

ANALYSIS OF COST OF HIGHER EDUCATION IN SOUTH AFRICA- SCOA

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Parliament Budget Office Presenters

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Presentation Outline

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PBO and Money Bills Act (1)

- The PBO established in terms of the Money Bills Amendment Procedure and Related Matters Act, 2009 (Money Bills Act)
- According to Section 15(1) of the Act, the PBO should:
 - Provide independent, objective and professional advice and analysis to Parliament on matters related to the budget and other Money Bills

Terms of Reference

Commissioned by SCOA and looks at the following:

- ❑ Identify funding options for higher education
- ❑ Costing for free higher education for all
- ❑ Analysis of NSFAS service delivery model
- ❑ International experience on funding for higher education

Methodology

- ❑ Study focus area is funding for undergraduate students
- ❑ NSFAS datasets and assumptions used for calculating funding estimates
- ❑ Publicly available reports and articles, from government and non-government bodies were used to complement this analysis

Higher Education and Development

Introduction

- ❑ At the core of the challenges for higher education funding is the extremely high level of inequality in South Africa
- ❑ Therefore, there is an overlap between the goals of transforming the economy and redressing the symptoms of historical injustices
- ❑ The higher education system is representative of the larger issues regarding socio-economic development and redress of injustices
- ❑ The higher education system has been significantly transformed since democracy. There have been attempts to increase access for all South Africans. The challenge is that:
 - ❑ Transforming a system made up of complex heterogeneous institutions is difficult
 - ❑ Increasing access to the system is complicated and has costs implication
 - ❑ Transformation while keeping the system operating is difficult

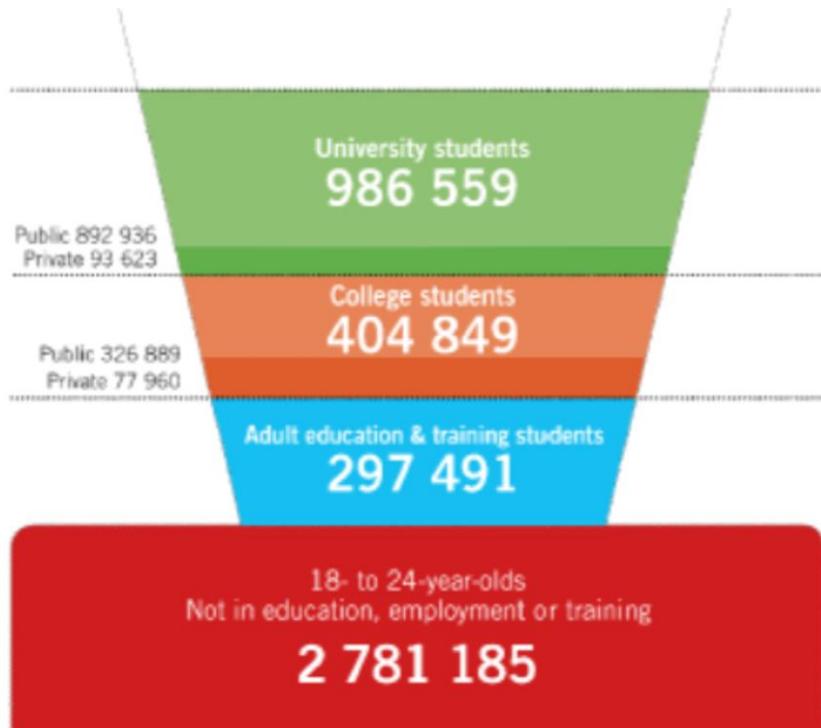
The current system

- ❑ There is unevenness across the higher education system
- ❑ There are historical inequalities between historically black and historically white universities:
 - ❑ Some HWUs have larger endowments, resources, infrastructure and access most of the third stream income, including from private sources
 - ❑ HBUs are more dependent on government funding and fees
 - ❑ There are different level of preparedness and race and income diversity of students
- ❑ #FeesMustFall calls for decolonisation of education reflect frustration with continuing poverty, inequality, the pace of change and expectations around future employment

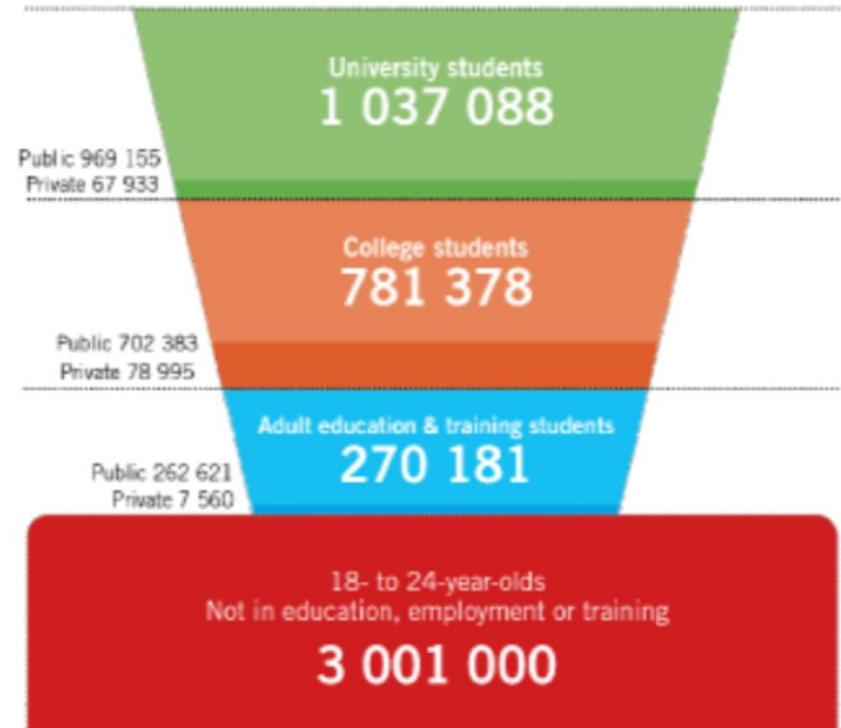
Corporatisation of universities

- ❑ Universities globally, and in South Africa, have been corporatised
 - ❑ The enterprise wings of these institutions have grown
 - ❑ Management efforts, monitoring and evaluation, resources and other aspects of university business have shifted toward promoting branding, rankings, and enterprise activities
 - ❑ In other words, the universities now have different clients not just students and government that funds studies
- ❑ The increased focus on raising more third-stream income means that some universities may be more interested in servicing paying clients and donors than students and teaching
- ❑ Academics also feel the pressure to teach more, publish more and to raise more third-stream income
- ❑ A global trend of not only outsourcing 'non-core' activities such as cleaning but also to 'contract-in/casualise' a lot of teaching staff while maintaining a smaller permanent staff
- ❑ At the same time, administration has become a larger part of university costs

2010



2014



Shape of the US public post-secondary system
2009, number of institutions



Structural problems: Inherited and ongoing

- ❑ The Post Secondary Education and Training (PSET) system is 'unbalanced':
 - ❑ There are too few students in adult education, the further education and training and college systems relative to universities
 - ❑ At the moment the system is weighted to the more expensive university system There is a need to rebalance the system to take pressure and undue expectations off the university system
- ❑ Therefore, part of the strategy should be to continue to fix the whole of the PSET system and to build-in the ability of students to transfer their qualifications between parts of the system
- ❑ The perception that universities are the centres to get the education and skills required in the market place has to be addressed.
 - ❑ The mystification and decontextualised references by government, business and the media when they talk about 'a shift to a knowledge economy' creates fears.
 - ❑ The high level of unemployment and the reshaping of South African labour markets adds to the view that one requires a university qualification to get a job.

Inefficiencies, Low & Slow Pass Through Rates

- ❑ Cohort studies (cited by CHET & CHE) show that for the students that leave high school and achieve entrance to first year studies of 3 year degrees:
 - ❑ Only 30% of students starting first year graduate within 3 years
 - ❑ Only 56%, including white students, graduate within 5 years.
 - ❑ The graduation rates are better for contact students than distance students
 - ❑ The graduation rate after 6 years declines to 50% if UNISA is included.
- ❑ Too many students are staying in the system for too long.
- ❑ The CHE (2016) estimate, based on cohort studies, that one-third of students drop out during first year and there are many repeaters in the system.

Inefficiencies, low & slow pass through rates (2)

- ❑ HE system could save money by improving pass & graduation rates:
- ❑ Low levels of preparedness of students coming through the basic education system
 - ❑ The ability of PSET and other education institutions to provide adequate support and bridging is inadequate to the huge task
 - ❑ The failure and drop-out rate is high and the time to finish degrees is too long
- ❑ Too many poor students in the system have problems focusing on their studies because of poverty and inadequate levels of funding –
 - ❑ they go hungry;
 - ❑ they struggle with accommodation;
 - ❑ They cannot afford transport.
- ❑ Students that leave home are not isolated from socio-economic issues affecting their families and communities:
 - ❑ They face pressures from their families faced with broader socio-economic issues, such as high unemployment, and precarious work and
 - ❑ While students from more affluent families can depend on support from their families the poor students' families often depend on them when there is a crisis

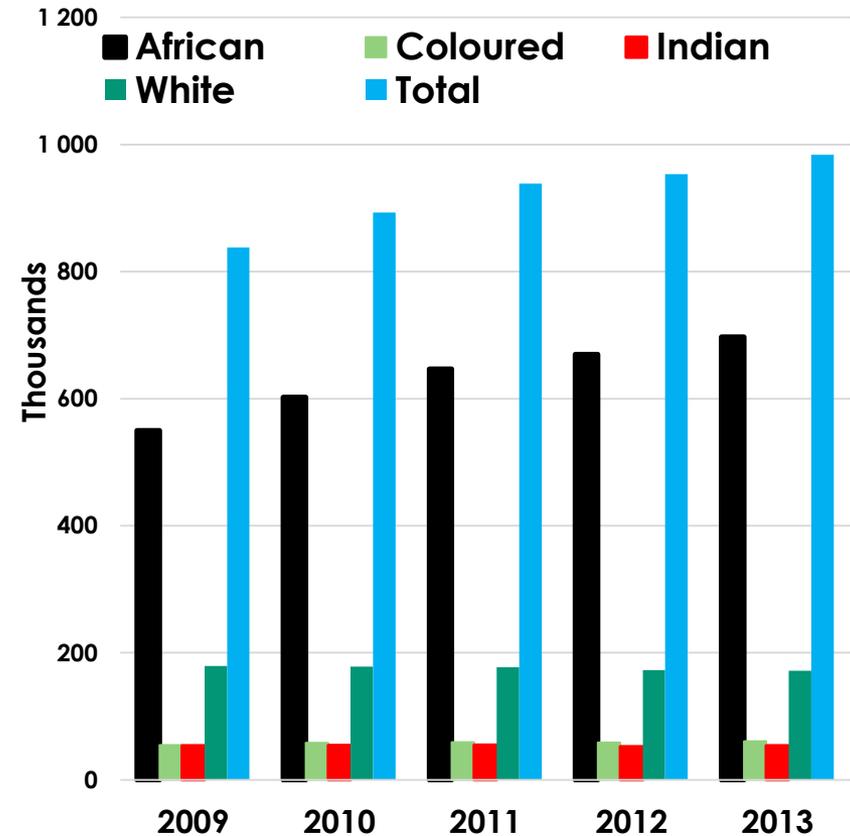
Inequality (who should be supported?)

- ❑ There is a view that people who can afford university education should pay and that government should support the poor.
- ❑ The conventional wisdom is that a free education system will exacerbate inequality
- ❑ The development of NSFAS was to provide bursaries and financing for poor students but it quickly became obvious that there is no funding for the 'missing middle'
- ❑ One of the problems with the debate is that there may be an inadequate understanding about the level of inequality in South Africa
- ❑ One reason for this inability to process how unequal South Africa is because of the magnitude of the inequality where the richest 10% of households own up to 95% of the wealth and earn 60% to 65% of the total annual income to households
- ❑ When one looks at what this means in terms of the income spread across the richest 10% of households we realise that the spread of incomes is huge from households earning under R188 000 per annum to households of billionaires. The missing middle falls into the richest 10% of households

Inequality (who should be supported?)

- There are currently close to 1 million students in the system
- The discussion above points out that:
 - There is a very large spread on incomes within the top 1 percent of households.
 - It is only the top 0.1% to 0.2% of households by income that may be considered elite
 - Based on the levels of inequality one, can posit a rough argument that the number of students from households that can easily afford to pay university education that may unduly benefit from a system of no fees amounts to up to 5% of the total enrolment.
- The point is that the argument that free education will benefit the elite has limitations in a country with the size of inequality of South Africa

Total University enrolments by race
2009 to 2013



Keys issues for consideration

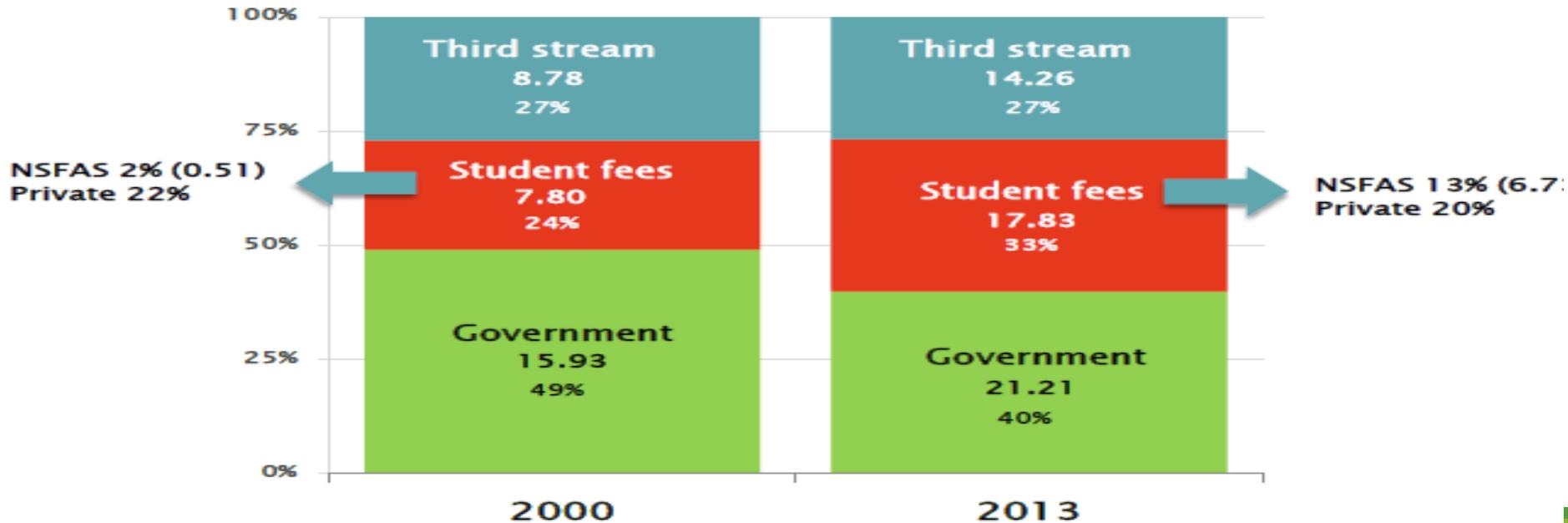
- ❑ Whichever option is chosen there will require more funding from the fiscus
- ❑ The options for the higher education boil down to:
 - ❑ The current system where higher education funding is mixed between government, student fees and 3rd stream (including private) finance
 - ❑ A 'decommodified' model where there is no fees and government covers the cost of fees. This system does not preclude 3rd stream income and private to support postgraduate and research activities.
- ❑ The minister for higher education recently suggested support for free education for the poor. He said we are moving towards a decommodified system.
- ❑ The question is whether supporting a mixed system allows a process of decommodification, particularly in a country as poor as South Africa?
- ❑ There has not been an adequate public debate about the provision of basic services, health, education and whether these activities should be publicly provided and decommodified.
- ❑ Overall, the approach of the current government has been to develop mixed systems of provision

Higher Education and Funding

Higher Education and Funding

- ❑ RSA HE funding consists of various models (shared costs), private funding, tuition fees and public finances. Though public finance share a higher proportion of more than 40% of many universities it has decline over time.
- ❑ Current funding framework in line with government plans (transform the sector, economic development and support HE institutions). However despite challenges in the system, government accused of underfunding for higher education, or hasn't kept pace with growing costs, also compared other countries model where GDP % is used.

Figure 4.1 Stream of University Income 2000 and 2013 (pg, 22)



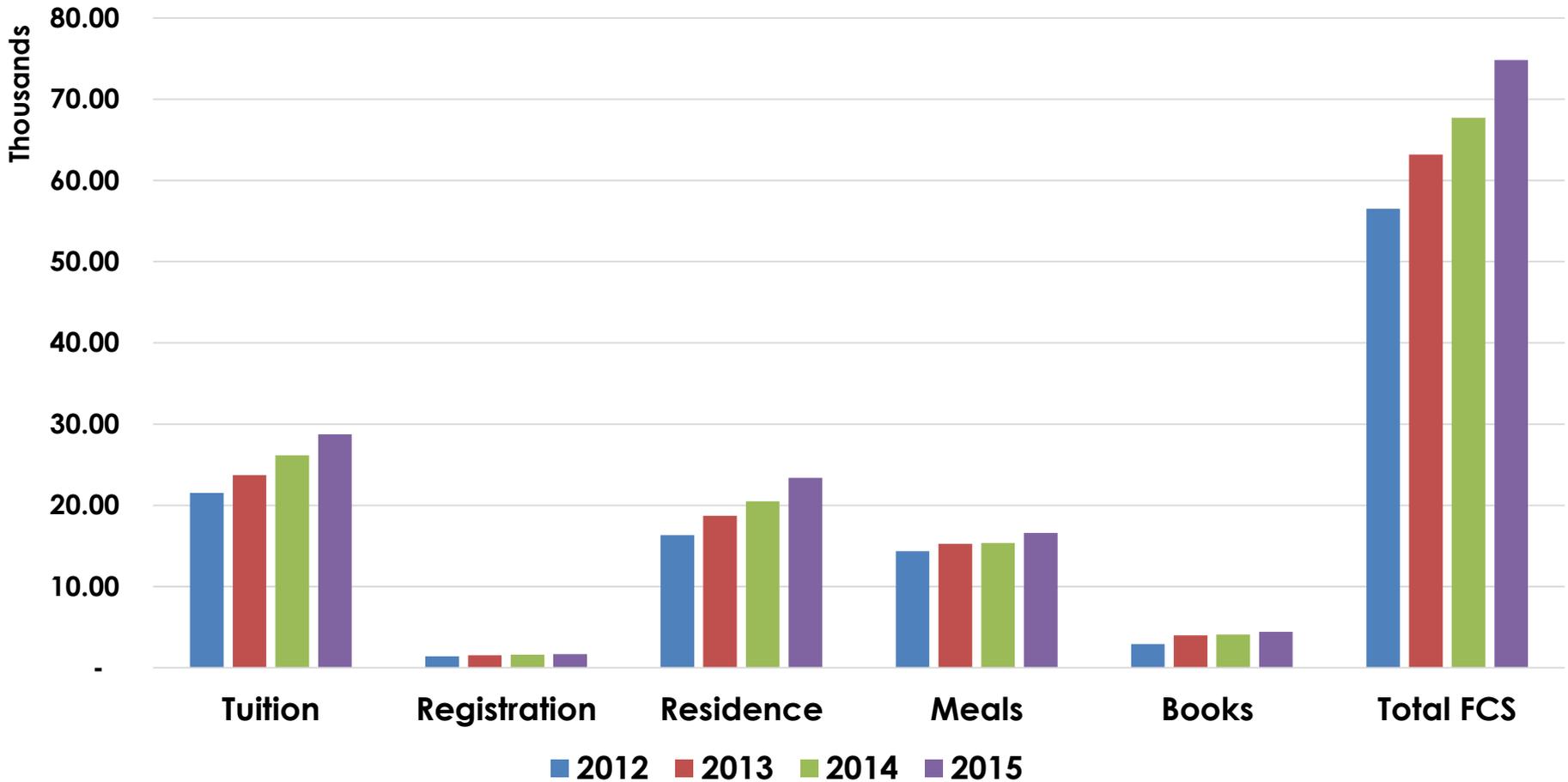
Higher Education and Funding

- ❑ General concerns that the funding from public finances to HE is low compared to other countries, Funding as percentage of GDP
- ❑ Public funding for HE hasn't kept with HEPI (9.8% HEPI compared with 6%) fees has increased beyond the funding
- ❑ Infrastructure and capital expenditure has also been below expectations
- ❑ The public funding for higher education currently exclude some HDI due to complexities around the means test (missing middle)
- ❑ The NSFAS funding fail to recapitalise due to poor debt collection, with 12% recovery rate compare to other schemes elsewhere with 44% average

Higher Education and Funding

- HE cost drivers comprise of the following; registration fees, tuition fees, residence, meals and text book- Full Cost of Study (FCS):

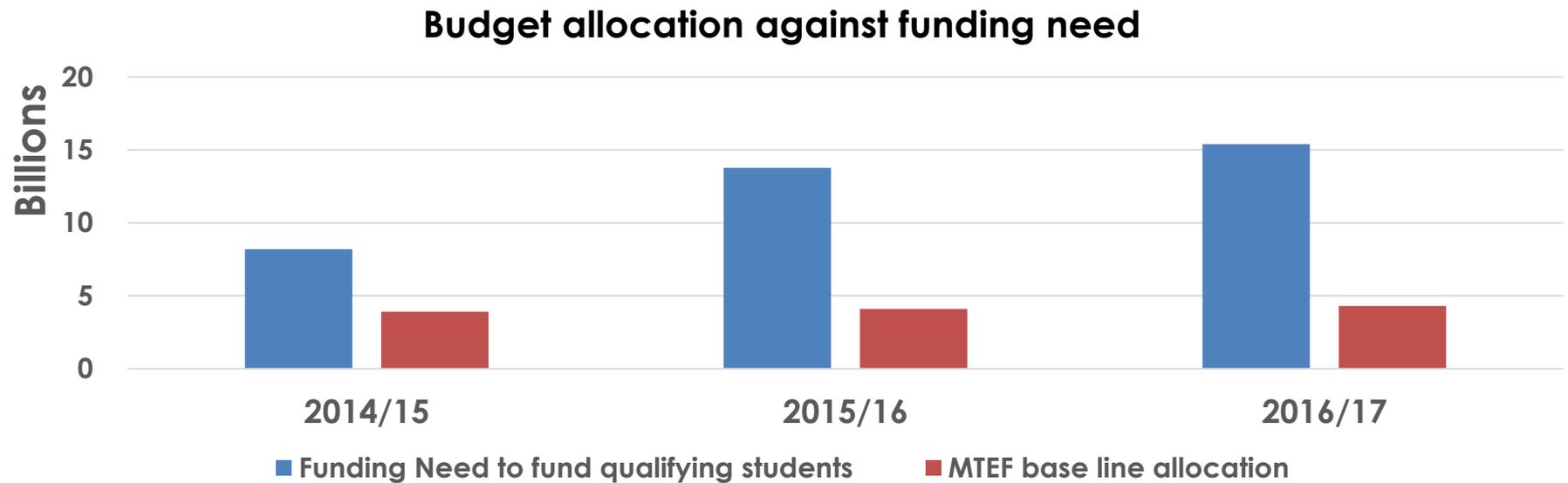
University Fees Cost Drivers



Higher Education and Funding

- ❑ Higher education demand increased by more than hundred percentage since between 1994 and 2015, however supply of academic staff hasn't kept up with the demand with the deteriorating lecture student ratio, 1:39 to 1:62,
- ❑ Despite decline in public financing of higher education, funding for other post schooling and education training has increased. E.g. TVET this is in line with NDP targets,
- ❑ Public funding is below the NSFAS funding needs

Figure 4.3 comparison between funding needs and allocation



Higher Education and Funding

Funding options

- ❑ NSFAS 2015 datasets from universities to estimate funding options with following variables and assumptions:
 - ❑ Family income threshold of R 122 000 or R 217 000
 - ❑ 1.8 % growth in UG enrolment targets annually
 - ❑ Average Full Cost of Study of 9.8 % annually
 - ❑ Average NSFAS award at 9.8% increase annually
 - ❑ Funding options:
 - 16% Coverage of undergraduate headcount enrolments; or
 - 25 % Coverage of undergraduate headcount enrolments; or
 - 100% Coverage of undergraduate headcount enrolments
- ❑ Annual Budget allocation
- ❑ NSFAS re-injected funds from debt collections

Higher Education and Funding

Funding options- Over the medium term

- ❑ With assumptions remaining the same
 - ❑ Doesn't take into account other costs beyond lecture, infrastructure and so on;
 - ❑ Focuses mainly on undergraduate cohort at public universities;
 - ❑ 16% Coverage of undergraduate headcount enrolments,
 - ❑ More than R 13 billion additional allocation to meet the funding needs - table 4.1
 - ❑ 25% Coverage of undergraduate headcount enrolments
 - ❑ More than R 35 billion additional allocation to meet the funding needs - table 4.2
 - ❑ 100% Coverage of undergraduate headcount enrolments
 - ❑ More than R 250 billion additional allocation to meet the funding needs- table 4.2

Higher Education and Funding

Public finance Status-

- ❑ Parliament adopted fiscal policy (fiscal framework) that aims to reduce budget deficit and stabilise debt-2016 Budget Review with expected higher economic growth. The actual below target so far
- ❑ Taxes upward adjusted to increase revenue by R 31 billion over the medium term, highly unlikely due poor growth
- ❑ Expenditure ceiling lowered by R 25 billion over the medium term, within reach but poor economic conditions may force government' hand. Additional R 16 billion provide for HE over the medium term
- ❑ And therefore highly likely to miss fiscal policy target,
- ❑ Additional Funding for Higher Education poses risk to attaining fiscal policy objectives, therefore objective might need reconsidering, assuming that:
- ❑ Government revenue insufficient to meet additional expenditure demands
- ❑ Reprioritised expenditure may be insufficient to cover additional funding for HE

Governance in Higher Education

National Student Financial Aid Scheme

- ❑ NSFAS is recognised as a reputable disburser of student financial aid, and as a model of good practice in the African continent.
- ❑ NSFAS provides administration of the loans and bursaries and pursue recovery of those loans.
- ❑ Scheme is currently limited to funding students whose household income is R122 000 or less,
 - ❑ The model is currently being reviewed to provide for the middle class households.
- ❑ NSFAS provide loans to cover the full cost of study,
 - ❑ Some universities apply a 'top slicing' system by sharing the available funding across all eligible applicants.
- ❑ 2015/16 financial year: NSFAS provided for 16% of higher education students.
- ❑ NSFAS is a registered credit provider and disburses billions of Rands of public funds every year,
 - ❑ The Scheme lacks policies to effectively recover debts.

Concerns raised towards NSFAS

- ❑ Underfunding of the scheme;
- ❑ lack of distinction between part-time and full-time students in funding model;
- ❑ funding students with dual citizenship;
- ❑ lack of the distinction between the university systems and NSFAS;
- ❑ lack of proper communication strategies with students in rural areas;
- ❑ lack of support structure towards poor or minor or both students' parents or guardians in their engagements with NSFAS processes;
- ❑ lack of effective and efficient strategy on debts recover;
- ❑ Lack of process to monitor who graduate and who drops out.

Governance at University Level

- ❑ Governance is key to ensuring that universities perform their role of producing high-level skills and generating knowledge.
- ❑ Restructuring of the higher education institutional landscape, accompanied by institutional mergers and incorporations, has posed additional governance and leadership challenges for institutions,
 - ❑ Leadership and management of multi-campus institutions often characterised by different academic cultures, traditions and different conditions of service for staff.
- ❑ The biggest challenge in governance within the university sector in South Africa relates to issues of power and responsibilities as dealt with by University Councils, the university leadership, senior administrators, academics, staff, students, policy makers and other external stakeholders.
- ❑ The core principles that are usually in contestation in this interplay of power are institutional autonomy and academic freedom, which are often defended as necessary.

Challenges faced by South African universities

The common challenges are

- ❑ disempowering and alienating institutional cultures;
- ❑ poor equity profiles;
- ❑ poor staff qualifications;
- ❑ poor high-level knowledge; and skills production;
- ❑ an imitative approach to knowledge production;
- ❑ poor understanding of the nature of students and staff;
- ❑ Failure to confront the politics of epistemology and a pervasive culture of passive resistance to transformation.

International experiences on higher education funding

- ❑ Past few decades saw major changes in the way higher education is financed in many countries.
- ❑ Governments grappled with the problem of financing rapidly expanding systems of higher education, while public expenditure for education has failed to keep pace, or in some cases declined.
- ❑ **Historically higher education in Germany has been state funded:**
 - ❑ 2006: German Constitutional Court ruled that tuition fees did not conflict with Germany's commitment to universal education and as a result tuition fees were introduced.
 - ❑ After exploring tuition fees for almost a decade, public universities in Germany have now abolished tuition fees for undergraduate students in all 16 states.
 - ❑ Higher education in Germany is free again, with 84% of funding coming from government.

International experiences on higher education funding

- ❑ **United Kingdom introduced tuition fees for the first time in 1998, with an upper cap of £1 000:**
 - ❑ 2004: the cap increased to £3 000.
 - ❑ 2010 the cap on tuition fees was removed, which enabled universities to charge students up to £9 000 annually.
 - ❑ More than half of UK universities announced their intention to charge students the full £9 000 in annual tuition fees.
 - ❑ The state contributes 30% of the cost of higher education.
- ❑ **USA: has one of the most expensive higher education systems in the world:**
 - ❑ The state contributes 34% to the cost of higher education.
 - ❑ State-funding for public universities decreased significantly over the last decade, which resulted in an increased reliance on tuition fees as a source of revenue.
 - ❑ This also resulted in student debt in the US exceeding \$1 trillion for the first time in 2014, which is bigger than the nation's credit card debt of \$0.7 trillion.

In Summary

- ❑ NDP sets targets for skills and education, but also aims need to redress inequalities and other socio economic challenges.
- ❑ Demand for higher education has increased significantly over the years,.
- ❑ Higher education system not kept up with demands for access and transformation.
- ❑ Unpreparedness increase challenges in the system.
- ❑ Higher education has three main sources of funding, government funding, tuition fees and private income
- ❑ Funding for higher education is seen as main barrier to access to the poor and the 'missing middle
- ❑ Additional funding from the fiscus will be required irrespective of the funding model to be proposed for higher education

In Summary (2)

- ❑ Stakeholders are suggesting different proposals to increase government revenue to fund higher education, including:
 - ❑ increase in taxes (PIT, CIT, VAT and Wealth Tax),
 - ❑ graduate tax,
 - ❑ reform to NSFAS model,
 - ❑ % of GDP spent on HE
 - ❑ reduction of HE fees

Presentation Appendix

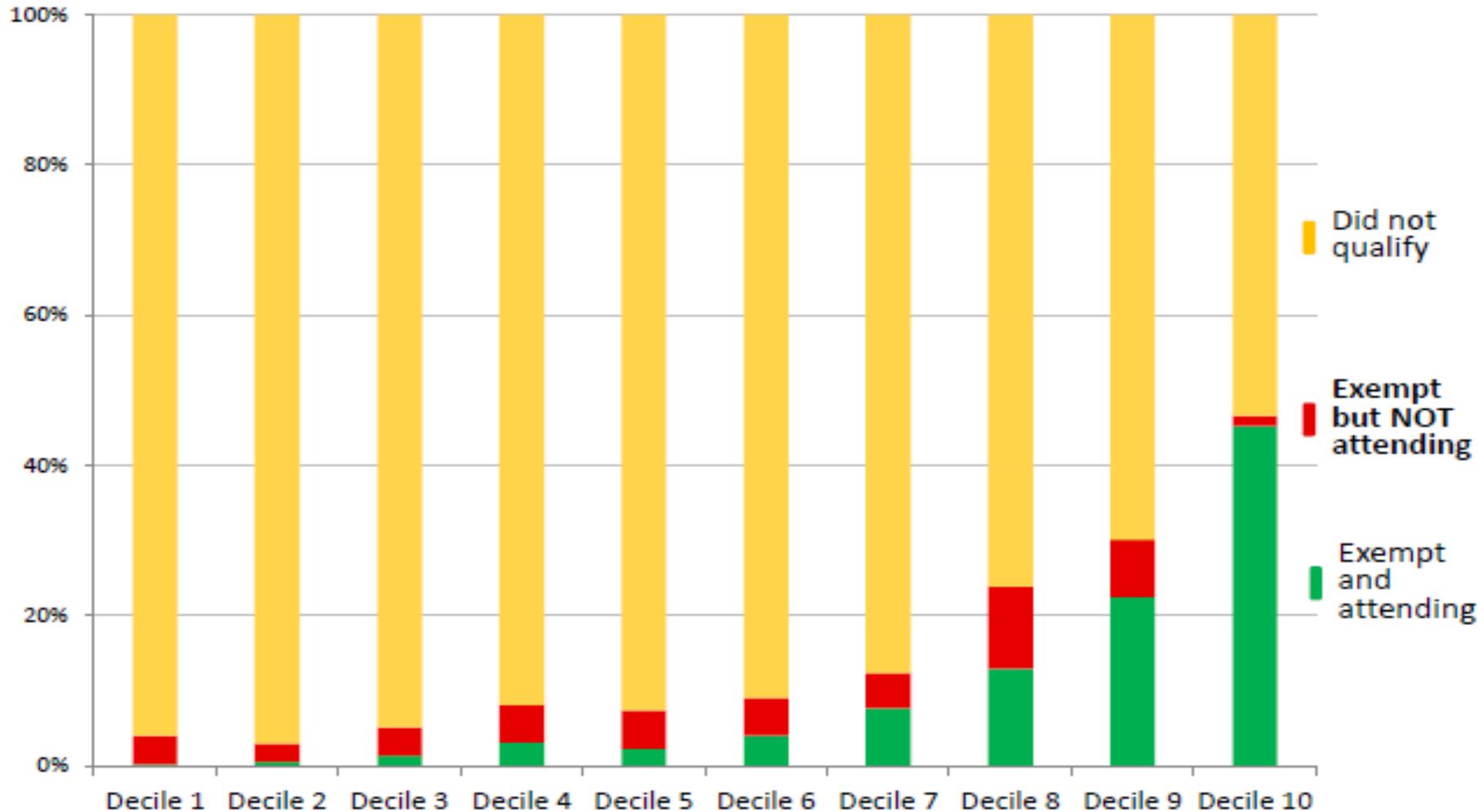
South African population, urban population and median age by group in 2011
(Source: 2011 Census, StatSA)

Race	% population	Popn 1000s	Urban pop 1000s	% urban	Median age
African	79.2	40055	21249	53.0%	21
Coloured	8.9	4526	4153	91.8%	26
Indian/Asian	2.5	1270	1251	98.5%	32
White	8.9	4572	4331	94.7%	38

Source: Finn, Leibrand and Woolard, 2009

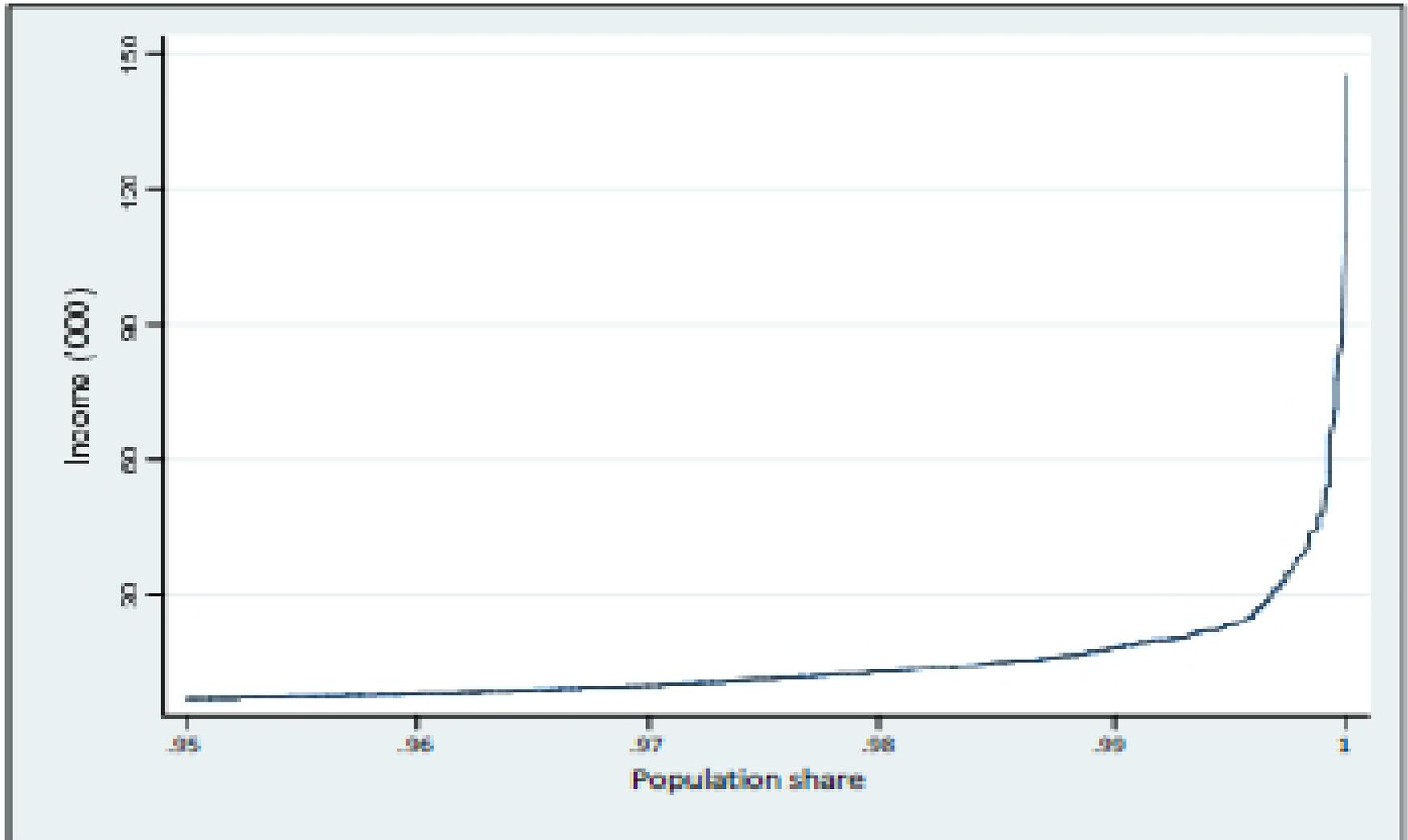
Decile	African	Coloured	Asian/Indian	White
1	12.40%	2.00%	0.50%	0.70%
2	12.00%	5.70%	0.00%	0.00%
3	11.90%	4.90%	2.70%	0.50%
4	11.50%	10.10%	0.50%	0.10%
5	11.50%	7.30%	6.10%	0.20%
6	10.90%	12.40%	1.40%	2.20%
7	10.30%	11.30%	17.90%	4.10%
8	8.70%	21.60%	12.00%	9.50%
9	7.40%	17.40%	21.90%	21.60%
10	3.40%	7.30%	37.00%	61.10%
	100%	100%	100%	100%

400 000 matriculants qualify for higher education per year, however there are just over 200 000 places for first time entrants (CHE, 2016)



Source: Van den Bergh (2016) in Cloete, Sheppard and Van Schalkwyk (2016)

J: Pen's Parade of Income of top 5%



Source: Tregenna and Tsela (2012, using 2006 ihousehold ncome data))

Higher Education and Funding

Table 4.1	2016/17	2017/18	2018/19	2019/20
Assumptions	Estimated	Estimated	Estimated	Estimated
Family income threshold increases from R122 000 (A)	R122 000	R122 000	R122 001	R122 002
1.8 % Growth in UG enrolment targets (B)	817 774	832 494	847 478	862 733
Average FCS if 9.8% increase (C)	82 155	90 206	99 047	108 753
Average NSFAS award at 9.8% increase (D)	40 767	44 763	49 149	53 966
Number of NSFAS grant holders projected at 16% of undergraduate headcount enrolments (E)	130 843.78	133 198.97	135 596.55	138 037.29
Total funding needed to maintain 16% of students at FCS (F) = (C x E)	10 749 485 769	12 015 388 211	13 430 368 388	15 011 982 291
MTEF base line allocation (G)	4 311 811 000	4 527 401 550	4 753 771 628	4 991 460 209
Additional funding provided in 2016 Budget Review (H)	4 882 000 000	5 555 000 000	5 832 000 000	
NSFAS re-injected funds (as per NSFAS APP) (I)	398 239 936	437 267 449	480 994 194	529 093 614
Additional funding to maintain 16 % of headcount enrolments over the MTEF (J) = (F-G-H-I)	1 157 434 833	1 495 719 212	2 363 602 567	9 491 428 469

Average NSFAS Full Cost of Study (25.5% or 100% of student population)

Table 4.2	2016/17	2017/18	2018/19	2019/20
Assumptions	Estimated	Estimated	Estimated	Estimated
Family income threshold increases from R122 000 to R217 000 (A)	R 217 000	R 217 000	R 217 000	R 217 000
1.8 % Growth in UG enrolment targets (B)	817 774	832 494	847 478	862 733
Average FCS if 9.8% increase (C)	82 155	90 206	99 047	108 753
Number of NSFAS undergraduate grant holders (25.5% of student population) (D)	208 532	212 286	216 107	219 997
Total funding needed to assist all qualifying students (25.5% of student population) over the MTEF at FCS (E) = (C x D)	17 131 992 944	19 149 524 961	21 404 649 619	23 925 346 777
MTEF base line allocation (F)	4 311 811 000	4 527 401 550	4 753 771 628	4 991 460 209
NSFAS re-injected funds (as per NSFAS APP) (G)	372 702 674	409 972 941	450 970 236	496 067 259
Additional funding provided in 2016 Budget Review (H)	4 882 000 000	5 555 000 000	5 832 000 000	
Additional funding to provide FCS of 25 % (I) = (E-F-G-H)	7 565 479 270	8 657 150 470	10 367 907 756	18 437 819 308
Student Head Count @ 100% (B)	817 774	832 494	847 478	862 733
Full Cost Study @ 100% (J) = (B x C)	67 184 286 056	75 096 176 319	83 939 802 427	93 824 889 321

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