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Parliamentary Budget Office

PARLIAMENT
OF THE REPUBLIC OF SOUTH AFRICA

Outline

- About the PBO
- PBO approach to costing estimate analysis
- Costing estimate analysis project example-
  - Higher Education Context in South Africa
  - Free Fee Higher Education - Costing Estimate Analysis
  - Summary

Introduction

- The Parliamentary Budget Office was established in 2013 by Section 15 of the Money Bills and Related Matters Act 2009, as amended in 2018
- Established to support the implementation of the Money Bills and Related Matters Act; in particular support to Finance and Appropriations Committees in both Houses of Parliament; but other Committees and Members of Parliament (MPs) subject to the availability of capacity
- The Money Bills and Related Matters Act of 2009 guides the approval of money bills, including amending the budget
- The Parliamentary Budget Office offers independent and objective analysis and advice to Parliament on money bills and other bills presented by the Executive; and any other documentation or reports with fiscal implications
- The Office mandate is explicitly stated in the establishing Act;
  - Costing and economic modelling are some of implied analytical tools
  - Government is expected to provide costing of programmes and bills proposed
- More demand for costing analysis outside government, e.g. Basic Income Grant, Early Child Development, National Health Insurance and etc

Parliament Committees and PBO

Standing Committee on Appropriations (NA):

-Spending issues
-Division of Revenue Bill, Appropriation Bill
-Supplementary Appropriation Bills, Adjustments Appropriation Bill
-Recommendations of the Financial and Fiscal Commission
-Reports or statements on actual expenditure published by the National Treasury

Select Committee on Appropriations (NCOP):

-Spending issues
-Division of Revenue Bill, Appropriation Bill
-Supplementary Appropriation Bills, Adjustments Appropriation Bill
-Recommendations of the Financial and Fiscal Commission
-Reports or statements on actual expenditure published by the National Treasury

PBO Primary Committees as per Money Bills Act

Standing Committee on Finance (NA): Budget Review (February) and MTBPS (October)

-Macroeconomic and fiscal policy;
-Fiscal framework, revised fiscal framework;
-Revenue proposal (including taxes) and actual revenue published by government;

Select Committee on Finance (NCOP):Budget Review (February) and MTBPS (October)

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-Revenue proposal (including taxes) and actual revenue published by government;

Accountability line for the Director

Parliament Executive Authority

Speaker of the National Assembly, and

Chairperson of the National Council of Provinces

Parliamentary Budget Office Advisory Board:

2 Houses Chairpersons (NCOP and NA)

2 Finance Committees Chairpersons (NCOP and NA)

2 Appropriations Committees Chairpersons (NCOP and NA)

Parliamentary Budget Office Director

Human Capital and Institutional Capacity

Office Leadership

- Director: Dr Dumisani Jantjies
- Office Management Structure (Director, 3 Deputy Directors and Office Manager)
- More than combined 90 years of experience in economic, policy and finance and fiscal analysis

Resources

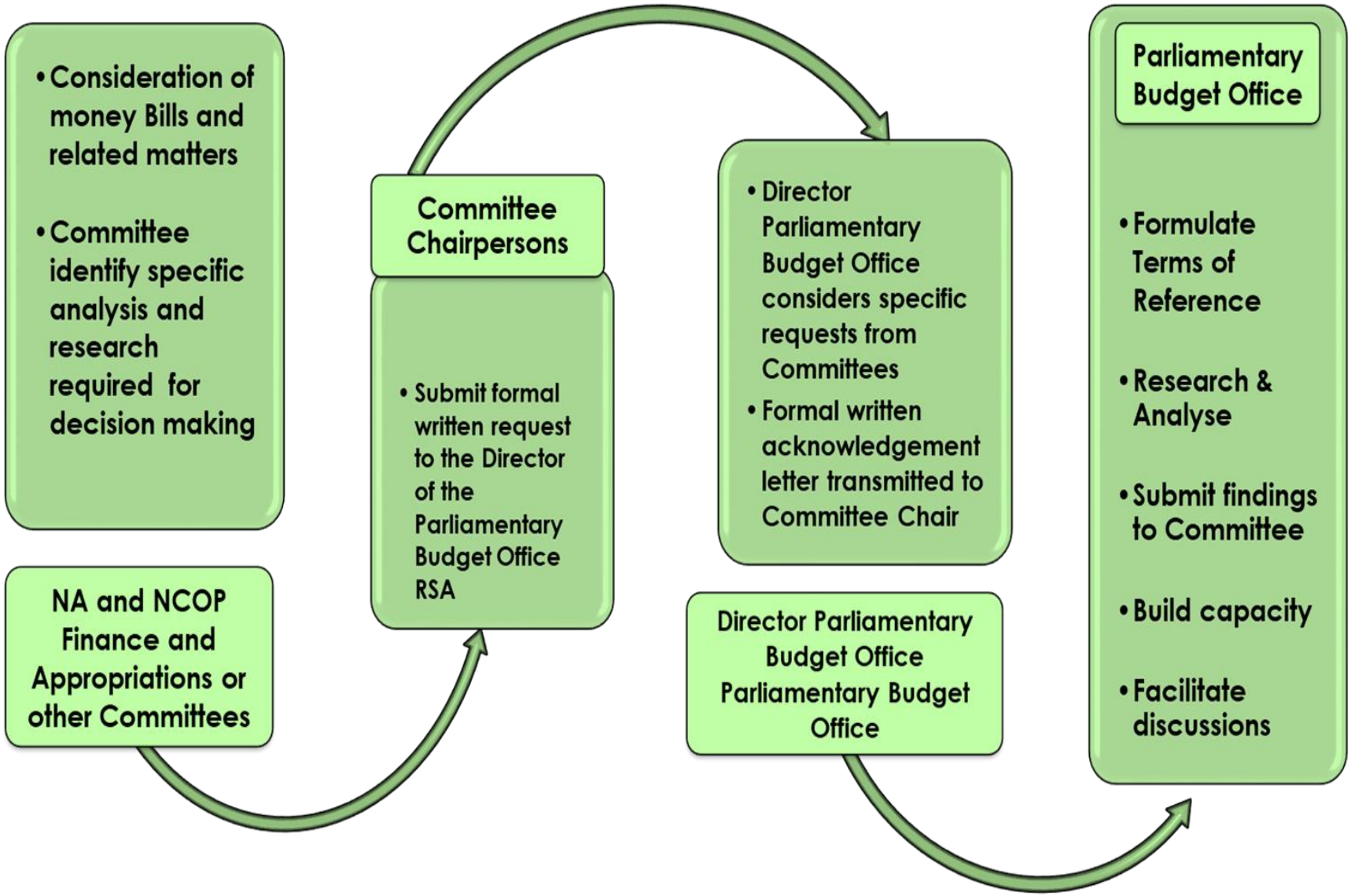
- Staff Complement: 13 out of 15
  - Director
  - 2(3) x Deputy Directors for Policy, Finance and Economics
  - 5 (6) x Analysts, 2 Graduate Trainees
  - 3 x Corporate Services staff: Office Manager, Director 'PA, Project-Coordinator
  - Minimum qualification is Masters degree in Finance, Economics and Policy
  - Working on having sectoral specialist in the team, e.g. health, education and etc.
- Office Budget
  - Annual operating budget (personnel & OPEX & CAPEX) of above $1.2 million US Dollars (R22 million) against requirement of R 40 million;
- Information & ICT requirements
  - Information is readily "available & freely" available from government and entities
  - Subscription to commercial data suites like EViews, Stata for data-analytics
  - Office building own economic model over the medium term
  - Sufficient tools of trade, within the context
- Office Space
  - Office is physically located outside parliament prescient , Parliamentary Towers

PBO approach to costing estimate analysis

Costing Estimate Analysis in Context

- The Money Bills Act does not explicitly require the Office to provide policy recommendations;
  - Therefore, the PBO costing estimates analysis provide insight to allow or empower Parliament to approve or reject government policy proposals
- The PBO costing estimates analysis provides MPs with an overview of the implication of policy proposals on society, the economy and on fiscus
- **The costing estimate analysis is based on the following public finance categories:**
  - Government expenditure
  - Government revenue including tax and non-tax revenue
  - Government (including entities) debt or budget balance
  - Government (including entities) assets and other investments
- In addition to the fiscal analysis, PBO costing will entail systematic analyses of macroeconomic, socioeconomic and environmental effects

Costing estimates analysis workflow and timing



Criteria for identifying policies to be costed

- Not all policies carry a fiscal, social and/or economic cost, nor do all policies with these costs lend themselves to costing
- **Therefore, before taking on a costing estimate analysis request, the PBO would apply the following criteria:**
  - The policy should have a material impact on public finances
  - The policy must be aligned with national policy priorities
  - There must be sufficient data (administrative or survey data) or close policy equivalents to allow the PBO to approximate the impact or arrive at an estimate
  - The details of the policies' key parameters should be settled and well-defined. The PBO should limit guesswork around policy parameters to avoid influencing the policy's formation
  - A relationship between the policy's costs or benefits and the level of activity should exist
- If the PBO deems that a policy cannot be reliably costed, stakeholders will be notified in writing with an explanation

PBO's approach to costing estimates analysis

- Traditional costing models have largely focused on the fiscal implications of the policy and have not sufficiently accounted for the macroeconomic, socioeconomic and environmental effects of policy
- These models have largely been utilised to ascertain the costs of a policy proposal and its affordability. However, the budget should not only be the point of focus for policy
- The PBO costing model proposes a framework in which fiscal implications are considered in tandem with macroeconomic effects, socioeconomic implications and environmental considerations (where appropriate)
- Within this framework, the PBO takes into account the distributional impacts of policy changes and considers government policy proposals through a macro-, meso-, and micro-lens, that takes seriously the interlinkages between society, economy and environment

PBO's approach to costing estimates analysis

- **The PBO costing estimates analysis is prepared from three dimensions:**
  1. General background analysis to determine the appropriateness of the project for costing
  2. Costing estimates analysis of policy proposals using the cost benefit or the cost efficiency analysis methods
  3. Socioeconomic impact analysis taking into account macroeconomic effects, socio-economic impacts and environmental considerations
- The PBO costing estimate analysis uses one of the following designs in determining suitable analysis for a given costing estimate analysis request:
  - **Comparative or Benchmarking design:** In this design, a policy proposal costing implications or potential outcomes are compared against a similar policy that has been implemented elsewhere
  - **Verify or audit government policy costing estimates design**: Cost estimates disaggregated to verify the reasonableness of the proposed costing implications
  - **Bottom-up costing estimate analysis design**: Breaking down the policy proposal into anticipated activities or components and then costed separately
  - **Top-down costing estimate analysis design:** Under this design, aggregate-level datasets, such as the total value of transactions and the average payment, are used to determine costing estimates

Costing estimate analysis project example-

2016 Free Fee Higher Education Costing-

Background

- At the core of the challenges for higher education funding is the extremely high level of inequality in South Africa
- The higher education system is representative of the larger issues regarding socio-economic development and redress of injustices
- The HE system has been significantly transformed
  - However, there are complex issues because HE institutions are heterogeneous, increasing access is costly, and transforming them is working and evolving
- There are historical inequalities between historically black (HBU) and white universities (HWU), including access to resources:
  - Few HWUs source most 3rd stream income and HBUs more dependent on government funding
  - Different levels of preparedness, and race and income diversity students
- Universities have corporatised and driven to raise 3rd stream income:
  - Focus is on branding, ranking and enterprise development
  - Focus on 3rd 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

Higher Education context in South Africa-

Structural problems: Inherited and ongoing

- The Post Secondary Education and Training (PSET) system is 'unbalanced':
  - There are few students in the adult, further education, 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
- The PBO costing project focuses on the free fee for Universities only, not the either PSET

Inefficiencies, Low and Slow Pass Through Rates

- Cohort studies show that for the students that leave high school and achieve entrance to first year studies of 3 year bachelor degrees:
  - Only 30 per cent of students starting first year graduate within 3 years
  - Only 56 per cent, 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 per cent 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
- HE system could save money by improving pass and 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

Inefficiencies, Low and Slow Pass Through Rates

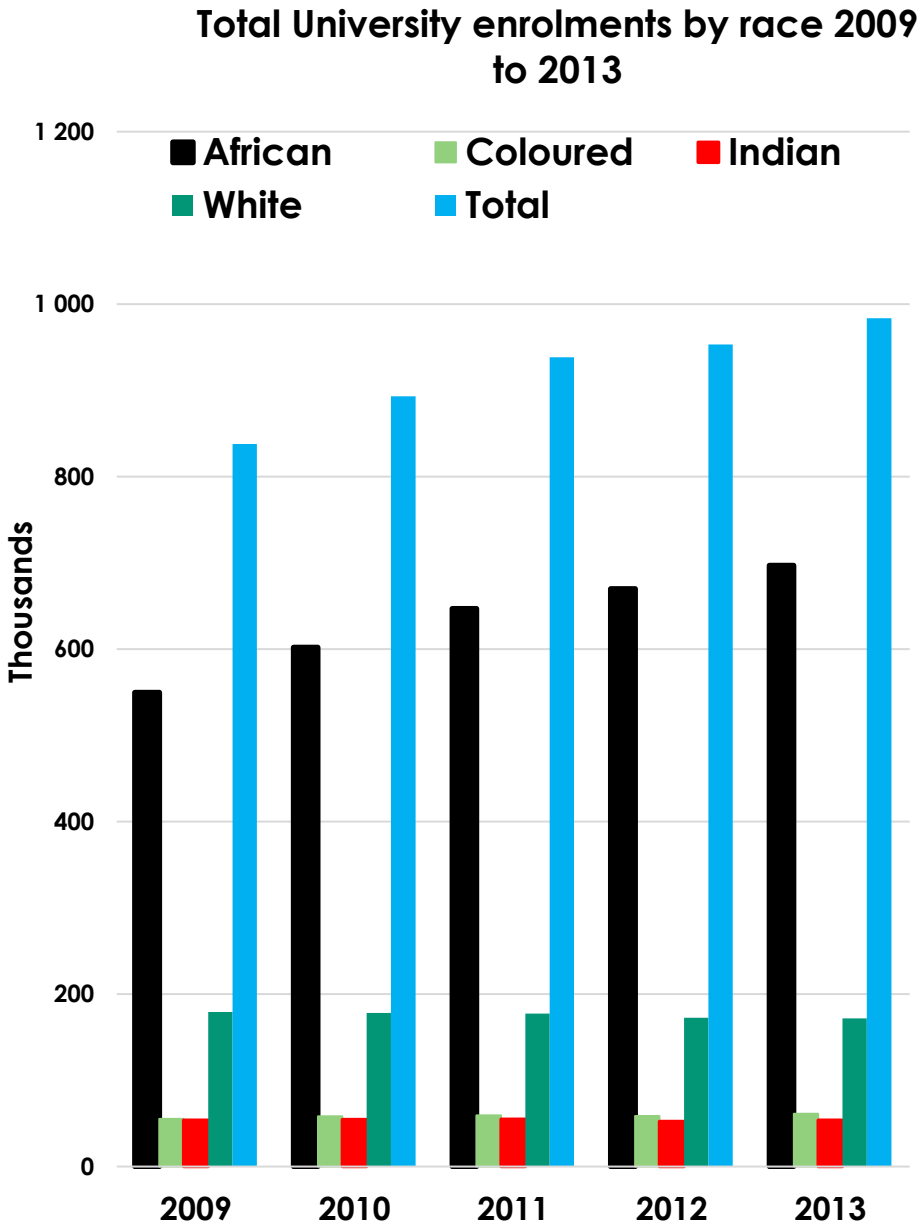
- Too many poor students in the system have problems focusing on their studies because of poverty and inadequate levels of funding
  - They go hungry
  - They struggle with accommodation
  - They cannot afford transport
- Students that leave home are not isolated from socio-economic issues affecting their families and communities:
  - They face pressures from their families, faced with broader socio-economic issues, such as high unemployment, and precarious work
  - 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
  - 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 Government Funding Agency (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 per cent of households own up to 95 per cent of the wealth and earn 60 to 65 per cent of the total annual income to households
- The missing middle falls into the richest 20 per cent of households
  - There is a very large spread on incomes within the top 1 per cent of households
  - It is only the top 0.1 per cent to 0.2 per cent 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 per cent of the total enrolment

Inequality (who should be supported?)

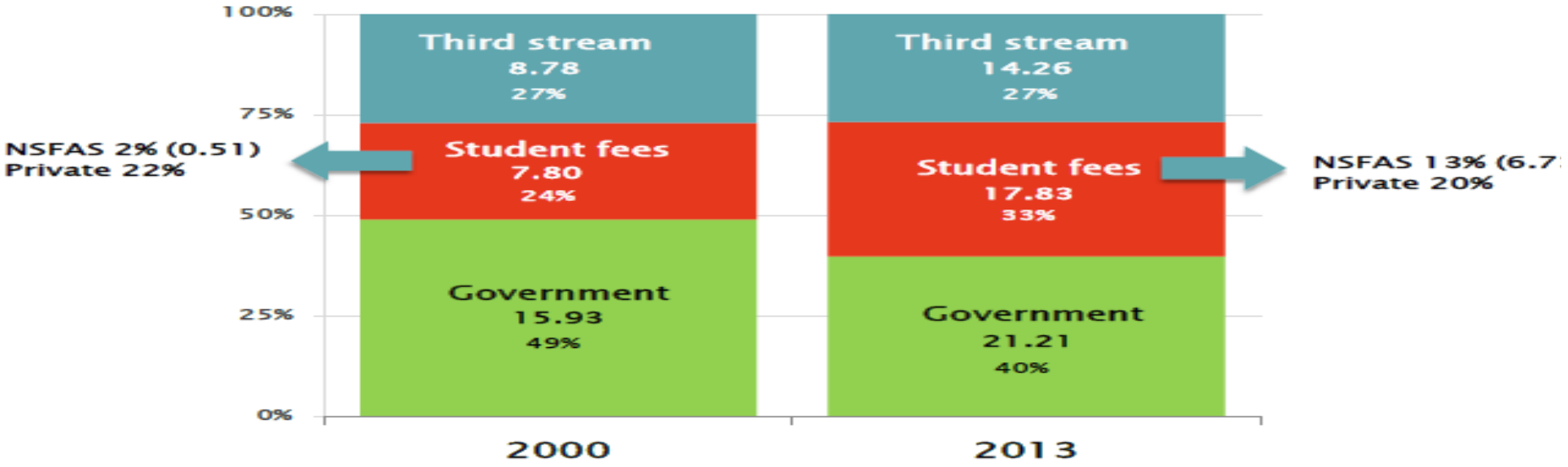
- There are currently close to 1 million students in the system
- The discussion above points out that:
  - There is a very large spread on incomes within the top 1 percent of households
  - It is only the top 0.1 per cent to 0.2 per cent of households by income that may be considered elite
  - Based 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 per cent 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



Free Fee Higher Education and Funding- Costing Estimate Analysis

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 per cent, 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 failed to keep pace with growing costs, also compared with other countries model where GDP percentage is

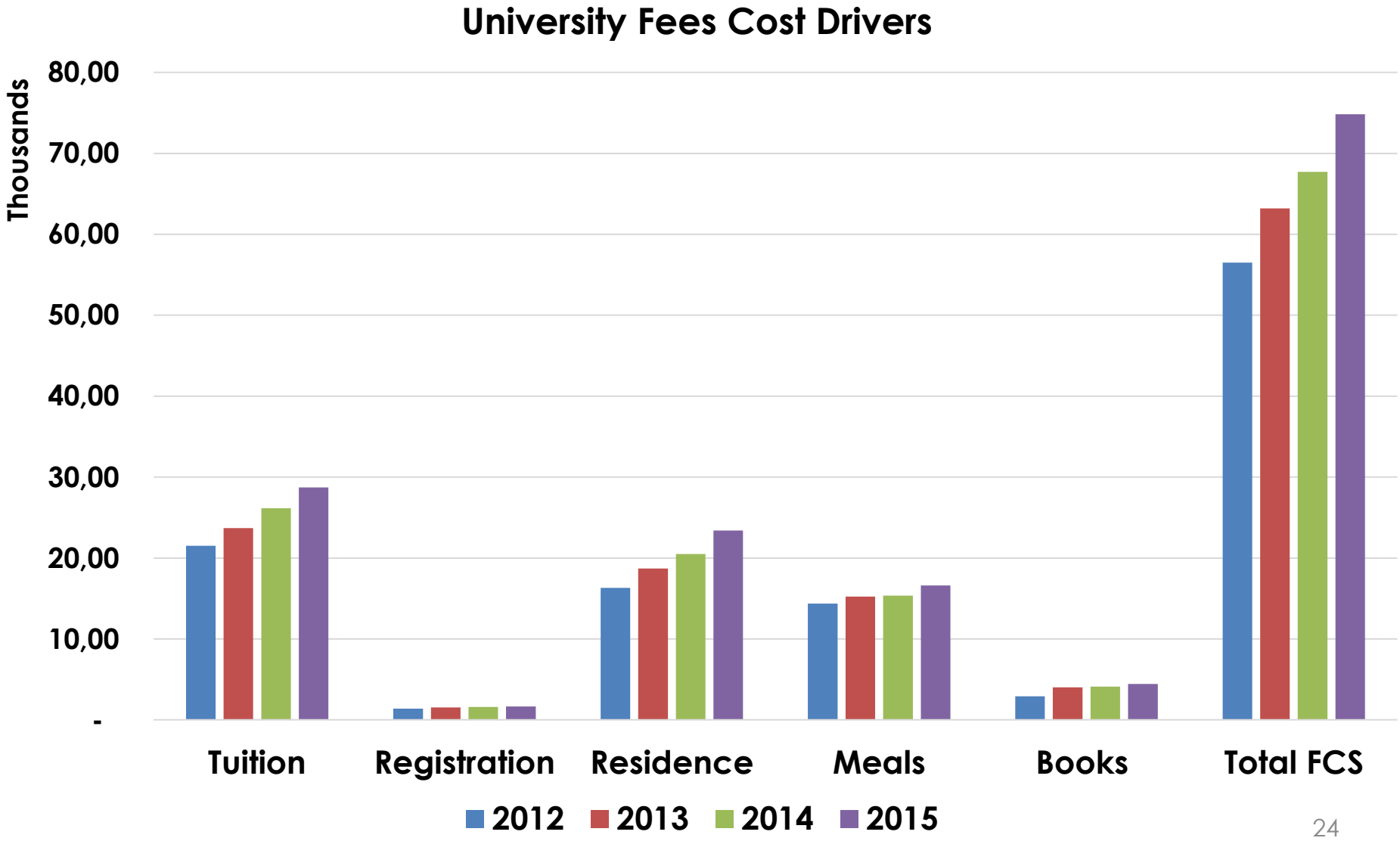


Higher Education and Funding

- 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 failed to keep up with HEPI (9.8 per cent HEPI compared to CPI 6 per cent) fees has increased beyond the funding
- Infrastructure and capital expenditure has also been below expectations
- The public funding for higher education 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 per cent recovery rate compare to other schemes elsewhere with 44 per cent average

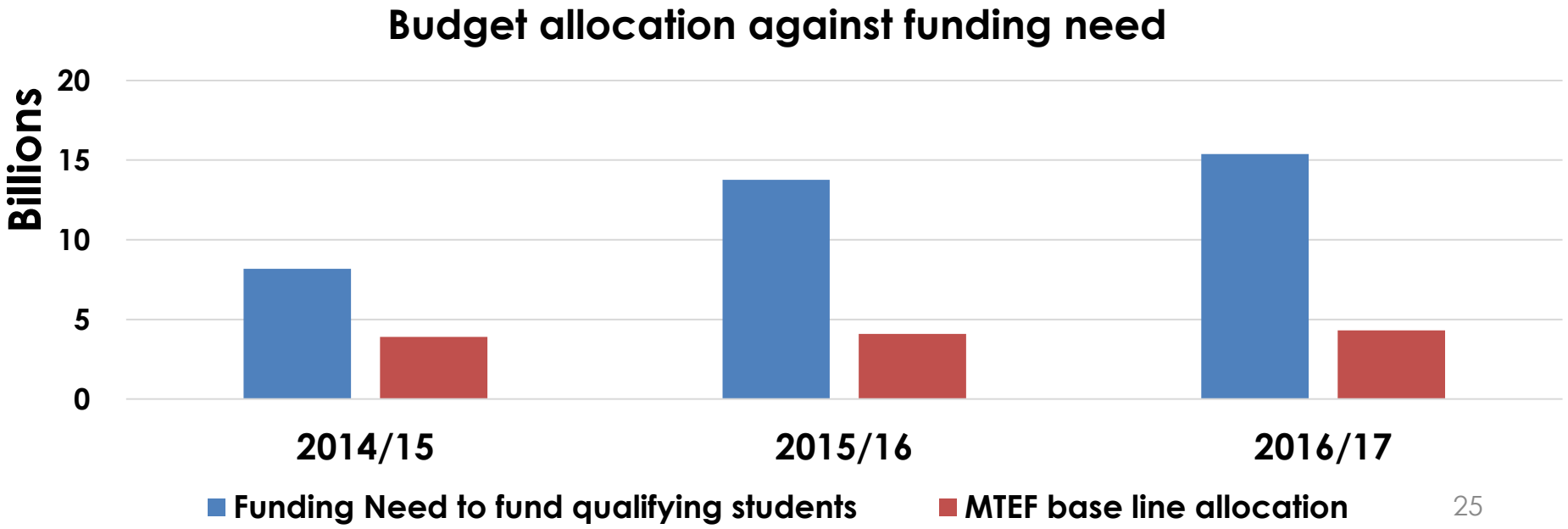
Higher Education and Funding

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



Higher Education and Funding

- Higher education demand increased by more than hundred percentage between 1994 and 2015, however supply of academic staff failed to keep 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 too
- Public funding is below the NSFAS funding needs



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 per cent growth in UG enrolment targets annually
  - Average Full Cost of Study of 9.8 per cent annually
  - Average NSFAS award at 9.8 per cent increase annually
- Funding options:
  - 16 per cent Coverage of undergraduate headcount enrolments
  - 25 per cent Coverage of undergraduate headcount enrolments
  - 100 per cent Coverage of undergraduate headcount enrolments
- Annual Budget allocation
- NSFAS re-injected funds from debt collections
- 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

Funding options-over the Medium Term - 3 years

- 16 per cent Coverage of undergraduate headcount enrolments
  - More than R 13 billion ($1 billion) additional allocation to meet the funding needs
- 25 per cent Coverage of undergraduate headcount enrolments
  - More than R 35 billion ($ 2.7 billion) additional allocation to meet the funding needs
- 100 per cent Coverage of undergraduate headcount enrolments
  - More than R 250 billion ($ 19 billion) additional allocation to meet the funding needs
- Refer to tables in following slides on more details

Higher Education and Funding- 16% cover

(16% of student population)	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)	130 844	133 199	135 597	138 037
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**

Higher Education and Funding- 25.5% or 100% cover

Average NSFAS Full Cost of Study (25.5% or 100% of student population)				
Assumptions	2016/17	2017/18	2018/19	2019/20
	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**

Public finance Status

- Parliament had 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

Keys oversight issues for consideration

- Whichever option is chosen there will be need for more funding from the fiscus. The options for higher education boils 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 decommodifed 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

Summary

- 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
- 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
  - Percentage of GDP spent on HE
  - Reduction of HE fees

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Thank you