPTN. One of the special advantages of this savings scheme is the tax relief offered to parents for an active account with savings that have been accumulated[48]. In addition, families whose monthly income is under a pre-determined threshold are eligible for a matching grant when their children are admitted into one of the higher

---

[47] http://www.debt101.ca/student-loan-advice/do-you-have-a-risk-shared-loan Accessed 13 January 2017

[48] This may possibly be like the concept of the Fundisa Fund, in which parents/guardians/benefactors of low-income earners can open a savings account for education financing, and can gain a bonus on their investment annually. From http://www.fundisa.org.za/index/php/how-does-fundisa-work.html - a similar savings scheme mechanism is being introduced by the Kenya Higher Education Loans Board (see this article accessed 24 March 2017 at https://www.studyinternational.com/news/kenyas-he-funding-board-launches-drive-to-recover-us120-million-in-student-loans/#AwvsFdfKk2BHLOtQ.97).

education institutions. The loan, once granted, is paid to the institution and the balance is then transferred to the students' bank account for their other costs. Repayment is due six months after completion of their degree, and monthly repayments depend on the repayment term, which can be between 5 and 20 years, linked to the value of the loan. Payments can be made via the Inland Revenue Bureau, but facilities for online payments and deposits can be arranged.

New Zealand

In New Zealand, an income-contingent loan scheme is also in place to support students in higher education. Debtors are required to repay once their income reaches NZ$19k, at a repayment rate of 12% of the income earned above this threshold. There is no interest charged on student loans, unless debtors live overseas for a period longer than six months. The New Zealand Inland Revenue Service is responsible for the collection of this debt, and through its international tax office, has a co-operation agreement in place with Australia and the United Kingdom to track and monitor the mobility and employment/earnings of its debtors.

Thailand

The student loan environment in Thailand has an interesting history. Thailand is possibly one of the only countries to have run two different types of government-funded student loan programmes. In 1996, the government of Thailand implemented the Student Loan Fund (SLF) which was essentially a bank-administered student-loan programme, through a mortgage-style loan repayment programme. However, in 2006, the Thai government introduced an income-contingent loan programme which was revoked after only one year of operation, partly because an inability to create a governance and administrative structure, backed by political will, to collect these loans through the revenue service. It is argued though that the sustainability of a mortgage-style loan repayment programme that has a significant hidden grant (interest subsidies estimated to be as much as 65%, making this more grant than loan, with interest rates at only 1% per annum, lower than the true cost of government borrowing) is partly to contribute to renewed interest in income-contingent loans in Thailand[49]. SLF is essentially a conventional mortgage-style student loan programme, with a fixed repayment term of 15 years, after a grace period of 2 years. While it is not income-contingent, it borrows a feature from these loan programmes in that the repayment obligation is stepped, starting at 1.5% of the principal loan and reaching 13% by the last year of repayment, which correlates with an expected increase in the average earnings by age of the debtor[50].

United Kingdom

The student loans programme in the United Kingdom is operated by a privately managed entity (Student Loans Company - SLC) in each of the member countries (England, Scotland, Wales and Northern Ireland). While the repayment of the student loans issued through the government is income-contingent (9% over the minimum earnings threshold of £21k), the interest rate is linked to the inflation rate plus 3%. Some loans, referred to as type 1 loans, have a lower earnings threshold of £17k and are charged

---

[49] Chapman, B. (2012). *Paying for higher education in Thailand.* From the EastAsiaForum. Accessed 20 March 2017 at http://www.eastasiaforum.org/2012/01/05/paying-for-higher-education-in-thailand/

[50] Chapman, B. & Lounkaewa, K. (2010). *Income contingent student loans for Thailand: alternatives compared*. Accessed from ResearchGate, on 20 March 2017 at https://www.researchgate.net/publication/222516845

at the inflation rate. Employers deduct repayments from the salary of the debtor, and the amount due by the debtor is verified through the tax returns submitted annually.[51] While the Australian student loans only cover tuition costs, the UK system does provide for means-tested loans to cover other costs such as a living costs (as per NSFAS, this would be the meal allowances and allowances for private accommodation). Clearly this does increase the size of the long-term debt of the student, and one of the policy considerations may be to differentiate the subsidisation of the interest rates for this loan provision to minimise the hidden grant element over the term of the loan.

United States

The US has a complex system of government-subsidised loan offerings and loan repayments – some which are offered federally, some which are offered by the State in which the student/university is located, and some which are underwritten by commercial lenders. The most commonly referenced programme is the Direct Loan programme in which loans are disbursed by the Department of Education to students directly[52]. The Direct Subsidised Loan is a needs-based loan, which is means-tested, and like the NSFAS means test, produces an index known as the expected family contribution (EFC). Students who qualify for this loan are not charged interest while studying, as the interest portion is subsidized by the government. The Direct Unsubsidized Student Loan is generally available to students who apply for it, but these students are charged interest while studying, even though this can be deferred while studying and then capitalised to the loan principal once graduated.

However, it is widely recognised that the "US student loan programme is in crisis"[53, 54] with over $1,3tn owed, with 700m debtors in default and many more in arrears. This is largely as a result of the model of student loans adopted in the United States, where the loan repayments are not income-contingent, but rather structured as home loan style repayments – with interest rates that fluctuate and increase the direct repayment due on the loan, where the term of the loan is fixed and the repayment due is fixed (relative to the amount outstanding), with the result that the repayment burden[55] (the fraction of the person's income that is needed to meet the repayment) changes if income falls or increases. Both types of student loans can be repaid using one of two different repayment options – the typical "mortgage-style" loan repayment, and a graduated repayment plan in which the amount due as repayment of the loan is stepped up every two years. For loan amounts under a determined threshold, the maximum term is 10 years, but beyond that debtors may qualify for an extended repayment period of up to 25 years.

---

[51] https://www.gov.uk/repaying-your-student-loan/what-you-pay (accessed 9 January 2017)

[52] These are also known as the Stafford Loans, and come in two forms – the Direct Subsidised Stafford Loan and the Direct Unsubsidized Stafford Loan.

[53] Barr, N., Chapman, B., Dearden, L. & Dynarski, S. (2017). *Getting student financing right in the USA: Lessons from Australia and England*. Unpublished manuscript submitted for publication. By personal correspondence with Prof Bruce Chapman, Australia National University (20 March 2017).

[54] Chapman, B. & Dearden, L. (2017). *Conceptual and empirical issues for alternative student loan designs: the significance of loan repayment burdens for the US*. Unpublished manuscript submitted for publication. By personal correspondence with Prof Bruce Chapman, Australia National University (20 March 2017).

[55] In NSFAS' case, the repayment burden is limited to between 3% and 8% of the income of the debtor, regardless of the size of the loan. In the US system, this repayment burden would fluctuate significantly for an individual debtor depending on the income earned and between debtors depending on the size of their loans and their income being earned.

NSFAS
National Student Financial Aid Scheme

This is fundamentally different to income – contingent schemes (which will be discussed in the next section). Given the growing debt burden, making alternative policy choices becomes more critical as the impact of this repayment burden may have on students. It has been suggested that one of the unintended consequences of a home-loan style student loan plan is its influence on career choices and employment decisions (public sector versus corporate), as a factor of how these will lessen the repayment burden associated with high student loan debt. Students may make a choice not to become a teacher, not to work in community jobs so that they are better able to service their anticipated student loan repayments[56].

Structuring options

Income-contingent loan schemes

Income-contingent loan schemes, such as NSFAS, are generally understood to be loans offered to students where the repayment arrangement for the loan depends on his/her income once employed. However, it can also be said that there is not a singular definition of these or how they are applied: "they can be collected like regular bank loans, or they can be collected through the tax system; some of them were set up to facilitate the introduction of tuition fees, others were set up in places where tuition fees were already high and still others were implemented in places which had free tuition"[57]

One of the most prominent income contingent loan schemes is that offered in Australia – the Higher Education Contribution Scheme (HECS), and more recently, the Higher Education Loan Programme (HELP). In this system, like with NSFAS, repayments on loan due occurs if and only when the debtors' income is higher than a pre-determined threshold. Before this, no payments are due[58]. These schemes operate in several countries, including in some programmes in the United Kingdom, New Zealand, Ethiopia[59], Hungary, the Netherlands and South Korea. One of the key principles of income-contingent programmes is that "no graduate (should) pay any of the debt unless they were receiving at least as much income as the taxpayers subsidising most of their education." [60]

Generally, income-contingent loan programmes exhibit a mix of the following characteristics:

- Universal benefit (all can apply, and are afforded opportunity to receive, within the means of the fund);

---

[56] Chapman, B. & Lounkaewa, K. (2010). *Repayment Burdens with US College Loans*. Discussion Paper No 647. Centre for Economic Policy Research, Australian National University. Accessed from ResearchGate, on 20 March 2017.
[57] User, A. (2016). Draft paper not for publication*. Income-contingent loans – a review of international practices with special reference to Australia, New Zealand and England*. By personal correspondence with the author.
[58] Chapman, B. (2015). *Taking income contingent loans to the world*. In University World News. Accessed 6 January 2017 at hgttp://universityworldnews.com/article.php?story=20150305123821344
[59] While Ethiopia's programme is often classified as a graduate tax (see previous), it is in fact a repayment scheme in which students must either repay their cost of study over 15 years or in an upfront settlement (with a 5% discount). It is not a true graduate tax where all students pay an income surtax for the duration of their earning lifetime (courtesy of DB Johnstone country profiles).
[60] Cited by Usher, A. (2016) ibid.

- Interest generally not linked to inflation;
- Lengthy repayment periods (many also include a forgiveness element post the end of the repayment period);
- Loan collection is often through the internal revenue service/income tax agency;
- Repayments are generally not due below a certain income threshold – and this threshold is often linked to a pre-determined reference point such as the threshold below which tax is not collected[61]; and
- Repayment rate is fixed once the debtor is above the threshold determined.[62]

However, not all models feature all of these elements, and may adopt income contingency practices differentially. In addition to this, even when the element has been adopted, the practice across various countries can be significantly different. For example, repayment rate practices vary across these programmes – the Australian HELP has low repayment rates of between 4% and 8% depending on income range, with England setting their repayment rate at 9% across the board, with 12% in New Zealand[63]. In Australia, the repayments are determined by applying the percentage to the debtors' entire income, rather than to only that portion above the income threshold. NSFAS adopted the 3-8% range, from its base income of R30 000 per annum (in 2002/2003 terms[64]), and applies this percentage to the full income, not just the amount over the threshold.

Perhaps then a useful question to ask is 'how much is the best-fit amount to pay?'. This would need to be an index that provides assurance that debtors are not over-burdened, but which also provides for some guarantee that the principal capital loaned is recovered at its present value so that it can be efficiently recycled back as new loans. As far back as 1987, Maureen Woodhall suggested that this should not be more than 8-10% of the debtor's income, with more recent opinions on this suggesting that a repayment index that approaches 15-18% is not sustainable for debtors.[65]

There is also a distinction in the literature between income-contingent loan programmes and income-based repayment schemes (as seen in the United States), where income-based repayment schemes generally have a lower monthly repayment amount (often set at 10% of the debtors' discretionary income), and where the monthly repayment does not cover the full amount of interest accruing each month – in some cases, this being subsidised by the government for up to three years. In these schemes, the repayment rates range from 10% to 20%Unpaid interest is only capitalised on these loans if the debtor is no longer flagged as being in "partial financial hardship".[66]

---

[61] In NSFAS's case, when the income-contingent loan programme was introduced, this threshold was pegged to the lowest taxable income bracket. Unfortunately, in NSFAS' case, this has not been revised annually, and to this day, remains pegged at the lowest tax bracket for 2002/2003 financial year.
[62] Usher, A. (2016) ibid.
[63] Cherastidtham, I & Moodie, G. (2016). ibid
[64] For the 2016 tax year, this minimum threshold would be sitting at R73 650 per annum, if younger than 65 years of age. Courtesy of https://www.westerncape.gov.za/service/paying-income-tax
[65] Chapman, B. & Lounkaewa, K. (2010). (ibid)
[66] https://studentaid.ed.gov/sa/repay-loans/understand/plans/income-driven; and http://www.usnews.com/education/blogs/student-loan-ranger/2011/03/23/income-based-vs-income-contingent-loan-repayment (accessed 9 January 2017)

How ICRs can become graduate taxes – the case of England[67]

As noted yesterday, graduate taxes and income-contingent loans (ICRs) have many similar features. They both defer payments until after graduation, and they are usually payable as a percentage of marginal income above a given threshold. In England right now, the payment scheme on ICR loans is that students pay 9% of whatever income they earn over £21,000 (roughly C$38,000). The difference between the two is that with a loan you have a set amount to pay, and when it's paid you're finished. With a graduate tax there is no principal, so you just keeping paying that fraction of your income for as long as the tax lasts.

That sounds like a simple and clear delineation, right? Well, here's a twist: what if the loan were so big that you had no practical chance of ever paying it off at the set repayment rate? What would the difference between an ICR and a grad tax be then? The answer is: practically nothing – and that's exactly where England finds itself right now.

Let's step back a bit: in 2010, the UK government decided to let institutions charge tuition up to £9000. They also decided to allow students to borrow this amount for tuition (plus more, again, for living expenses) under the repayment scheme described above. When they did this, they were under the misapprehension that universities might actually try to compete for students on price, and hence assumed an average tuition of about £7000. Rather predictably, average tuition shot straight to £8500. As a result, it's quite common for students to be borrowing £12-13,000 per year, or £36-39,000 for a degree (that's C$66-72,000 – yes, really).

Crazy, right? Cue all the "intolerable debt burden" stuff. But wait: these loans aren't like the ones we're used to. Repayment is based on your income rather than size of debt – no graduate is ever required to pay more than 9% of their income over £21,000 in any given year, so the burden in any given year is pretty limited. And – here's the kicker – the loan gets forgiven after 30 years. So, if you don't finish paying, your obligation disappears without you having any debt overhang. Exactly like a Graduate Tax.

How many won't pay it off? Well, these things are difficult to predict, but even over 30 years, paying 9% of your income over $38,000 isn't likely to completely pay off very many of these loans. The government's own financial forecasts are that 35-40% of the total net present value of the loans will have to be forgiven (others put it 8-10% higher). At a rough estimate, that probably means 70 to 80% of all borrowers will see some loan forgiveness.

At this point you start to wonder if debt numbers really matter in this system. Forget ICR: for most people, the current system is simply one in which government transfers billions of pounds in 2014 to institutions using student loans as a kind of voucher system, then turns a portion of those loans into student grants in 2044 via loan forgiveness. In the meantime, graduates pay a 9% surtax on income over £21,000.

Altogether, a very wacky system. Not a model for anyone, really.

Conventional loan repayment schemes

These are loans – referred to earlier as mortgage-style or home loan-style loans – that are paid back at a set amount over a set period, dependent on the value of the loan, and not linked to the affordability of the debtor. Conventional loans work well when affordability of the loan is assessed upfront as a factor of the current earning of an individual, but it has been argued are not viable when the total cost of the

[67] Courtesy of Higher Education Strategy Associates, Alex User, Posted 18 March, 2014. http://higheredstrategy.com/how-icrs-can-become-graduate-taxes-the-case-of-england/

loan (capital) or the income of the individual is not known upfront. In South Africa's credit regulations, this would be considered reckless lending, and as such, not permissible.

What then makes an income-contingent loan programme different to standard commercial student loans or in fact, home loans? In income-contingent loans, since repayments are a factor of the income of the debtor and not a factor of the principal capital of the loan, the duration of the loan repayment period is variable in many schemes; often the interest rates levied are variable and do not impact on the monthly repayment, but rather on the term of the loan; and the fraction of the income used to make repayments is fixed, usually at set intervals depending on the income range of the debtor, and dependent on the terms and conditions agreed to by the debtor upfront, as per the credit policy of the entity.[68]

Graduate taxes

Graduate taxes can be regarded as a form of "equity finance" – as graduates with higher lifetime earnings repay more than those with lower lifetime earnings potential in present-value terms. They are essentially student loans which are never settled[69]. They have been proposed as a mechanism for financing higher education in several countries. Referred to some as a "small addition to income tax paid by all graduates during their working lives"[70], this mechanism has been suggested as a solution to the growing student debt problem and increasing rates of default on repayment, where repayment commitments may prevent many young people from moving out of poverty following their university degrees.

Recent debate in the UK university think-tank (MillionPlus) suggested that up to 45% of the current income-contingent loan programme (managed by the Student Loans Company) would not be recouped by the British government and proposed that a graduate tax would bring in as much revenue to the funding of student fees as the current system, minus the cost of running a separate administration agency[71]. In this proposal, two different models were suggested. The first suggested a model that ran over a 30-year tax surcharge of 2% for incomes (equivalent) between R180k and R440k; 2,5% for earnings between R440k and R750k; and 3,5% for those earning above this (nothing would be due for those below R180k). The second model recommended a 40-year term, at 1,5% for the lower band; 2,25% for the second band; and 3% for top earners. The overall finding was that this model, using a graduate tax of between 2 and 3% over 30-40 years would bring in as much revenue as a repayment system which levies a beneficiary 'tax' of 9% over 30 years for those with student loans.

However, the introduction of such a system – particularly in South Africa – would only be feasible if it is made retrospective to some degree, otherwise there would not be sufficient funds from Treasury to run higher education in the short term, which would necessitate further government borrowing. A graduate

---

[68] Barr, N., Chapman, B., Dearden, L. & Dynarski, S. (2017). (ibid)
[69] Barr, N., Chapman, B., Dearden, L. & Dynarski, S. (2017). (ibid)
[70] Hain, P. (2016). *Replace student fees and debt with a graduate tax.* Published as a Comment on the Mail and Guardian website, 30 September 2016. Accessed on 6 January 2017 at http://mg.co.za/article/2016-09-29-replace-student-fees-and-debt-with-a-graduate-tax
[71] Sharp, M. (2015). *The HE debate: Where next for … a graduate tax*. Accessed on 6 January 2017 at http://www.millionplus.ac.uk/news/blog/the-he-debate-where-next-for...a-graduate-tax. This article suggests that in an earlier report on the sustainability of higher education loans systems, it was noted that up to 73% of student loan recipients would never pay off the full sum day – especially those who will be middle income earners, including those entering the public service.

tax would however allow higher education to be "fee-free" at the time of studying, and would remove the perception that the pre-payment of student fees becomes a debt, as it is suggested that most people who work do not consider their future tax obligations as a debt.[72] Arguments against graduate taxes speak to the notion that some graduates would pay more than their degrees may have cost (those earning higher incomes), while others will pay less, dependent on their earning potential – which may be construed by students as unfair. In addition, such a system runs counter to a system of variable fees, within a regulated market, in which students chose where and what to study based on perceived quality and value for money. It could be contented that in a world where higher costs of study are directly correlated to higher earning potential that this would level itself out and thus be reasonably equitable[73].

Oregon's Pay-It-Forward scheme and the ICR vs graduate tax problem [74]

You may have heard some rumblings from south of the border over the past few months with respect to a program called Pay It Forward (PIF). The brainchild of a student group called Students for Educational Debt Reform, this idea was picked up by the Oregon assembly last summer; within a few months, over a dozen state governments were examining similar draft legislation.

The basics of the program are these: instead of paying tuition, students agree to pay a percentage of their future income (the percentages vary by state – in Oregon it's 0.75% per year of study) for 20 years after graduation. Some people mistook this for a version of income-contingent loans because it emphasized paying for school after-the-fact rather than up-front, and also because repayments were to be made as a function of income. But there's one key difference. Loans have a limited liability: once you pay off the principal and interest, you're done. With PIF, there is no principal – once you start paying into a hypothecated fund, destined for the state's higher education institutions, you keep on paying for 20 years no matter what. This is formally known as a "graduate tax".

Graduate taxes tend to be more progressive than income-contingent loans. If you're at the bottom of the income scale, you probably come out better off – you simply never pay anything. If you're at the top of the income scale, you're likely going to pay a lot more because a portion of your income will go into public coffers long after you'd likely have paid off a loan. Interestingly, the famous Yale Tuition Postponement Option of the early 1970s (designed by Nobellist James Tobin, and used by Bill Clinton when he attended law school there) went off the rails for precisely this reason – the richer students got tired of paying for the poorer ones, and started making a fuss.

One downside to a graduate tax is that it's harder to collect than a loan. In the US, for instance, it's hard to imagine enforcing something like PIF, unless it was instituted nationally (if someone moved from Portland to Chicago, would Illinois be responsible for collecting the PIF contribution?). A graduate tax was in fact examined relatively thoroughly not once but twice

---

[72] https://e.wikipedia.org/wiki/Graduate_tax. Accessed 6 January 2017.
[73] While there is evidence that professional degrees and doctoral degrees generally have a higher earnings potential than bachelors' degrees (and in some cases, masters degrees) – this is not directly linked to the cost of study, other than as a factor of the length of study at a university. From https://trends.collegeboard.org/education-pays/figures-tables/lifetime-earnings-education-level. Accessed 32 March 2017. A study that does show some correlation between the cost of degrees and earnings is reported here (http://www.economist.com/news/united-states/21600131-too-many-degrees-are-waste-money-return-higher-education-would-be-much-better), and while this shows that some degrees have higher earnings return relative to cost of the degree with financial aid.
[74] Courtesy of Higher Education Strategy Associates, Alex Usher, Posted 17 March 2014: http://higheredstrategy.com/oregons-pay-it-forward-scheme-and-the-icr-vs-graduate-tax-problem

in England (the 1997 Dearing Report and the 2005 fee reform), and was rejected precisely because of concerns about grads evading repayment through emigration.

Another downside is: where exactly does the money come from while you're waiting for graduates to start earning money? If tuition is covering 40% of institutional expenditure, someone has to make that income good over the 20 or so years before the grad tax makes up the difference. It's not clear who that might be; if the state had money to do this, it probably wouldn't be faffing around with ideas like PIF. You could securitize the revenue stream, of course, but that also might get tricky. Income-contingent loans lack graduate taxes' most potentially progressive features, but they do have the advantage of: a) being collectable, and b) producing income for institutions in the short term.

Graduate taxes versus collection through the tax system

As much as graduate taxes are distinct from income-contingent loan schemes, so is the collection of repayments through the revenue service distinct from a graduate tax. Collecting of loans through the revenue service merges the efficiency of revenue collection with the effectiveness of income-contingent loan programmes, enabling better collection of debts due and better management/risk-sharing of loan default. Even when discussing income contingent loan schemes, there is a strong distinction between those that collect through the tax system and those that do not.

Requirements for collection through the revenue service (in South Africa)[75]

To enable collection through the revenue service, students wishing to apply for financial aid for higher education would need to be/become registered as a tax payer with the South African Revenue Service (SARS). The Higher Education Loans Board (Kenya) requires their students to do this from year 2 (two) of the study terms of the student, once the student has already applied to them for funding, and once they have been awarded for their first year of study. As an alternative, NSFAS could require that applicants first apply for a tax number, and then upon confirmation of their tax number, apply for financial aid. To make this simpler for the student who is applying, the registration as a tax payer could be integrated into the NSFAS application process, as far as possible. If this student is considered eligible for funding – this could be inclusive of provisions made for students in the "missing middle" and the "poor" – then the full cost of study could be advanced to the student (with tuition to the university) and debited to their tax account. Statementing during the period of study would then be through the annual tax assessment, which would show that there is no income being earned, and therefore no tax liability due, and this could be recorded as an 'assessed capital loss'. Once the individual has exited from the university and enters employment, their tax assessment will determine the amount of tax to be repaid based on their earnings.

Inherent benefits and challenges of revenue-agency collection for South African student loans

In South Africa, this efficiency and proficiency with which SARS collects taxes due is well recognised and supported by legislation and regulations which bind employers and employers. The Tax

[75] Much of this is taken from a meeting with Chris Elfick and Mark Weber (7 November 2016) and from the following publication: Elfick, C.A.C. & Weber, M.A. (2016). *Submission by Learning Strategies (Pty) Ltd to the Commission of Inquiry into Higher Education Funding (The Fees Commission)* available at http://justice.gov.za/commissions/FeesHET/submissions/oinst/2016-FHETC-Sub-Learning-Strategies.pdf

Administration Act 28 of 2011 is a 292-page document, detailing all the principles, processes and procedures necessary for the management and collection of tax, including the power to prosecute criminally for default on the tax liability. In the original drafting of the NSFAS Act 56 of 1999, Section 24 mandated the SARS to furnish NSFAS with the name and address of the employer of the borrower. In addition, Section 23 then afforded NSFAS the authority to instruct the employer to deduct such repayments from the salary of the debtor. As this latter section was repealed in a later amendment to the NSFAS Act, any change in practice – such as advancing a tax liability for current studies against future earnings (a beneficiary tax) – will need to be re-authorised through either/both the NSFAS Act and the Tax Administration Act. Examples of this type of legislation has been provided by HELB and included as an annexure to this paper. Such an amendment requires political will on the sides of all parties.[76]

There are several benefits to adopting this as a model of practice. Firstly, SARS has full visibility of an individuals' income and nett worth, and expenditure, and so determining a fair, affordable repayment arrangements is facilitated through the annual tax assessment, and collected through an "established payment mechanism"[77] in which payments can be made direct from salaries along with the PAYE (pay-as-you-earn tax). With the existing infrastructure in place, SARS has the potential to increase collections at a marginal add-on cost for collection, should NSFAS and SARS agree to a retrospective collection role for the revenue agency. In addition, SARS has instituted a few different direct payment methods, like NSFAS has, which could complement these mechanisms. For SARS, dependent on the agreed data protocols between NSFAS and SARS, it is possible that there could be upfront recognition or projections about the types of professionals to be qualified at a future date, and notification of the qualification/graduation status of graduates who may be entering the workplace either in formal employment or in self-employment.

While this paper has suggested the role of SARS as a mechanism for collection of income-contingent loans (as a type of beneficiary tax), it is also possible that SARS could facilitate the deployment of a graduate tax system in which all students who opt for "no-fee higher education" agree to pay a pre-determined percentage of their future earnings for a set term. In the US example cited earlier (see text box), Oregon determined that students would pay 0,75% per-year-studying of their future income for 20 years post-graduation. As argued in this blog though, the final repayment percentage determined for each student was not linked to the $ value of their future earning, but to the period that they studied for (N + x)[78], and students who earned more would therefore pay more, regardless how much their cost of study per year was. In addition, there was no principal loan amount or interest on this loan accruing, which means that the graduate will pay for the full term, with 'no-opt-out' or early settlement provisions[79]. As a ***graduate tax***, such a funding stream would therefore not serve the institutions second stream revenue flow but would most likely become part of the first stream revenue, therefore not necessarily

---

[76] It is also important to note that in the Ministerial Task Team report on the Poor and the Missing Middle, other examples of changes to tax legislation have been extensively reviewed and referenced, and will not be repeated here. It should also be noted that in this report, as in the National Development Plan, the use of SARS as a mechanism for the collection of NSFAS loans has been recommended.
[77] Elfick et al (2016) (ibid)
[78] Where N = regulation time and x = how many years beyond regulation time that the student studied for
[79] Some policy instruments would need to be introduced to manage the impact of skills migration, as graduates leave for work outside of SA. Possibly similar to that being considered now for tax debts of South Africans living overseas.

bringing in cash flow to the universities in the short-term. However, as a ***beneficiary tax on an income-contingent loan***, this would remain second stream revenue as the personal contribution by the student to his/her cost of higher education for the private benefit, and the use of the revenue services would therefore be restricted to its role in collections.

In the current South African context, there may be some challenges in implementing such a revenue-based collection system. Firstly, students may not be entering the workplace immediately following graduation or may be under-employed – while graduate unemployment is significantly lower than the general unemployment rate, this is nonetheless high enough, with anecdotal evidence suggesting that graduates are often not employed in the professions qualified for due to job availability. While this is less of a risk in an income-contingent programme, it does defer the payment of the loan until a later time, pushing back the likelihood of full settlement in the debtors' working life. Secondly, in South Africa, many graduates may be entering the informal sector, therefore "escaping the tax net"[80]. Addressing the gap created by the informal sector and widening the tax base to include those who are self-employed or business owners (with provisional tax status) would contribute significantly to increasing not only the revenue from the tax base itself, but also the collection of the beneficiary or graduate tax. The risk of emigration to the loss of possible revenue streams remains even with this model, although consideration could be given to linking travel restrictions or conditions (in respect of passport applications, passport renewals, visa applications) to revenue debt, then this risk could be mitigated. This is the case in Kenya[81]. Collaborative agreements between foreign offices in different countries within the continent or even within the South African Development Community to track and trace debtors will also reduce some of the leakage.

Policy and practice considerations

Within the sector – globally and locally – there have been many arguments made suggesting that the repayment of fees for higher education should be linked to the earning potential of the student in the future. NSFAS contribution to the Fees Commission presented the view that the deferred payment of fees for higher education is the policy instrument that should be used to continue to increase access to higher education for the marginalised. Within this context, it is recognised that by shifting the payment of fees to a later date when they are earning, students who may not have been able to fully fund their studies will be less likely to drop-out from their academic programmes on the grounds of financial exclusion.

It has been suggested in many reports on the efficiency of NSFAS that, as so much of NSFAS debt is held by individuals who have dropped out and therefore have lower chances of gainful employment, this creates a "revolving door syndrome", in which the student enters university and is revolved back into poverty having accumulated – in some cases – a significant burden of debt that may not only be that due to NSFAS but also to the universities or other lending agencies (where NSFAS has not covered the full cost of study).[82]

---

[80] Elfick et al (2016). (ibid)
[81] Usher, A. (2016). By personal correspondence.
[82] This was reported initially in the Ministerial Review of NSFAS in 2009 (which estimated a 72% drop-out rate at the time). It was also reported on in the Performance and Expenditure Review (2016).

in its' efforts to increase recoveries, NSFAS has proposed several different mechanisms for the collection of debt in the 2016 and 2017 academic years[83] – these include obtaining payroll deduction agreements from several of the public/state payroll companies and then contacting these debtors through an external debt collecting company to obtain consent for payroll deductions. Campaigns were also implemented through several external debt collectors to target private sector debtors, to obtain both debit order consents and/or outstanding balance settlements. The next phase of the strategy is to begin differentiating between debtors that have been on-boarded for payment when they start employment and the management of arrears once these on-boarded debtors default on their payment arrangements. This is being achieved by utilising the services of credit bureaux, and beginning to more actively pursue legal action when debtors refuse to make repayment arrangements. This must all be done at a time when increased political activity – amongst students, debtors and the wider community – is advocating for free higher education, creating a spiralling apathy amongst debtors to repay.

Re-designing the NSFAS loan repayments experience for university graduates

In July 2016, NSFAS and the Institute of Design Thinking at the University of Cape Town initiated a collaborative project in which postgraduate students were asked to "re-design the NSFAS loan repayments experience for university graduates, in a world where loan repayments are not on the long-term horizon of students who are still studying". Two independent groups of students, working through the design thinking process, provided reflections on this problem statement from their own observations and study that were used to generate ideas and prototypes for NSFAS. Some of these have been incorporated into this paper, as suggestions for incorporation into NSFAS' recovery strategies going forward.

Reflections on influences on student repayment behaviours

As part of NSFAS' journey towards becoming more student-centred, the project revealed that feedback from students has largely pointed towards the need for NSFAS to become more visible, to become easier to access (both electronically and in person), to recognise that the needs of students for information and for services from NSFAS is different at different points of their journey from debtor to graduate to debtor. By so doing, both these projects demonstrated that the attitudes of students towards making repayments would significantly shift, so that this would seem less like a hardship and more like a #PayItForward. From interviews with students, "creating a sense of belonging has potential for students to want to be associated with NSFAS, and form a lasting connection which may ultimately lead to students wanting to repay their customised loan". At some universities, being a NSFAS student may carry a stigma ('not clever enough for a scholarship'; being recognised as having parents who are no- to low-income earners). As such, building an on-campus ecosystem for NSFAS-funded students to engage, connect, identify with and support one another will build a positive association between the NSFAS brand and the 'willingness to repay later'.

This also presents an opportunity to change the dominant discourse on campus amongst students away from one which repeats the notion that "it is not a loan, it is free government money", "why should I pay back", "NSFAS does not need the money", "it's not that important", and "my post-varsity family obligations will take priority over my NSFAS loan repayments".

---

[83] As per the NSFAS Recovery Strategy 2016-2017 presented to the NSFAS Board in October 2016.

Generating new solutions and strategies

From these observations, suggestions that are worth considering are presented below:

- “introducing a one-stop-shop software solution that works as a relationship management tool for NSFAS and the student beneficiary”;
- “a campus society with an ambassador programme, which forms the social (connecting) component, along with a mobile phone app as a technological tool that will be built and improved over time (socio-technology solution) ... hybridity”;
- “utilising the existing NSFAS platforms, e.g. sBux to be switched back on (after graduation) to serve as a track and pay back application for the loan repayment”;
- “having informed students who have the option to track their loan balances and customise their repayment plans through having a personalised profile, and where NSFAS can alert/follow-up with the beneficiary if they are not following their repayment schedule”;
- “a NSFAS ambassador and mentorship programme where students can be trained by NSFAS professionals, undertake various projects such as community outreach, and events on behalf of NSFAS in their respective campuses or in the NSFAS call centre, earning a social resume at the end of one’s studies in exchange, students on NSFAS loans are rewarded with points that monitors, manages and rewards the contribution, participation and engagement of students and students may benefit based on their rewards points from having part of their loans converted to a bursary”;
- “Using the online platform/app to develop a PayItForward feature, or a sponsor-a-student feature”;
- “(engaging) employers (through) a job board via the career message board feature on the technology platform – messages from the careers service would be career specific”; and
- “NSFAS pop-up stalls where students can come with queries”.

It was clear from these reports that – to enhance student attitudes towards repayment - NSFAS needed to build a communications strategy alongside the introduction of a technology platform that shifts the perceptions of students away from NSFAS being an “disengaged credit provider” to an organisation that is enabling and aspirational, seen by students as transparent and serving the South African youth. It is worth noting the following comment in one of the projects that serves as a reminder of what needs to be achieved:

> “What is needed was not a complicated set of data or a legal mechanism to force people to pay back their loans but rather human engagement between NSFAS and its beneficiaries. At the moment, it seems that the student experience with NSFAS is stressful and leaves them feeling resentful. One student expressed this frustration saying, ‘if I’m going to have to pay all this money back anyway, why is it so difficult getting by with a NSFAS loan?’ What this draws attention to is that his NSFAS loan feels more like a burden than it does helping hand.”

There are some specific practice considerations that could be useful to NSFAS as it explores new strategies and mechanisms for increasing the recovery of loans that are due. Some of these are highlighted briefly below:

- ***Creating access to easy information about loan balances, loan affordability, calculators, financial literacy:*** Using the technology platforms available (and perhaps investing in one of the prototypes developed by the Institute of Design Thinking) to build a mobile app for loan recoveries and repayments, with different payment mechanisms and platforms – including SnapScan, Zapper, PayPal, etc; and developing animated videos of how to pay;

- ***Public service employment and repayments to NSFAS:*** From the example cited by Kenya, in which debtors need to be supplied with compliance certificates before they can be employed by the public sector, it is suggested that similar discussions with the Department of Public Service and Administered be considered. Under such an arrangement, employment in the public sector would be conditional on the debtor agreeing to PERSAL deductions to repay their NSFAS loans[84];
- ***Developing better measurement indices for recoveries, repayment and default***: There are several indices referenced in this paper that could provide NSFAS with valuable metrics for monitoring the effectiveness of loan recovery strategies that are being implemented, and which may also provide evidence for NSFAS in terms of targeted interventions – identifying trends by looking at debtor characteristics, institutional characteristics and programme characteristics;
- ***Deepening the collaboration between NSFAS and SARS***: While NSFAS and SARS have partnered in the sharing of employment data of NSFAS debtors, the recommendation that this is strengthened and reinforced through legislative changes to both the NSFAS Act and to the Tax Administration Act cannot be emphasized enough. In the engagement between the two parties, consideration should be given to a medium-term solution and ultimately, its' transition to a new model as a long-term solution;
- ***The loan-grant conversion and its impact on the 'hidden grant'***: This is a policy instrument that NSFAS can reconsider with a view to using more effectively to incentivise study completion, rather than study progress. As such, this could introduce grant conversion as a factor of completion within regulation time, grant conversion as a factor of student participation in mentoring/peer-tutoring programmes, grant conversion as a factor of employment within the public sector etc. These may be more effective uses of this instrument;
- ***Differential repayment terms and obligations for types of costs***: In some of the examples cited, tuition costs and living allowance costs are managed and treated differently, not only because they may be disbursed differently (tuition to the institution, allowances to the students), but perhaps also because the inflation on the costs are different over time, and so should attract different interest or different loan-grant conversion treatments. The capabilities of the loan management system to deal with this differentiation may be a limiting factor, but this remains nonetheless a practice that may be worth further exploration; and
- ***Exploring cross-border agreements for tracking students working overseas:*** Through the SADC community, NSFAS could explore partnering with the agencies in Botswana, Namibia, Mozambique, Zimbabwe, Lesotho and Swaziland to track NSFAS debtors in those countries. Likewise, through its affiliation to the Association for African Higher Education Financing Agencies (AAHEFA), NSFAS could expand this into Rwanda, Tanzania, Kenya and Ghana through bilateral co-operation agreements. The extent to which this could be explored beyond the continent would have to be given further thought.

[84] Cornerstone Economic Research (2016). Performance and Expenditure Review of the National Student Financial Aid Scheme. On behalf of National Treasury.

Conclusion

Dependency on state funding places grave constraints on NSFAS' ability to extend financial support to all the students that require funding to attend post-school education institutions. But NSFAS has a significant loan book, which when performing well, with bring in significant streams of revenue for future loans for students. Managing the loan book and improving its' efficiencies and its' performance by understanding the factors that have limited this are critical. But NSFAS is not alone in this struggle. Across the globe, public student funding programmes in both developed and developing countries are facing growing student debt default and delinquency. These programmes have different policies and practices in place, some which contribute to the debt repayment hurdles faced by students, and others which lessen the burden on the student, by increasing the burden on the State.

For NSFAS, finding a comfortable path that will trigger improvements in recoveries while remaining sensitive to the socio-economic situation that our students, and ultimately our debtors, find themselves in, is a central facet of its strategy going forwards. There is little need for NSFAS to re-invent the wheel – borrowing lessons learned from those on the continent and those across the seas has provided valuable insights into what may work. Building these into the student-centred model recognises the long-term impact of this changing business model on recovery and the sustainability of the scheme. Becoming that 'helping hand' through delivering a student-debtor experience that makes repayment less painful will require partnerships, policies, practices and the political will to make it happen.

Acknowledgements

The contributions of Alex Usher (Higher Education Strategy Associates, by teleconference); Marc Weber and Chris Elfick (Learning Strategies Consulting Services, by meeting); and Bruce Chapman (Crawford School of Public Policy, Australian National University, by email) to this paper is recognised and acknowledged – particularly in respect to making available unpublished work. Their experience in and knowledge of this sector, both globally and locally, has been invaluable.

In addition, recognition is given to Prof DB Johnstone (University of Buffalo, Graduate School of Education) for also making available unpublished work and advisory pieces that have been undertaken by him and the International Comparative Higher Education Finance and Accessibility Project, and for offering his insights into this complex area of work over many years.

We would also like to thank the programme managers at the Hasso Platnner Institute of Design Thinking at the University of Cape Town, Rael Futerman and Keneilwe Munyai and their two teams of students for their contributions (annexed to this report): Lauren Brooks, Sean Andrew, Adeola Oluwaseyi Poroye, Yannick Ilunga, Zulfah Albertyn, Fergus Turner, James Clacherty and Zamashobance Nyadeni.

Annexure A

HELB Act amendments binding employers and employees to deductions

Annexure B

"The NSFAS Collective"

Prepared by Lauren, Sean, Adeola and Yannick (UCT)

Annexure C

"The S.O.F.T. Way – Student Oriented Finance for Tuition"

Prepared by Zulfah, Fergus, James and Zamashobane (UCT)