

# Fiscal analysis of cost of higher education in south Africa-SCOA

Parliamentary

Budget Office



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# Presentation Outline

- ❑ PBO and Money Bills Act
- ❑ Terms of Reference
- ❑ Methodology
- ❑ In Summary
- ❑ Higher Education and Development
- ❑ Higher Education and Funding
- ❑ Governance in Higher Education
- ❑ Appendix

# PBO and Money Bills Act

**Establishment of the PBO RSA** - June 2013, 3 & half years in operation

## Legislative Mandate

- PBO support and gives effect to Sections 42(3) and 77 of the Constitution
- PBO established in terms of Section 15 of the Money Bills Amendment Procedure and Related Matters Act, 2009 (Money Bills Act)

## According to Section 15(1) of the Money Bills Act, the PBO to:

- Provide independent, objective and professional advice and analysis to Parliament (Finance and Appropriation Committees in both Houses) on matters related to the budget and other Money Bills Act

# PBO and Money Bills Act (2)

□ In terms of Section 15(2) of the Money Bills Act:

- To support the implementation of the Money Bills Act by undertaking research and analysis for Committees
- Annually provide reviews and analysis of the documentation tabled in Parliament by the executive in terms of the Act
- Provide advice and analysis on proposed amendments to the Fiscal Framework, Division of Revenue Bill and Money Bills and on policy proposals with budgetary implications

# PBO and Money Bills Act (3)

- ❑ Monitor and synthesise matters and reports tabled and adopted in a House with budgetary implications, with particular emphasis on reports by other Committees
- ❑ Keep abreast of policy debates and developments in key expenditure and revenue areas
- ❑ Monitor and report on potential unfunded mandates arising out of legislative, policy and budgetary proposals
- ❑ Undertake any other work deemed necessary by the Director to support the implementation of this Act

# Terms of Reference

**Commissioned by Standing Committee On Appropriations (SCOA) and looks at the following:**

- ❑ Identify funding options for higher education (HE),
- ❑ 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;
- ❑ Full Cost of Study (FCS) include; Tuition fees, Registration, Residence costs, Meals and Books;
- ❑ NSFAS datasets and assumptions used for calculating funding estimates;
- ❑ Funding estimates excludes institutions infrastructure and other costs;
- ❑ Publicly available reports and research papers, from government and non-government bodies used;
- ❑ Followed the various public discussions about finding for higher education; and
- ❑ Government pronouncements on higher education funding.



# In Summary

- ❑ NDP sets targets for skills and education, but also aims to redress inequalities and other socio economic challenges;
- ❑ Demand for higher education has increased significantly over the years;
- ❑ Higher education system has not kept up with demands for access and transformation;
- ❑ Unpreparedness of both learners and institutions increases 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 a 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)

- ❑ Beneficiaries of free higher education would significantly outweigh the elite,
- ❑ Stakeholders are suggesting different proposals to increase funding for higher education, including:
  - increase in taxes (PIT, CIT, VAT and Wealth Tax),
  - graduate tax,
  - reform to NSFAS model,
  - % of GDP spent on HE
  - reduction in HE fees or
  - regulated HE fees structure

# In Summary (3)

## □ Public Finance updates on PSET, 2015-2016-2017 :

- 2015/16 additional allocation to PSET, by 'freezing increase' for 2016 academic year;
- 2016/17 additional R 2,9 billion for NSFAS,
- 2017/18 additional R 2,1 billion for NSFAS,

# Higher Education and Development

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# 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,
- ❑ Lot of work has been done to transform South Africans HE system since dawn of democracy and there have been attempts to increase access for all South Africans, however,
  - Transforming the HE 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

# Introduction (2)

- ❑ There are historical inequalities between historically black (HBU) and white universities (HWU), including access to resources:
  - HWUs source most 3<sup>rd</sup> stream income & HBUs are more dependent on government funding
  - Different levels of learner preparedness and race & income diversity of learners
  
- ❑ Universities have corporatized and driven to raise 3<sup>rd</sup> stream income:
  - Focus is on branding, ranking and enterprise development
  - Focus on 3<sup>rd</sup> stream income and attention to new funders and paying clients in addition to students and government
  - Outsourcing 'non-core' staff, contract lecturers and growth in administration

# The current system

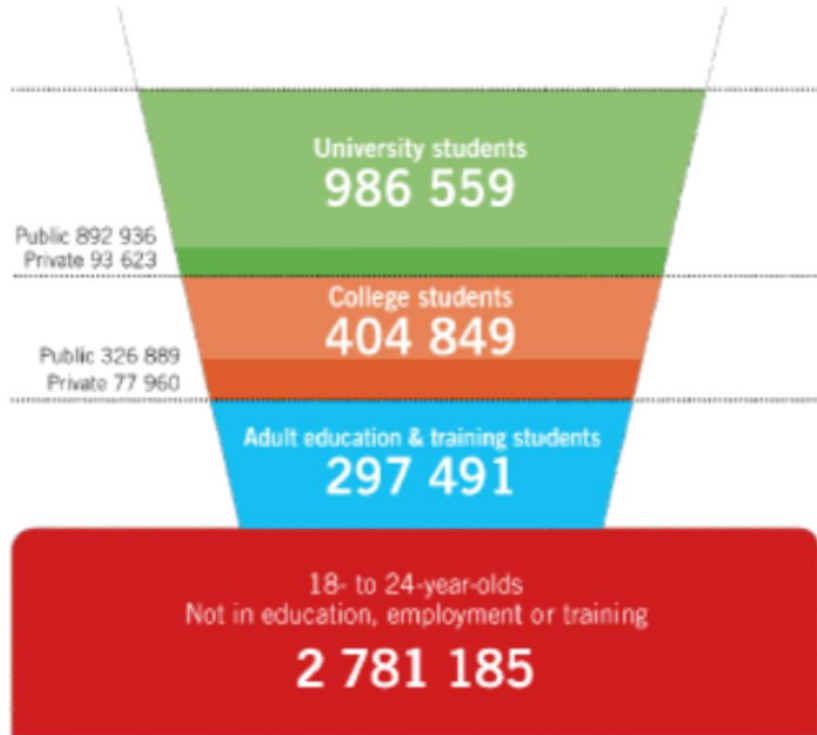
- ❑ There is unevenness across the higher education system
- ❑ There are historical inequalities between historically black and historically white universities:
  - Some HWUs have larger endowments, resources, infrastructure and access most of the third stream income, including from private sources
  - HBUs are more dependent on government funding and fees
  - There are different levels 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

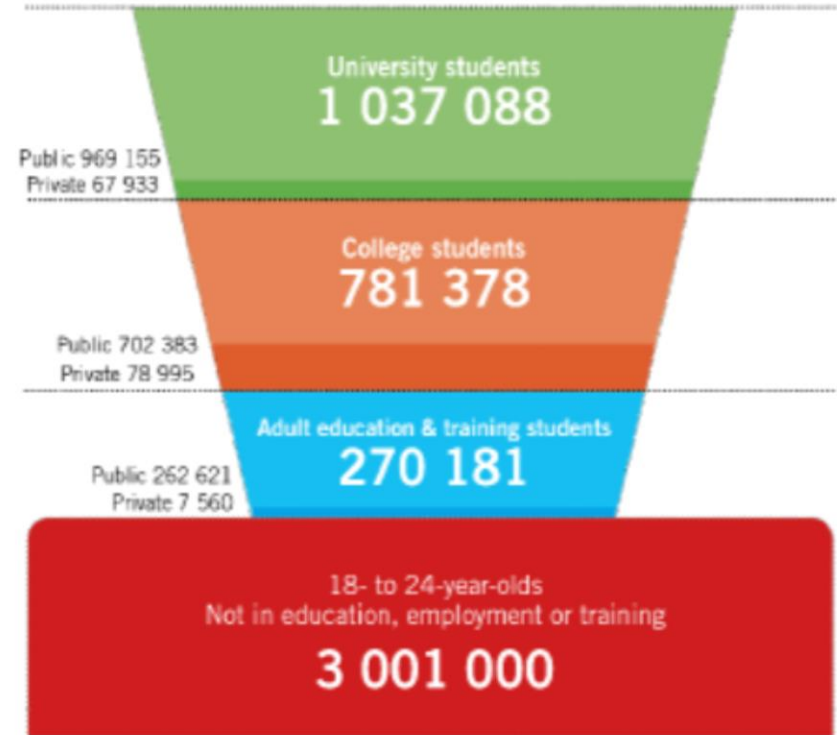
- ❑ Universities globally, and in South Africa, have been corporatised
  - The enterprise wings of these institutions have grown
  - Management efforts, monitoring and evaluation, resources and other aspects of university business have shifted toward promoting branding, rankings, and enterprise activities
  - 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 corporate 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 compliment of 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 (TVET) and college systems relative to universities (HE)
  - 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

- ❑ HE system could significantly 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

# Inefficiencies, Low & Slow Pass Through Rates (2)

- ❑ Cohort studies show of students achieving 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
  
- ❑ Basically, 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.

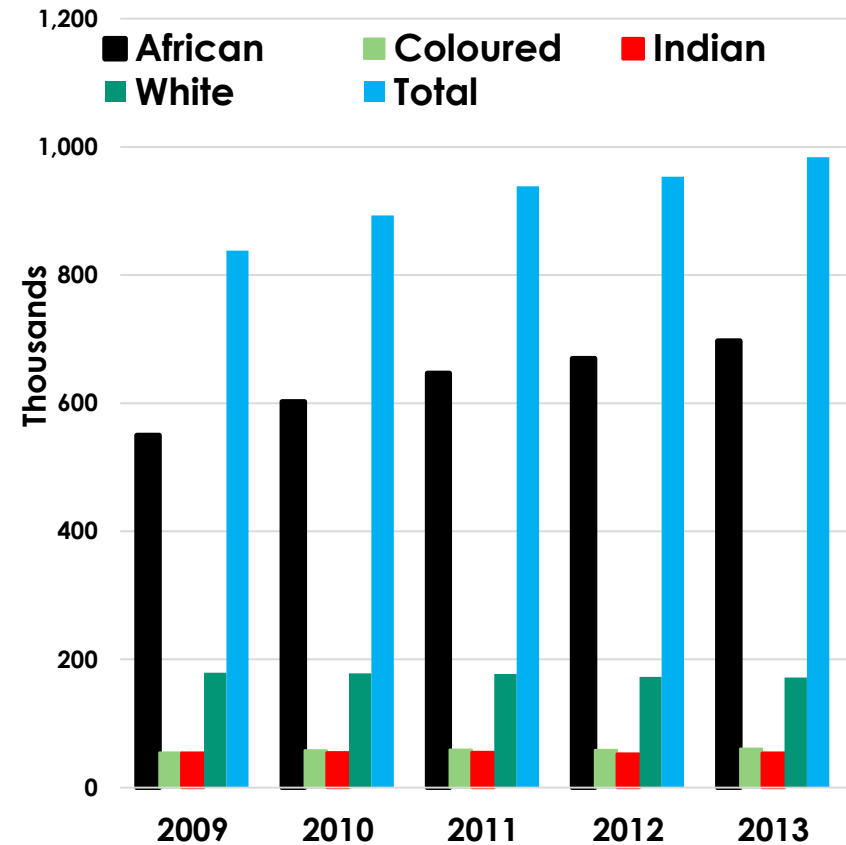
# Inequality (who should be supported?)

- ❑ There is a view that people who can afford university education should pay and that government should support the poor,
- ❑ Conventional wisdom is that a free education system will exacerbate inequality,
- ❑ However, the argument that free education will benefit the elite has limitations in a country with the size of inequality of South Africa,
- ❑ 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'
- ❑ In South Africa richest 10% of households own up to 95% of the wealth and earn 60% to 65% of the total annual income to households,
- ❑ The 'missing middle' falls into the richest 20% of households
  - 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.

# Inequality (who should be supported?) (2)

- There are currently just about a 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 HE 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 funding to support postgraduate and research activities.
- ❑ The Minister for HE 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

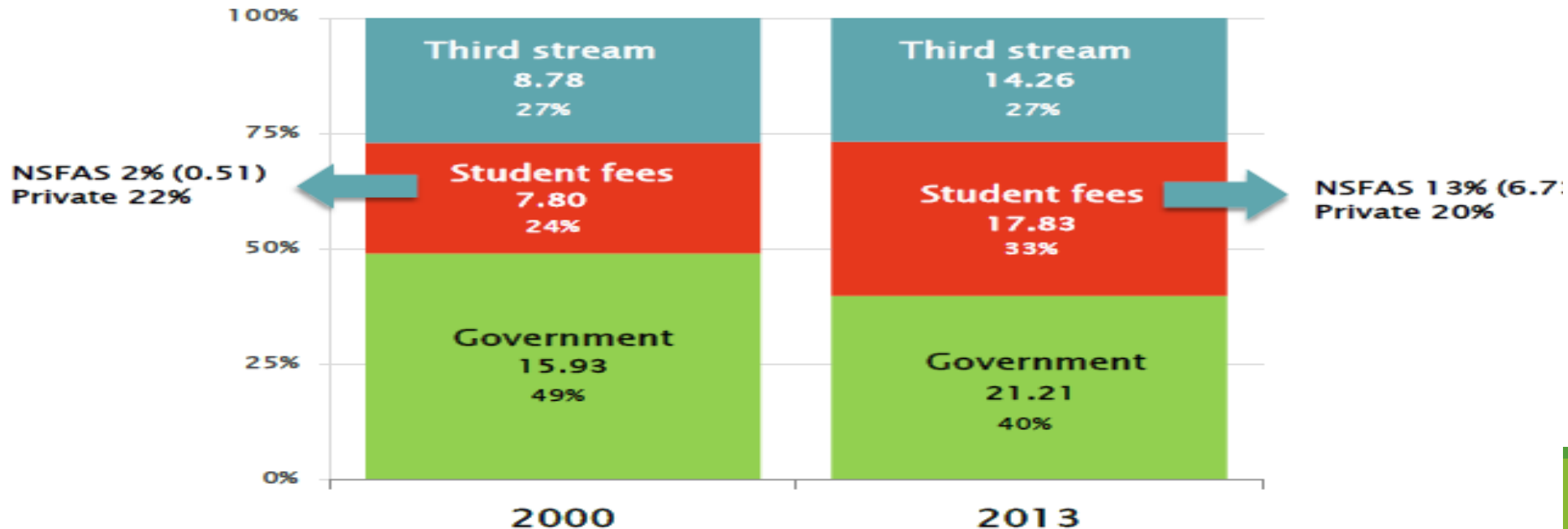
# Higher Education and Funding

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## Higher Education and Funding

- ❑ HE funding based on shared costs principle, and consists of private funding, tuition fees and public finances.
- ❑ Public finance contribute a higher proportion of more than 40%, though it has declined over time.
- ❑ Current funding framework in line with government plans of transforming the sector, economic development and support to HE institutions.
- ❑ Despite other challenges in the system, government is accused of underfunding for higher education, or hasn't kept pace with growing costs, also compared with other countries model where GDP % is used.



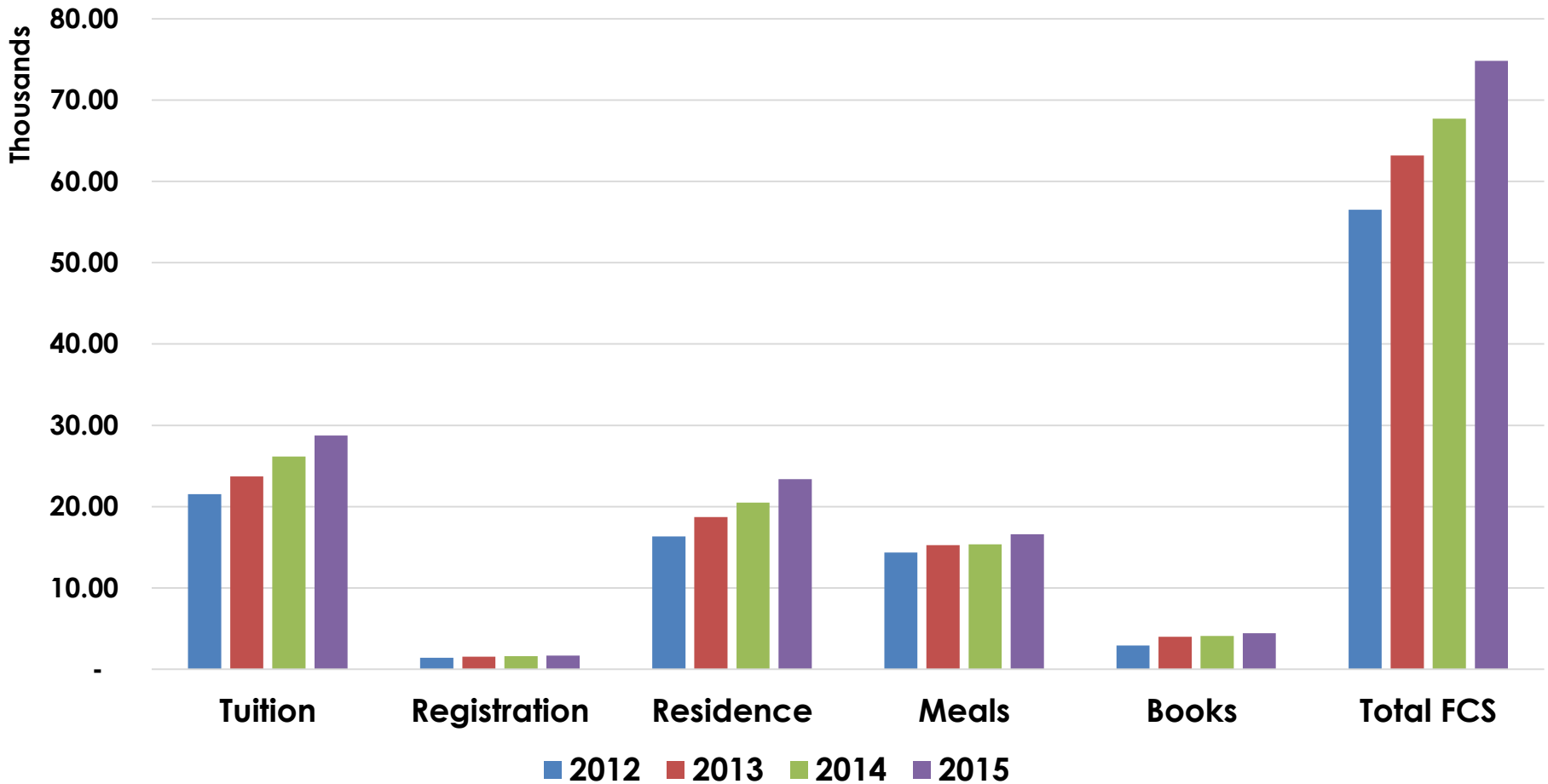
# Higher Education and Funding

- ❑ Public funding for HE hasn't kept with HEPI (9.8% HEPI compared to CPI 6%) fees has increased beyond the funding,
- ❑ Infrastructure and capital expenditure has also been below expectations,
- ❑ The public funding for HE currently exclude some historically disadvantages individuals (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,
- ❑ HE demand increased by more than hundred percentage 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 HE, funding for other post schooling and education training has increased. E.g. TVET this is in line with NDP targets too,

# Higher Education and Funding

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

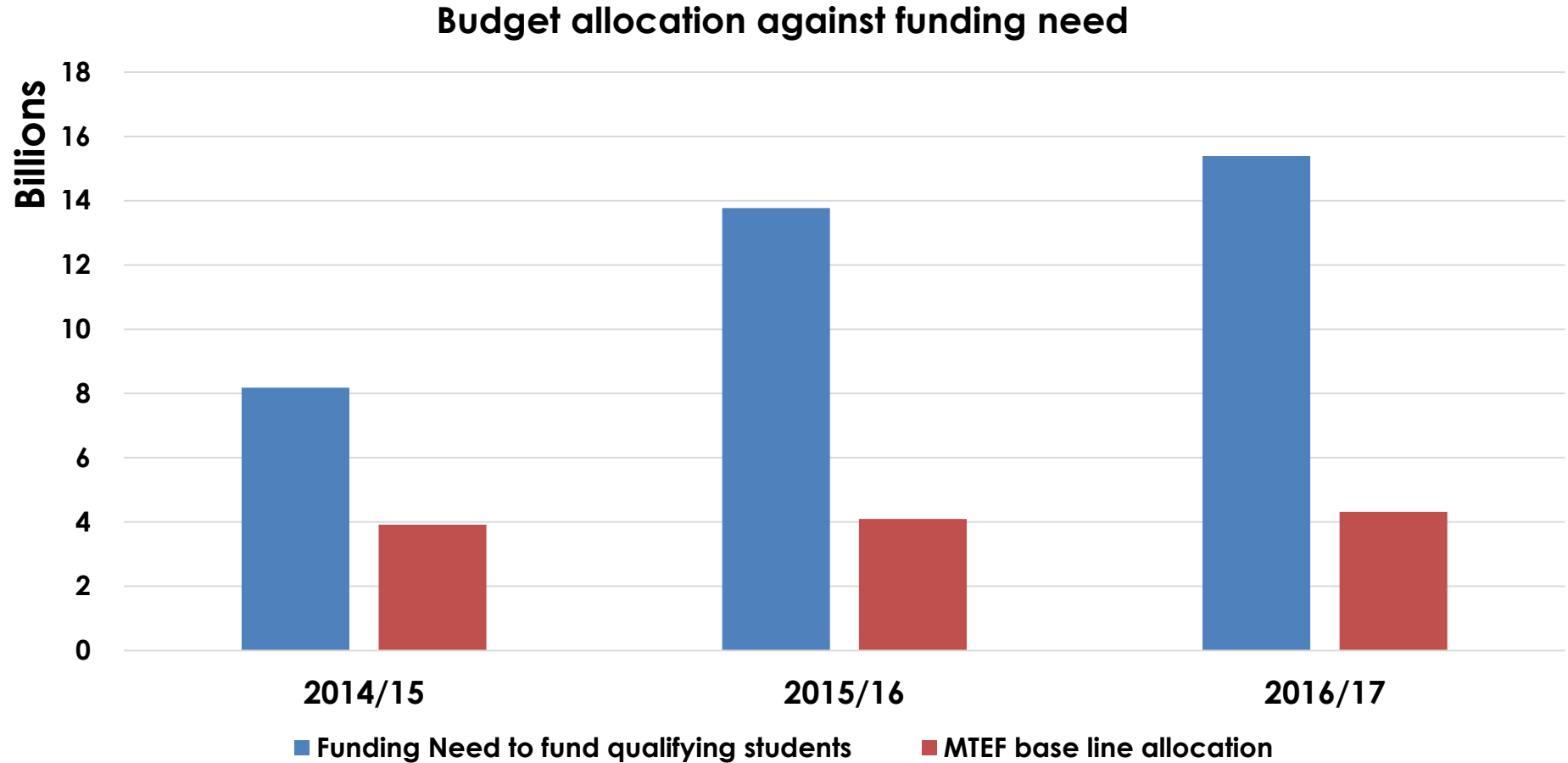
**University Fees Cost Drivers**



# Higher Education and Funding

Public funding is below the NSFAS funding needs

Figure 4.3 comparison between funding needs and allocation



# Higher Education and Funding

## Funding options- OVER THE MEDIUM TERM- 3 YEARS

- ❑ NSFAS 2015 datasets from universities to estimates 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 % increase 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- 3 YEARS

- ❑ 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 of the report
  
- ❑ 25% Coverage of undergraduate headcount enrolments
  - More than R 35 billion additional allocation to meet the funding needs - table 4.2 of the report
  
- ❑ 100% Coverage of undergraduate headcount enrolments
  - More than R 250 billion additional allocation to meet the funding needs- table 4.2 of the report

# Higher Education and Funding

## Public finance Status-

- ❑ Parliament adopted fiscal policy 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**

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# 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.
- ❑ Kenya, Zambia, Mozambique, Nigeria, Burkina Faso and Egypt have a history of free higher education, although this has not remained in place for all of these countries.

# International experiences on higher education funding (2)

- ❑ 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 (3)

## ❑ **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.

**Thank you**

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# Appendix

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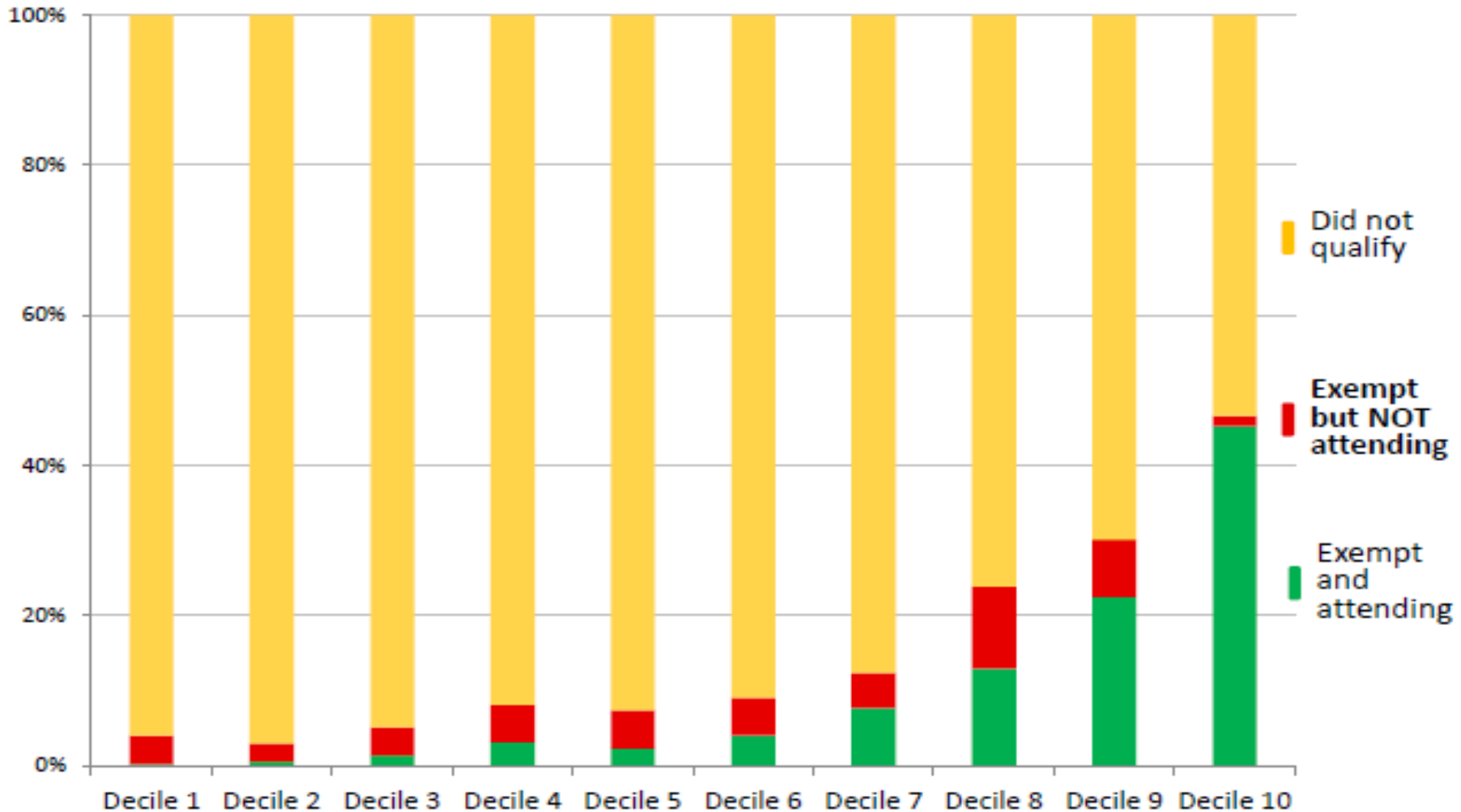
**South African population, urban population and median age by group in 2011**  
**(Source: 2011 Census, StatSA)**

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

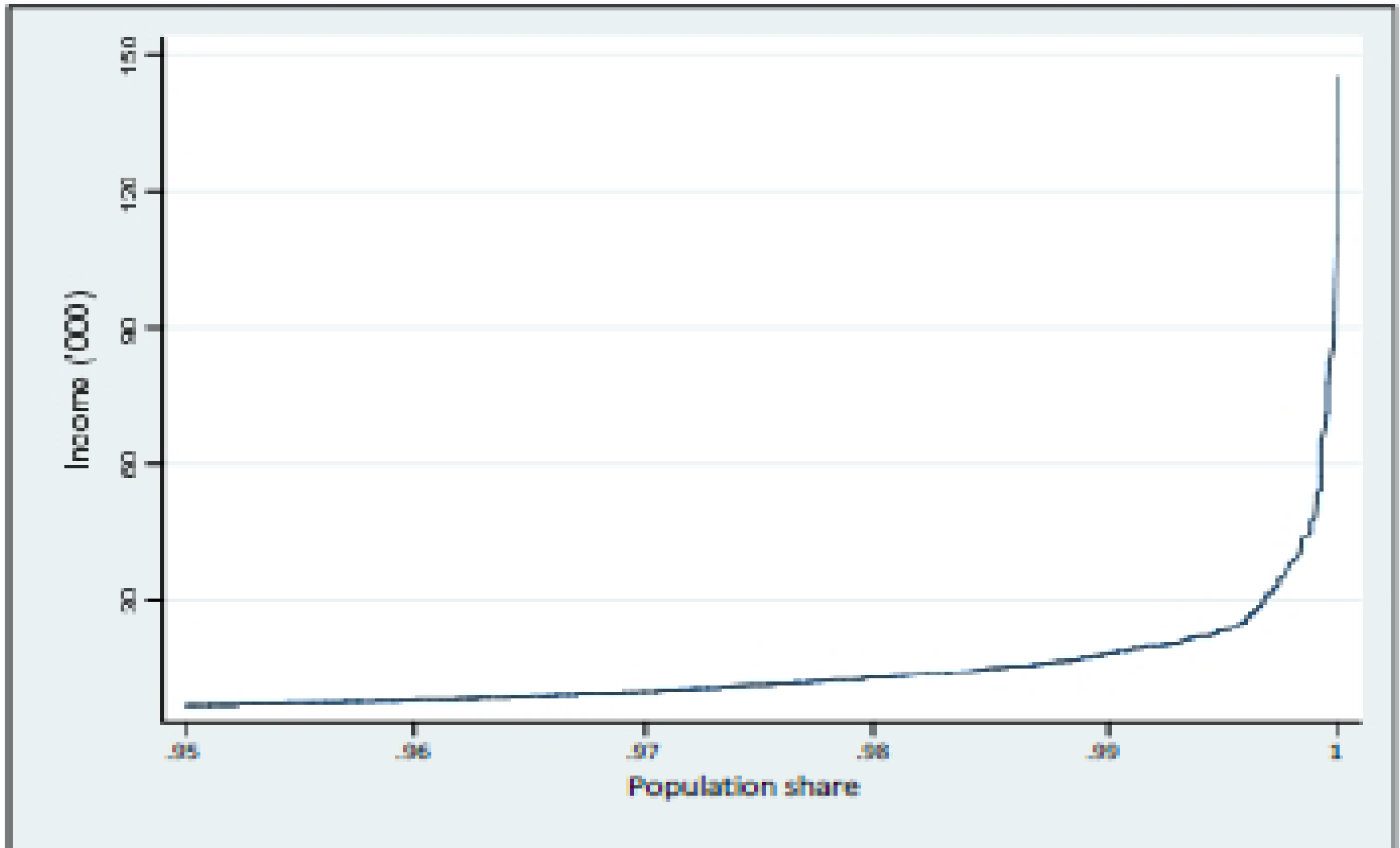
Decile	African	Coloured	Asian/Indian	White
1	12.40%	2.00%	0.50%	0.70%
2	12.00%	5.70%	0.00%	0.00%
3	11.90%	4.90%	2.70%	0.50%
4	11.50%	10.10%	0.50%	0.10%
5	11.50%	7.30%	6.10%	0.20%
6	10.90%	12.40%	1.40%	2.20%
7	10.30%	11.30%	17.90%	4.10%
8	8.70%	21.60%	12.00%	9.50%
9	7.40%	17.40%	21.90%	21.60%
10	3.40%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

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

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

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