DNA Economics

Volume 2

An analysis of existing Post-School Education and Training expenditure and Revenue

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Final version

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LIST OF ACRONYMS

AFS	Annual Financial Statement
ANC	African National Conference
APPETD	Association of Private Providers of Education, Training and Development
CHE	Council on Higher Education
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
FCS	Full cost of study
FET	Further Education and Training
FTE	Full Time Equivalent
GETC	General Education Training Certificate
HEQC	Higher Education Quality Committee
HEQSF	Higher Education Qualifications Sub-Framework
HESA	Higher Education South Africa
HRD	Human Resource Development
HRDCSA	Human Resource Development Council of South Africa
INDLELA	Institute for the National Development of Learnerships, Employment Skills and Labour Assessments
NAMB	National Artisan and Moderation Body
NC(V)	National Certificate (Vocational)
NLRD	National Learners' Records Database
NQF	National Qualification Framework
NSA	National Skills Authority
NSDS	National Skills Development Strategy
NSF	National Skills Fund
NSFAS	National Student Financial Aid Scheme
NSDS	National Skills Development Strategy
PER	Performance and Expenditure Review
PSDF	Provincial Skills Development Forums
PSET	Post-School Education and Training
QC	Quality Council
QCTO	Quality Council for Trades and Occupations
RPL	Recognition of Prior Learning
SAIVCET	South African Institute for Vocational and Continuing Education and Training
SANCO	South African National Civic Organisation
SAQA	South African Qualification Authority
SDA	Skill Development Act 97 (1998)
SETA	Skills Education Training Authority
SDL	Skills Development Levy
TVET	Technical and Vocational Education and Training
WNC	Women's National Council
PED	Provincial Education Department
GER	Gross Enrolment Ratio

EXECUTIVE SUMMARY

The Post-School Education and Training (PSET) system has a critical role to in providing the human capital, research and innovation that is needed to drive development and raise economic growth over the long term. In South Africa, the PSET system has undergone many changes since 1994; laws and policies have been overhauled, new institutions have been established, old ones have been restructured, and funding arrangements have been revised. From these changes, two distinct sectors have emerged - the university sector and the college sector (including TVET institutions).

The White Paper for PSET sets out ambitious targets to promote equitable access to education in the university and college sectors, and to meet the long-term goals of the National Development Plan. This project seeks to estimate the cost of implementing the White Paper and achieving these targets. As a first step in this process, a comprehensive review of revenue and expenditure across the PSET system has been conducted. This report sets out the main findings from this analysis.

Table 1: Summary of targets in the White Paper on Post School Education and Training

Sector	Actual	Target (2030)	% change
TVET	1 000 000#	2 500 000	150%
Community colleges	265 000^	1 000 000	277%
University	937 000*	1 600 000	71%

Source: DHET (2014)
*Baseline years differ: # 2015, ^ 2011 and *2014*

The PSET System has experienced rapid growth in enrolments and funding

Between 2010 and 2014, the PSET system experienced rapid growth in enrolments, driven by increases in headcount enrolments in TVET colleges and to a lesser extent universities. Enrolments in TVET colleges grew by 95% from 358 393 in 2010 to 702 383 in 2014, whereas university enrolments grew at a slower pace, from 892 936 to 969 155 over the same period. Despite increased enrolments, the demand for post school education and training continues to grow, placing additional pressure on educational institutions within the system. The main reasons for the rise in demand are the higher numbers of learners qualifying for university entry, the demand for post-school qualifications from employers, and policy changes that have made more funding available for technical and vocational education.

Government's contribution to the PSET system is substantial, amounting to around R41.1 billion in 2013/14, or 56% of total PSET expenditure. The bulk of expenditure in the PSET system is on the university sector, which accounts for 71% of the total, followed by workplace training (13%) and TVETs (11%).

State support to the university sector has outpaced enrolments, with total government funding per full-time equivalent student increasing in real terms over the last four years. Total government expenditure on the TVET sector has risen at an even faster rate, but has not kept up with enrolments, leading to a significant and real decline in funding per full-time student over this same

period. Moreover, the average cost of a TVET student is significantly lower than that of a university student.

Table 2: The university sector - enrolments and funding

'000	2010	2014		Growth rate	
	Nominal	Nominal	Real	Nominal	Real
Enrolments	600 002	668 705	668 705	2.7%	2.7%
State subsidies	R17 516 740	R24 155 093	R19 420 959	8.4%	2.6%
State subsidies per enrolment	R29.19	R36.12	R29.04	5.5%	-0.1%
NSFAS awards	R3 343 531	R6 969 941	R5 603 909	20.2%	13.8%
Total government funding	R20 860 271	R31 125 034	R25 024 868	10.5%	4.7%
Total government funding per enrolment	R34.77	R46.55	R37.42	7.6%	1.9%

Table 3: The TVET sector - enrolments and funding

'000	2010	2014		Growth rate	
	Nominal	**Nominal**	**Real**	**Nominal**	**Real**
Enrolments	358 393	702 383	702 383	18.3%	18.3%
State subsidies	R3 951 741	R5 827 173	R4 685 111	10.2%	4.3%
State subsidies per enrolment	R11.03	R8.30	R6.67	-6.9%	-11.8%
NSFAS awards	R317 998	R1 991 488	R1 601 178	58.2%	49.8%
Total government funding	R4 269 739	R7 818 661	R6 286 289	16.3%	10.2%
Total government funding per enrolment	R11.91	R11.13	R8.95	-1.7%	-6.9%

There has been a significant shift in Government's approach to the funding of the PSET sector, with much more funding allocated through NSFAS support to students

A large part of the growth in funding to the PSET system in general, and to TVET colleges in particular, is explained by the growing contribution of the NSFAS. Table 44 shows that funds disbursed by NSFAS increased from R3.7 billion to R9 billion between 2010/11 and 2014/15; rising at an average annual rate of 25%. Although most of this funding is disbursed to universities, the proportion of funding to TVET Colleges has risen from 8.7% of total funding to 22.2 % over this period.

Table 4: NSFAS Funding by institution

Type of institution	2010/11	2011/12	2012/13	2013/14	2014/15
Universities	R 3 343 531	R 4 833 866	R 5 871 490	R 6 729 070	R 6 969 941
TVET Colleges	R 317 998	R 1 116 591	R 1 822 497	R 1 953 253	R 1 991 488
Other Institutions	R 16 900	R 15 094	R 16 884	R 19 082	R 1 042
Total	R 3 678 429	R 5 965 551	R 7 710 871	R 8 701 405	R 8 962 471

Source: Extracted from National Treasury, 2015

While the rapid growth in NSFAS funding has enabled many more learners to access TVET colleges, the resultant enrolment growth has caused a reduction in total per learner funding and

has likely had negative impacts on the quality of technical and vocational training. Moreover, NSFAS awards have failed to keep pace with the growth in the full cost of study at many universities. The so-called "some for all" approach to NSFAS funding has therefore led to a rising payment gap, which has likely contributed to the high dropout and failure rates amongst NFSAS beneficiaries. NSFAS loan recoveries have also declined sharply, from a peak of 35.3% in 2006 to 3.7% in 2014.

Although university throughput rates have improved over time, throughput rates in the TVET sector remain low

According to 2006, 2007 and 2008 six-year cohort studies conducted by the Council of Higher Education, university throughput rates have improved over time, and are well above 50% for 3 and 4 year degrees. Based on these numbers, the total cost of producing a graduate for a three year degree averages R317 763. Over the period 2008 to 2014, the average annual growth rate for university graduates, at 5.6%, was much higher than the growth rate for enrolments over this period. This suggests ongoing improvements in efficiency in this sector.

In the TVET sector, however, throughput rates are much lower. In 2013, the average throughput rate for the National Certificate Vocational (NCV) was just 10.8%; for every ten students that enrol in an NCV course, only one will complete the course after 6 years. This undermines the efficiency of the system and greatly increases the cost of producing graduates. It consequently costs, on average, R454 260 to produce an NCV graduate.

The state's ability to invest further in the PSET system is limited

Government is under increasing pressure to meet the White Paper targets, but the PSET system is hamstrung by inefficient operations, complicated funding flows and unclear mandates. The NSFAS, which was designed as an income-contingent repayment scheme, has been unable to recover loans and replenish its funding pool. In the main, the low recovery rates of this scheme are the result of changes in the legislation, policy decisions and weak administrative capacity. This has limited the entity's ability to recover its debt; and it has become increasingly dependent on Government transfers.

NSF and SETA reserves have been used to plug the immediate NSFAS funding shortfall. In 2014/15, the NSF allocated R1.6 billion from its own reserves to the NSFAS. This despite the fact that the mandate of the NSF and the SETAs is to fund workplace and skills training. While this emergency measure has served to address the immediate funding gap, it does not provide for a sustainable and long-term solution, and the accumulated reserves of the NSF and SETAs will be quickly depleted if they continue to be diverted for this purpose.

Costing and funding the expansion of the PSET system

The proposed expansion of the university and TVET sectors comes on the back of already rapid growth rates in these sectors. Learnings from the recent past are important going forward, and have implications for the continued sustainability of the PSET system. The next stage is in this project is to develop a costing model. The main purpose of this costing model is to draw on the

historical analysis presented in this report, in order to provide policy makers with a clear view of the future resource requirements needed under different implementation assumptions. In a fiscal environment, where resources are constrained, this costing model will assist Government in making the decisions, choices and trade-offs that will be required to realise the intent and objectives of the White Paper.

PART A: INTRODUCTION

1 OVERVIEW

Since South Africa's first democratic elections in 1994, the Post-School Education and Training (PSET) system has undergone many changes. National policies have been transformed, legislation and regulations have been revised, new institutions have emerged and old ones have been restructured, and alternative funding arrangements have been developed. From all of these changes, two distinct sectors have emerged - the university sector and college sector.

The university sector consists of 26 public universities, providing a range of traditional and technical programmes. Traditional universities offer high level and specialised programmes, whereas universities of technology have a narrower academic mandate, and focus on science, engineering, and technology programmes as well as business and management. Comprehensive universities have attributes of both types of universities. The college sector is somewhat new construct, combining Technical Vocational Education and Training (TVET), previously known as Further Education Training colleges, with community (adult learning) colleges.

The White Paper for PSET, released by the Department of Higher Education and Training in 2013, outlines the core challenges confronted by the system, and sets out a number of policies for growing the capacity of the university and college sectors. Specifically, this paper proposes three specific targets to be achieved over the NDP period, by 2030.

Table 5: Summary of targets in the White Paper on Post School Education and Training

Sector	Actual	Target (2030)	% change
TVET	702 000*	2 500 000	256%
Community colleges	265 000^	1 000 000	277%
University	937 000*	1 600 000	71%

*Source: DHET (2014) Baseline years differ: ^2011 and *2014*

Increasing the size of the PSET system by this scale, in less than two decades, will be complex and costly. This at a time when Government resources in general, and funding to the higher education system in particular, are severely constrained. Whereas the White Paper sets out the needs of the system and how these should be addressed; it does not try to cost these various interventions. Moreover, the White Paper does not consider the different funding options available to the system in any detail, and how these can be made more efficient or sustainable.

This project seeks to estimate the cost of implementing the White Paper. In doing so, the findings from this research will provide policy-makers with the information and evidence that they need to make informed choices about implementation of the White Paper, and to understand the resourcing requirements associated with these choices. In parallel to this project, the DHET has begun work to develop an implementation plan for the White Paper; and it is critical that these processes continue to inform each other.

The costing exercise begins with an analysis of the level and composition of expenditure across the PSET system; and identifies the main sources of funding (Part **B**). The report then examines the changing patterns of funding, revenue, and expenditure within each of the sectors. Part **C** reviews income and expenditure trends in the college system; Part **D** examines the university system; and Part **E** workplace training. Part **F** describes the main funders of the PSET system and concludes this report.

PART B: THE PSET SYSTEM

2 THE STRUCTURE OF THE PSET SYSTEM

The White Paper sets out a framework for a comprehensive, consistent, integrated system of post school education and training. Conceptually, as Figure 1 shows, the White Paper identifies two distinct sectors: the college and university system. Whereas the university sector is relatively well established, the college sector is a new concept within the South African PSET system.

The emergence of a college sector is the result of policy decisions aimed at increasing access to continuous and ongoing training for adults and providing technical and vocational training to school leavers, who have exited the basic education system and do not qualify for entry into universities or need to acquire skills that are directly relevant to the workplace. Community colleges are set to become the primary avenue for furthering adult education; and TVET's are expected to expand access to education primarily for the NEETs (those Not in Employment, Education, or Training).

Figure 1: Conceptual understanding of the PSET system

Source: DNA Economics and Mzabalazo Advisory Services

Another important aspect of the White Paper is the positioning of skills and workplace training within the PSET system. Whereas skills and workplace training cut across the college and university sectors, the SETAs are expected to play a critical role in consolidating skills development plans, providing information to the university and college sectors on the type of skills needed by employers, and helping direct resources for workplace training. Funding arrangements for the skills system and workplace training also differs from that of the college and university sector, with a dedicated payroll tax (the Skills Development Levy) in place to support SETA and company initiatives in this area.

Finally, the DHET has a key part to play as the custodian and steward of policy and institutions in the PSET system; and the NSFAS and NSF play an increasingly important role in funding the system. The actions and decisions of these parties greatly influence the allocation of resources between and within the university and college sectors.

3 EXPENDITURE ON PSET

3.1 How much is spent on PSET?

As shown in Table 6 below, a total of R76.3 billion was spent on the PSET system in 2014/15, which represents 2% of the country's GDP. This includes final expenditure by TVET colleges, universities, SETAs, Community Colleges and other supporting institutions such as the DHET itself. There are no reliable estimates of expenditure for community colleges, and transfers to these institutions are therefore used as a conservative proxy[1]. The table shows that the bulk of expenditure on the PSET system is in the university sector, which accounts for 69% of the total, followed by expenditure by SETAs and the NSF (16%) and TVET colleges (11%). Very little data is available on the expenditure of private education and training providers and hence (non-SETA funded) private expenditure is not included here.

Table 6: Expenditure on the PSET system (2014/15)

Sector	Amount (R'000)	Percentage
TVET Colleges	R8 501 243	11%
SETAs and NSF	R12 353 705	16%
Universities	R52 860 091	69%
Community Colleges	R1 731 890	2%
Other institutions (incl. DHET)	R426 536	1%
Total	**R76 270 232**	**100%**
Total as % of GDP	**2.0 %**	

Source: DNA Economics calculations[2] based on data provided by the DHET

3.2 How much does government spend?

Funding arrangements for the university and college sectors differ substantially from that of the skills and workplace training system. The university and college sectors are funded from subsidies, student fees and 'other third stream sources' of income. The state provides subsidies to universities, and provides funding to the NSFAS for loan and bursary disbursements. In contrast, the Skills Development Levy, introduced in 1999, primarily funds the skills and workplace training system.

State funding accounted for 70% of total expenditure on the PSET, or about R53.5 billion in 2014/15. Of this amount, direct subsidies to the college and university sectors accounted for 56.1% of total government expenditure, with transfers to NSF and SETAs (through the Skills Development Levy) accounting for the next largest amount (23.1%). This figure may underestimate the total

[1] This approach may underestimate expenditure in the community college sector, as donors, foundations, and private companies do fund programmes within these PALCs.

[2] It should be noted that some SETA funds are eventually spent within the other sectors (TVET, Universities and Community Colleges), the exact amount of which is not available. As a result the above table does include some degree of double counting; but the impact of this is likely to be very minor.

spending by government, as some of the expenditure by other departments and public entities on the PSET system cannot be easily identified.

Table 7: Government contribution to PSET by source (2014/15)

Government Source	Amount (R'000)
DHET Transfers to Universities	R24 155 093
DHET Transfers to TVET colleges	R5 827 173
Community Colleges	R1 731 890
NSF and SETAs (SDL)	R12 353 705
NSFAS	R8 961 429
PSET Institutions (incl. DHET)	R426 536
Total	**53 455 826**
Government PSET expenditure % of total PSET expenditures	**70.09%**
% of total of tax revenue	**5.42%**

Source: DNA Economics based on various sources of information

The growth in government's share of expenditure on PSET resulted from an increase in transfers from the department, which grew from R34.4 billion to R44.8 billion between 2011/12 and 2014/15 at an average annual growth rate of 9%; as shown in Table 8.

Table 8: Transfers to the PSET Sector between 2011/12 and 2014/15

	2011/12	2012/13	2013/14	2014/15
	R'000			
NSFAS	R 3 956 849	R 5 195 661	R 5 769 405	R 6 138 832
CHE	R 36 772	R 39 993	R 41 888	R 42 689
SAQA	R 41 435	R 45 723	R 49 401	R 55 008
HESA	R 3 000	R 5 000	R 7 000	R 7 420
NSF	R 19 934			
QCTO	R 26 889	R 20 352	R 21 747	R 23 167
TVET	R 871 195	R 973 356	R 1 084 062	R 1 148 072
University subsidies (current)	R 17 714 461	R 19 026 612	R 20 077 668	R 21 283 093
University subsidies (capital)	R 1 639 698	R 1 814 414	R 2 011 099	R 2 213 000
University of Mpumalanga and Sol Plaatje University (current)	R 0	R 0	R 28 719	R 159 000
University of Witwatersrand:University of Mpumalanga and Sol Plaatje University (capital)	R 0	R 0	R 150 000	R 500 000
Other	R 67 867	R 160 089	R 221 711	R 102 119
Direct Charges	R 10 025 200	R 11 694 500	R 12 090 200	R 13 200 000
Total Transfers	**R 34 403 300**	**R 38 975 700**	**R 41 552 900**	**R 44 872 400**

Source: 2015 ENE

About 13.9% of these transfers were earmarked for student fees through the NSFAS in 2013/14.

Over the same period, government tapped into the Skills Development Levy to plug shortfalls in funding for the college and university sectors. This involved using the NSF's accumulated reserves to fund the NSFAS and over-enrolments in TVET colleges. However, as the accumulated reserves of the NSF dwindled as grant application and adjudication processes and financial management improved, the department has more recently opted to use the uncommitted surpluses accumulated by the SETAs to meet these funding gaps.

Although the use of uncommitted accumulated reserves (initially from the NSF and now from SETAs) is a 'quick fix' for the funding constraints currently experienced, it is not a sustainable long-term solution to funding the sector. Eventually, as accumulated reserves erode, government will again face the challenge of maintain these higher funding levels

3.3 Sources of funding

Institutions within the PSET system receive funding from multiple different sources. Moreover, the nature and size of these different contributions have changed over time in response to policy and legislation.

Table 10 shows the PSET funding matrix for one year, 2013/14. It shows that in this year, TVET colleges received 60% of their funding from the DHET through a subsidy. A further 20% of funding received was obtained from the NSFAS, mainly through grants made to students. The NSF funds over-enrolments, and provided a further 5% of total funding. TVET colleges also receive approximately 5% of their funding from non-academic activities such as project work, rental of facilities, and other own sources of revenue.

In this same year, the university sector received 40% of its funding from the DHET through block and earmarked grants. NSFAS funding for student fees contributed about 13% and income from private fees accounted for about one fifth of total funding.

Most of the NSFAS' income comes directly from Government appropriations, though in 2013/14, the NSF's contributed significantly to meet the shortfall in NSFAS's funding. The NSFAS also manages bursary and loan schemes on behalf of other departments, such as the department of basic education.

The SETAs and the NSF's receive an overwhelming majority of their funding from the Skills Development Levy; with a significant portion of the SETAs accumulated reserves 'swept' to the NSF in 2013/14.

Table 9: Funding matrix for 2013/14

System / Institution	DHET	NSFAS	National Skills Levy	NSF	Private Tuition / Exchange Fees	Third stream / Private (non-fees) funding	SETAs	Investments	Other government departments
	R'000								
TVET Colleges	5 827 173	R1 991 488		R 480 000	R 466 812*	R 466 812*	R 466 812*		
SETAs			R 9 673 800			R 203 659*		R 305 488*	
Universities	R 24 155 093	R6 969 941			R 13 693 973	R 11 803 438		R 2 599 819	
NSFAS	R 5 681 729			R 1 630 058				R 655 457	R 1 149 222
NSF			R 2 514 907				R 1 104 809	R 391 064	

Source: DNA Economics based on various sources of information
** Estimations*

Table 10: Funding matrix for 2013/14

	Source of funds							
	Appropriations		Skills Development Levy		Private funding		Other	
System / Institution	DHET Subsidy	Transfer from NSFAS to households	SETAs allocation	NSF allocation	Private Tuition / Exchange Fees	Third stream / Private (non-fees) funding	Investments and interest	Other government departments
TVET Colleges	60%	20%	5%	5%	5%	5%		
Universities	40%	13%			20%	27%	Nothing here for universities?	
SETAs			95%			2%	3%	
NSFAS	66%			19%			8%	7%
NSF			27%	63%			10%	

Source: DNA Economics calculations

The complexity of the funding flows in the PSET system, as illustrated above, have cost and efficiency implications. For example, the Skills Development Levy is collected by SARS from employers, and deposited in the National Revenue Fund. The DHET then allocates the SDL between the NSF and SETAs. Based on the SETA grant regulations, the uncommitted surpluses of SETAs are then transferred to the NSF. The NSF in turn transfers funding to NSFAS to fund shortfalls in financial aid for TVET college and university students. As a result, universities and TVET colleges receive funding from the NSF, SETAs, NSFAS, and the DHET (in the case of the subsidy). The longer the chain from the origin of the funding to the final beneficiaries, the more likely that administrative and reporting costs will reduce the pool of funding available to the end beneficiaries of the system.

Key points and policy issues

More than half of the R66.9 billion spent on the PSET system in 2013/14 was funded from budgetary appropriations. This approach may be equitable, in that it lowers the cost of access to education for poorer students, and does not encumber them with long-term loan obligations. However, the cost of this system is carried by the general population, including those who are unable to access these benefits; and the funding model does not recognise the private gains that are derived from post school education and training.

In addition, direct appropriations are currently insufficient to meet the funding demands of the system, and Government has used the Skills Development Levy to fund the college and university sectors. In the past, this funding has come from the NSF's accumulated reserves, which have been re-allocated to fund the shortfall in NSFAS funding. In future, it seems that this funding gap will be partially financed from the uncommitted and accumulated reserves of SETAs that have been reallocated to the NSF. The 'sweeping' of reserves from the SETAs to the NSF equips the DHET with the authority to deliver a short-term solution to the current crisis. However, access to these funds is temporary, is not subject to the same accountability and controls that apply to appropriated funds, and does not provide for a sustainable funding solution for the system.

PART C: THE COLLEGE SECTOR

4 TVET COLLEGES

The revenue and expenditure analysis provided here is based on the recent Performance and Expenditure Review of the TVET sector commissioned by National Treasury[3].

4.1 Overview of sector

4.1.1 The role of the TVET sector

Technical Vocational Education and Training (TVET) colleges (previously referred to as Further Education and Training, or FET, colleges) aim to provide educational opportunities to those who either do not qualify for tertiary education or who feel they require vocational training with direct application to the workplace. According to the National Development Plan (NDP), the sector has a critical role to play in the development of practical, employable skills and, hence, the reduction of youth unemployment and skills shortages in the country. This is reflected in the White Paper target to increase enrolments in public TVET colleges from approximately 400,000 in 2011, to 639,618 in 2013 (DHET, 2015) to 2.5 million in 2030 (DHET, 2013). There are currently 50 public TVET colleges in the country, with over 260 campuses.

4.1.2 TVET programme offering

The two main programme streams offered by TVET colleges, and the focus of this study, are the National Certificate (Vocational) ("NC(V)") programmes and NATED (or "Report 191") programmes. NC(V) programmes were introduced in 2007 as a parallel alternative to the National Senior Certificate, but with a greater emphasis on practical and vocation-specific learning. NC(V) programmes run over three years (at NQF levels 2 to 4) and now attract the largest proportion of funding and expenditure among programmes in the sector. NATED, or "N", programmes were historically the flagship programmes of the TVET / FET sector, and acted as the theoretical component of the artisanal training system for apprentices employed by private sector firms. Whereas in the past in terms of the apprenticeship system learners would first be contracted with and employer and would then be released from work to attend the training, in recent times, learners increasingly enrol in NATED without first being employed or obtaining employer sponsorships. The learners seek work experience but often do not find it. NATED courses are primarily theoretical in nature and are presented over six trimesters for Engineering Studies (N1 to N6) or three semesters for business and services programmes. Colleges also present a range of other programmes including short courses and workplace-related programmes such as learnerships, apprenticeships, and occupational qualifications. Table 11 shows how enrolments have increased in public TVET colleges since 2010.[4] Rigorous auditing processes and systems are not in place in all colleges to ensure that college enrolment figures are accurate, and hence these figures should be interpreted with some caution; particularly for less recent data.

[3] See (National Treasury, 2015) TVET Performance and Expenditure Review draft report.
[4] Note that enrolments for all colleges for 2015 have not been published by the DHET at the time of writing.

Table 11: Public TVET College Headcount Enrolments from 2010 to 2013

Year	NC(V)	NATED	Occupational Qualifications	National Senior Certificate	Other / unspecified	Total
2010	130,039	169,774	23,160	3,916	31,504	358,393
2011	124,658	222,754	20,799	1,128	30,934	400,273
2012	140,575	359,624	62,456	1,715	93,320	657,690
2013	154,960	442,287	19,000	1,693	21,678	639,618
2014	162,874	478,310	19,825	428	40,946	702,383

Source: DHET Statistics on Post-School Education and Training in South Africa 2010, 2011, 2012 and 2013.
Data for 2014 provided by DHET VCET officials to the project team.

4.1.3 Key challenges of the TVET sector

The White Paper highlights the key role that the college sector (TVET and Community Colleges) has to play in the development of mid-level skills; of which there are currently serious shortages in the country. However, a number of challenges inhibit the ability of the TVET sector to address these shortages; all of which have significant current and future cost implications:

- The government funding available to TVET colleges has historically differed significantly by province; with some provinces providing particularly low funding (per learner) relative to the existing funding norms
- Despite recent increases in funding, many colleges still are not able to employ or retain skilled lecturers and deliver high quality training.
- In addition, many colleges still do not have sufficiently robust data and financial systems to enable effective monitoring and management
- Low throughput and certification rates severely hamper the potential impact of TVET colleges. In 2013, the average certification rate for NC(V), NATED Business and NATED Engineering per level was 32.5%, 32.4% and 48.6% respectively (DHET, Statistics on Post-School Education and Training 2013, 2015). The result is that only a small proportion of learners actually complete all levels of these programmes (less than 5% at many colleges), meaning that calculated costs per graduate can be very large (National Treasury, 2015).
- The White Paper calls for the re-design and streamlining of TVET programme curricula and delivery methods due to the recognition of several weaknesses in existing programmes; for example:
    - NC(V) programmes are not as practically and vocational relevant as they were intended to be; with colleges spending substantially less on the practical aspects of training than was expected during the design of the funding norms, as discussed in Section 4.3 below
    - While NC(V) programmes were originally intended to be targeted to learners who have completed Grade 9 (NQF1), colleges increasingly accept and encourage enrolments from students who have completed higher qualifications; often in response to the difficulties experienced by learners with only Grade 9 in coping with

the NC(V) syllabi (particularly in Engineering and IT programmes[5]). This creates inefficient and expensive learning pathways for the education system as a whole since many learners are being funded first to complete their schooling to grade 11 or 12 and then funded again to complete the NCV from level 2 through to level 4. Some then go on to enter learnerships funded by SETAs and so end up being funded three times to achieve (or in many cases not achieve) the equivalent of a Matric.

- An associated challenge is that classes for NCVs can include a wide range learners in terms abilities and age. This creates difficulties for teachers who are often already having to cope with large classes, resulting from expanded numbers entering the colleges.[6]
- NATED curricula have in many cases become outdated and out of touch with the demands of the workplace; a problem worsened by the fact that most NATED students no longer receive concurrent workplace training[7].

4.2 Revenue

The vast majority of government post school education funds were historically directed towards the university sector. More recently, funding towards FET level technical and vocational education and training has increased. The considerable growth in funding for TVET colleges has been underpinned by the recognition that occupational and vocational trades are important contributors to employment and a country's long-term development trajectory, as well as the recognition that many potential TVET students require NSFAS support to be able to enter the sector.

Figure 2 provides a breakdown of the sources of funding received by public TVET colleges in 2013, which totalled R9.1bn[8&9]. Colleges receive the majority of their funding through direct transfers from the DHET. In addition, government supports TVET colleges through student bursaries provided by the NSFAS and specific funding provided by the NSF and the SETAs. Private revenue through (non-bursary) course fees, donations and private company funding comprise only a small share of income. This means that any increase in enrolments to meet long term targets would have to be funded almost exclusively by government, unless the funding structure or programme mix of public TVET colleges change dramatically. The options available for accessing other sources of funding TVET sector targets will be evaluated in the Funding Options phase of this project.

A key change to college funding in recent times, is the substantial increase in the amount of student bursaries provided by NSFAS; increasing from R0.3bn in 2009 to R1.83bn in 2013 in an

[5] This point was widely raised by interviewed officials during the National Treasury's Performance and Expenditure Review performed by DNA Economics (National Treasury, 2015)

[6] White Paper on Post School Education and Training (2013), p. 16

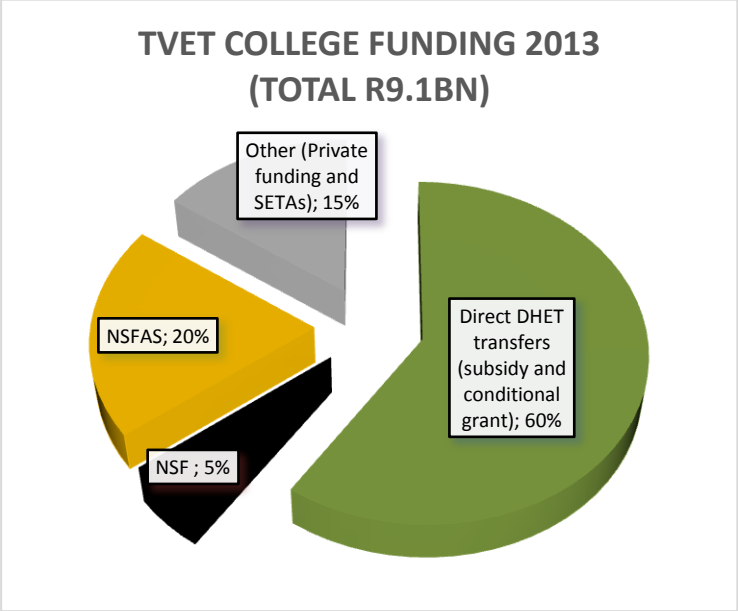
[7] White Paper on Post School Education and Training (2013), p. 14

[8] The "Other" funding category in Figure includes SETA funding – i.e. not exclusively non-government funds – as it was not possible to isolate funding from SETAs from other project funding received by colleges from private entities.

[9] A detailed breakdown of funding for other (non-2013) recent years could not be provided from the data available to the project team

attempt to increase access to the TVET sector. While this has allowed significant increases in enrolments in the sector, this has made TVET colleges even more reliant on public funding.

Figure 2: Overall TVET funding by source



Source: Source: National Treasury, 2015 & TVET Performance and Expenditure Review draft report

On 15 May 2015, the revised National Norms and Standards for Funding Technical and Vocational Education and Training Colleges were published. The document identifies seven possible streams of TVET college income (DHET, 2015c), which are discussed in turn below. While limited historical data makes it difficult to evaluate the longer-term impacts and appropriateness of the funding system, the relationship between funding and expenditure in the selected sample of colleges is considered in Section 4.3.

4.2.1 Formula funding

Formula funding, transferred from the DHET, is meant to cover the majority of the costs of delivering NATED and NC(V) programmes. This includes the recurrent direct lecturing and programme costs, on-going programme-related capital costs[10] and college overhead costs related to administration and student support.

Formula funding is currently provided either directly to colleges or directly to college staff (through salaries) that are registered on PERSAL. Before 2013/14, TVET funding was allocated and dispersed to colleges by Provincial Education Departments (PEDs, funded through a Conditional Grant system).As a result, both the amount of funding and the factors determining funding differed by province. .

[10] This includes the equipment, machinery and facilities required to deliver practical training

Table 12 shows how the total direct funding of TVET colleges by PEDs had increased over time. Between 2010/11 and 2014/15 the state appropriation funding increased, in nominal terms, by 47% (R3.95bn to R5.82bn) and the NSFAS TVET funding of TVET increased by 526% (R0.32bn to R1.99bn – see Section 8); hence the total TVET public funding[11] has increased by 83% (R4.27bn to R7.8bn) in this period. TVET enrolments over the same period has increased by 96% (358,393 to 702,383 - see Table 11)[12].

Table 12: Direct TVET College funding since 2011/12

Financial Year	Amount provided (R'000)	Growth rate
2010/11	R3,951,741	
2011/12	R 4,375,311	10.7%
2012/13	R 4,844,607	10.7%
2013/14	R 5,467,377	12.9%
2014/15	R 5,827,173	6.6%
2015/16	R 6,179,574	6.0%

Source: For 2010/11 to 2013/14: (DHET, Statistics on Post-School Education and Training 2013, 2015)*;*
For 2014/15 & 2015/16: Data provided to project team by DHET

In the current system, the funding formula calculates the college allocation based on Full-Time-Equivalent (FTE) students per programme for NC(V) and NATED programmes, by taking into account programme specific cost factors[13], the assumed fee level and an output bonus. The output bonus adds a performance bonus element to the formula, although it would appear that in practice it has never been allocated (primarily due to insufficient funds).

The total revenue "required" to present programmes is calculated by multiplying the assumed costs in the funding model per programme by the number of FTE enrolments in that programme. In theory, it is then assumed that 80% of this required amount should be funded from the DHET transfer and 20% from other sources (i.e. private fees and NSFAS). However, in practice, a college receives only a proportion of this 80% from the DHET based on the total funds made available by the DHET to the TVET sector and which province the college is based in. Despite college funding and administration being migrated to being a national function, colleges still receive inequitable amounts of funding based on which province they are located[14]. As a result, while a programme-level costing formula is used to determine the funding norms (based on FTE students), the percentage of funding relative to these norms differs substantially by province; ranging from 52% to 79%.

[11] This ignores the contribution of SETAs to the TVET sector; which is not available. As SETA grants are directly provided to an employer who then chooses a training provider, it is difficult for colleges to track what proportion of their income originates from SETAs.

[12] As mentioned in Section 5.1.2, enrolment figures should be interpreted with some caution

[13] For example, in 2014/15 the funding model assumes that it costs R59 986 per FTE to deliver NC(V) Hospitality, whereas it assumes R31 443 per FTE for NC(V) Office Administration.

[14] As the total funding available did not increase substantially at the time of the migration, it was not possible to equalize funding across provinces without reducing funding substantially in some provinces.

The funding formula used does not incorporate college specific factors, other than the province the college is based in and its enrolments by programme. This assumes that the programme level funding model is equally appropriate for all colleges, regardless of whether they are urban or rural, large or small, or produce high certification rates or not. The funding model's indifference to student performance also does not incentivise colleges to improve performance; since no output bonus has been allocated thus far. The funding mechanism can even create a perverse incentive to enrol more students even if dropout rates are high, as funding is allocated regardless of dropout rates.

4.2.2 Earmarked-capital funding

This funding stream is earmarked to cover three specific types of capital expenditure: expenditure on the expansion of existing campus infrastructure; the construction of new campuses; or capital expenditure to address backlogs inherited from the past. This funding is dispersed via conditional grants or by matching grants through joint investments with the private sector.

4.2.3 Earmarked recurrent funding

This funding stream is earmarked for developmental projects, specifically focussing on staff development, the implementation of computerised systems and college-level-research. Additionally, the earmarked recurrent funding stream covers the resources required for a basic minimum package of services to be provided by all colleges as defined by the DHET.

4.2.4 College fees

The funding formula assumes that 80% of the cost of providing the programme should be covered directly by the state with the remaining 20% being funded through college fees (which may be funded privately or through NSFAS). In setting fees, colleges should therefore not deviate substantially from what is considered fair practice (as defined by the funding formula determining the total cost of presenting a programme).

4.2.5 Student financial aid

Colleges also receive indirect funding through student financial aid in the form of bursaries from state or private organisations to students. The primary state organisation responsible for granting bursaries to TVET students is the National Student Financial Aid Scheme (NSFAS). In 2014, 228,642 learners received NSFAS bursaries, which represents 36% of TVET enrolments across NC(V) and NATED. However, as NSFAS funding is not provided to those repeating subjects - and both programme have high failure and repeat rates – a much higher proportion of first-time students receive NSFAS funding.

4.2.6 Fee-for-service income

This includes income generated by colleges for providing training services to public and private sector institutions (including SETAs) on a market basis to private and public clients outside of the formula funding system.

4.2.7 Other private funding

This could include any funding sources not covered by the six sources discussed above. Some examples that are mentioned in the policy document are development funding received from international donors and income from the sale of good or services produced by students as part of their training programmes.

There is currently a task team within DHET that is reviewing the funding methodology for TVET colleges which could result in changes to the mechanism through which funding is allocated in future, although it is not yet clear what changes are likely to result.

As enrolment targets have increased at a faster rate than funding per enrolment for NC(V) and NATED over the last few years, colleges have been encouraged to increase enrolments in programmes not directly funded by the DHET. While the proportion of enrolments in non-NC(V), non-NATED programmes were still only 6.4% of total enrolments in 2013 (DHET, 2015), this proportion is expected to increase in future, particularly given White Paper plans for a greater amounts of SETA funding in public TVET colleges. Unfortunately, very little financial data exists for these "other" programmes (i.e. non-NC(V), non-NATED) presented by TVET colleges, other than what is available on a case-by-case basis through SETAs[15].

4.3 Expenditure

4.3.1 Methodology

The analysis in this section is taken from the recent Performance and Expenditure Review (PER) of the TVET sector (National Treasury, 2015).[16].

Historically accurate, detailed financial data for the TVET sector has been difficult to find, as was highlighted by a 2010 audit of the sector conducted by the HSRC (Cosser, Kraak and Winnaar, 2010). While the quality and quantity of data available centrally has improved in recent years, data is often still lacking in accuracy and/or consistency. In particular, analysis of centrally available data during the PER revealed that college expenditure data was not available in consistent formats and frequently contained inaccuracies or anomalies that could not be resolved without detailed analysis.

It was therefore clear that colleges would have to be contacted individually if a meaningful expenditure analysis was to be conducted. The PER team selected a sample of 15 colleges[17] to ensure that programme-level[18] expenditure analysis could be conducted. Detailed expenditure data

[15] As these programmes are not directly funded by the DHET as part of formula funding, relatively little formalised, verified data and information is provided by colleges on their nature and costs

[16] Note that to contain the size of this document, only a summary of the approach, key sections and findings of the PER is provided here.

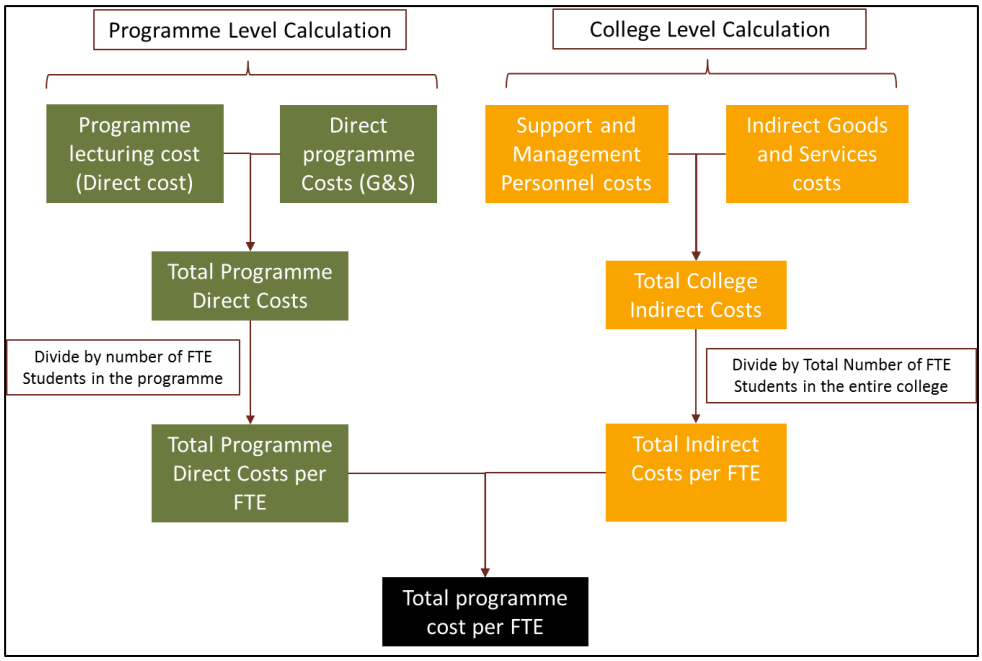
[17] While the initial sample included 15 colleges, sufficiently accurate data was only received from 12 of these colleges, despite the best efforts of the project team. The three colleges were excluded due to student unrest, an inaccurate data submission and unresponsiveness of key officials respectively.

[18] Note that the term "programme" here refers to the training programmes presented by the college; e.g. NC(V) Office Administration or NC(V) Electrical Engineering

was collected from this sample of colleges, which was supplemented with data from financial statements, trial balances and PERSAL as well as interviews conducted with college staff and management. All data collected was for 2014.

The key output of the expenditure analysis is the amount spent by each college per FTE student (which will be referred to occasionally as the "unit cost") for each of the programmes it presents. Figure 3 provides a high level representation of the methodology adopted, while a more comprehensive discussion is given in Appendix 3

Figure 3: Expenditure Analysis Methodology



Source: National Treasury, 2015

4.3.2 College level expenditure

Table 13 lists how much each of the sampled colleges spent per student in 2014 on its lowest cost, average cost and highest cost programme within NC(V) and NATED separately. For example, Buffalo City college spent R35 792 per FTE student on its lowest cost NC(V) programme (Office Administration), R45,022 on its most expensive NC(V) programme (Mechatronics) and R37,708 on average across all NC(V) programmes. The table is listed in descending of the average costs. The table displays the substantial differences in unit costs (expenditure per FTE) amongst colleges; with average spending on NC(V) ranging from R20,063 to R39,925 and average spending on NATED ranging from R15,462 to R36,763 per FTE. These spending differences between colleges and relative to the norms reflect primary: (1) differences in learner to lecturer ratios and (2) differences in the breakdown of spending between different categories of expenditure (see Section 4.3.4).

Table 13: Minimum, average and maximum college programme expenditure per FTE

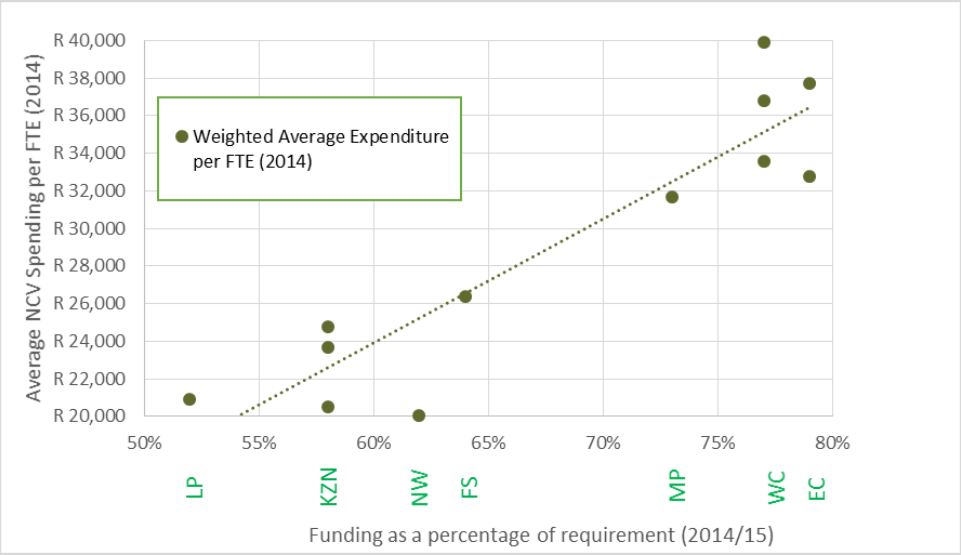
College	Minimum Expenditure per FTE (2014)	Average Expenditure per FTE (2014)	Maximum Expenditure per FTE (2014)
NC(V)	**R 17,561**	**R 29,220**	**R 48,362**
South Cape	R 37,462	R 39,925	R 44,023
Buffalo City	R 35,792	R 37,708	R 45,022
Boland	R 33,693	R 36,812	R 48,362
Cape Town	R 29,895	R 33,589	R 45,024
East Cape Midlands	R 31,074	R 32,744	R 36,473
Nkangala	R 24,561	R 31,663	R 34,873
Flavius Mareka	R 22,988	R 26,368	R 31,407
Thekwini	R 23,049	R 24,746	R 28,637
Umgungundlovu	R 18,601	R 23,681	R 28,564
Lephalale	R 19,221	R 20,898	R 24,985
Esayidi	R 19,058	R 20,519	R 22,744
Orbit	R 17,561	R 20,063	R 26,434
NATED	**R 13,703**	**R 21,401**	**R 105,782**
South Cape	R 31,627	R 36,763	R 39,480
Boland	R 27,793	R 31,627	R 43,101
East Cape Midlands	R 21,837	R 25,228	R 32,505
Cape Town	R 21,222	R 25,061	R 51,592
Umgungundlovu	R 20,920	R 22,823	R 24,832
Thekwini	R 16,552	R 22,678	R 27,905
Buffalo City	R 18,951	R 21,842	R 26,918
Nkangala	R 17,468	R 19,496	R 24,349
Orbit	R 13,703	R 18,974	R 105,782
Esayidi	R 16,846	R 18,256	R 20,934
Flavius Mareka	R 14,475	R 15,919	R 20,191
Lephalale	R 14,409	R 15,462	R 59,496
Overall	**R 13,703**	**R 24,799**	**R 105,782**

Source: National Treasury, 2015

These differences in average spending appear to be largely related to funding, as might be expected. Figure 4 displays average college expenditure on NC(V) against the level of funding received in 2014 as a proportion of the funding norms as determined by the DHET funding model. As discussed in Section4.2.1, although funding norms are calculated using the same enrolment based formula for all colleges, provinces receive different proportions of this norm. Figure 4 shows that in the sample, colleges in provinces that receive more funding relative to the funding norms (like the Western Cape and Eastern Cape) spend substantially more than those in provinces such as Limpopo or KwaZulu-Natal that receive less funding relative to the norms. What is also interesting about this result is that, in the sample, a 1% increase in funding is, on average,

associated with 2.2% (R657) higher NC(V) per FTE expenditure[19]. This more than one-to-one increase in spending suggests that better funded colleges are also more able to attract other sources of funding.

Figure 4: Average NC(V) College Expenditure per student FTE relative to funding



Source: National Treasury, 2015

4.3.3 Programme level expenditure

Contrary to what might be expected based on the programme level funding norms, unit costs don't typically differ substantially between different programmes within the same college; as is evident, firstly, by looking horizontally within a college in Table 13 above. With the exception of a few isolated cases, the range between minimum and maximum programme expenditure per FTE within a college is relatively small relative to the average. Indeed the cost of the most expensive NC(V) programme in the five lowest expenditure colleges is still lower than the minimum expenditure in the five most expensive colleges. For NATED, the same observation is broadly true, except for a few cases where maximum expenditures are very high. These high maximum values – for example the R105,782 maximum observed for NATED Tourism studies at Orbit college - are usually the result of very low student numbers in a programme which means that fixed lecturing costs are divided between these few students. These high costs, therefore, do not appear to be indicative of variances in the underlying costs of presenting different programmes.

Table 14 is similar in structure to Table 13, with the focus being specifically the minimum, average and maximum amounts per FTE that different colleges spent on the specified programmes. It is again immediately evident that there is very little difference in the average amounts spent on different programmes, with NC(V) between R26,426 and R31,445 and NATED between R19,686 and R24,527. The wide variances between minimum and maximum expenditure levels are

[19] Similarly, spending on NATED programmes increase on average by 1.8% (or R393) per student for a 1% increase in funding

determined largely by differences in total funding available to different colleges, rather than underlying differences between programmes.

It appears likely that (within the sample) NC(V) programmes subsidise NATED programmes to some extent; since NC(V) programmes on average receive 80% higher funding than NATED programmes per FTE, while average spending per FTE is only 37% higher in the sample. This can be seen from last two columns of Table 14, which provide the programme costs from the funding norms and a comparison of the average expenditure to this norm. Average expenditure on NC(V) programmes is typically only about 60% of funding norm costs, whereas NATED average costs in some cases even exceed the norm cost. Funding norms directly determine the funding per programme, and hence they provide a mechanism to investigate the degree of subsidisation between different programmes.

Table 14: Minimum, average and maximum college programme expenditure per FTE (in R)[20]

	Minimum Expenditure per FTE	Average Expenditure per FTE	Maximum Expenditure per FTE	Funding Model (Normed) Cost Assumption 2014/15	[Average Exp.] as a % of [Normed Cost]
NATED	**13,703**	**21,401**	**105,782**	**25,666**	**83%**
Management Assistant	14,495	24,527	39,383	19,818	124%
Educare	13,703	22,875	59,496	24,074	95%
Financial Management	16,886	22,667	34,069	19,818	114%
Business Management	17,342	20,863	36,370	19,818	105%
Engineering Studies N4-N6	16,260	20,783	27,610	23,406	89%
Human Resource Management	14,409	20,302	31,627	19,818	102%
Engineering Studies N1-N3	14,475	19,686	39,480	20,063	98%
NC(V)	**17,561**	**29,220**	**48,362**	**46,349**	**63%**
IT and Computer Science	20,658	31,939	44,023	48,200	66%
Hospitality	21,344	31,445	48,362	59,986	52%
Tourism	17,561	31,094	38,733	45,690	68%
Electrical Infrastructure Construct.	18,601	29,406	41,387	48,938	60%
Engineering and Related Designs	20,390	29,349	41,372	64,359	46%
Civil Engineering & Construction	19,058	28,937	41,860	49,615	58%
Finance, Economics and Accounting	19,343	27,627	36,406	35,176	79%
Office Administration	19,131	26,426	40,626	31,443	84%
Total	**13,703**	**24,799**	**105,782**	**36,007**	**69%**

Source: National Treasury, 2015

[20] Note that the table only includes those programmes that are presented by eight or more colleges to save space and allow focus on the programmes where sufficient data exists to draw conclusions.

4.3.4 Breakdown by category of expenditure

To understand why there is so little variance between programme-level spending within a college and why NC(V) costs diverge substantially from the costs specified in the funding norms, it is useful to compare the breakdown by category of expenditure between actual NC(V) expenditure in the sample and what is assumed in the funding model, as given in Table 15. Comparing the last two rows in the table, it becomes clear that while the proportion spent on staff compensation is fairly well aligned to what is assumed in the funding norms, substantially less is spent on direct programme costs than was anticipated.

The total cost per Full-Time Equivalent Student (FTE) was calculated as the sum of four expenditure categories (see Appendix 3for detailed definitions):

1. Lecturing staff costs
2. Direct Programme Costs
3. Indirect Goods and Services Costs
4. Support and Management Costs

The DHET has prescribed a 63% funding norm on compensation of employees from 2015 onwards; and hence we might expect variances between colleges in terms of categories of spending to reduce over time as colleges adjust to the new regime[21].

Table 15: Proportion of NC(V) spending on different expenditure categories

College	Lecturing Staff	Support & Management Staff	Direct Programme Costs	Indirect Goods & Services Costs	Total
South Cape	34%	20%	1%	44%	100%
Nkangala	52%	12%	6%	28%	100%
Cape Town	55%	15%	3%	25%	100%
Boland	41%	18%	7%	34%	100%
East Cape Midlands	46%	15%	6%	29%	100%
Buffalo City	58%	14%	2%	26%	100%
Flavius Mareka	53%	17%	6%	19%	100%
Esayidi	44%	18%	14%	25%	100%
Lephalale	45%	22%	8%	25%	100%
Orbit	43%	20%	12%	25%	100%
Thekwini	51%	16%	3%	30%	100%
Umgungundlovu	45%	18%	2%	35%	100%
Average of sampled colleges	**47%**	**17%**	**6%**	**29%**	**100%**
Funding Norm Model Breakdown	42%	18%	25%	14%	100%

Sources: National Treasury, 2015 & Figuji (2009), Report on investigation into FET College Funding Norms. Using the detailed funding norm calculations provided, DNA Economics were able to attribute all normed costs to the categories above

[21] It should be noted that capital expenditure was not included in Table 15, and hence the percentages given here for compensation of employees would be higher than the percentages if capital expenditure was included in the analysis

The relatively low variance in spending between different programmes and the substantially lower spending on direct programme costs than what is assumed in funding norms suggest that programme delivery is much less practical (and hence less costly) than was envisioned in the design of NC(V) programmes[22]. This point was also corroborated through interviews with sampled colleges.

A large number of college officials interviewed confirmed that NC(V) programmes are often delivered in a substantially less practical way than was likely intended at the time that the programmes were designed. There appears to be two main reasons for this: Firstly, direct programme costs or workshop equipment costs are perhaps the only expenditure type that is not either relatively unavoidable (e.g. lecturer costs) or relatively fixed (e.g. overhead costs). Hence, it can be more easily reduced when spending needs to be rationalised in a college. Secondly, in some cases college officials confirmed that they had decided to prioritise theoretical teaching in an attempt to increase low pass rates in theoretical examinations. College officials often drew the distinction between truly practical sessions (learning through doing it yourself) and learning through being shown or told how a practical task is done.

4.3.5 Relationship between expenditure and performance

Given the relatively small sample available and the large number of potentially relevant factors for which data is not available, it is not possible to perform a reliable analysis on the underlying determinants of performance as it relates to spending. However, looking at the relationships between expenditure and performance data does still deliver a number of interesting results that can form the basis for future research and discussion.

In particular, as both programme-level expenditure and programme-level pass rates were available for each of the colleges in the sample[23], it is possible to perform linear regressions over a fairly large number of observations and obtain statistically significant results despite including a number of programme and college specific control variables.

Three particularly noteworthy results on the relationship between performance and expenditure:

- **NC(V) Certification rates increase by 0.8% for a R1000 increase in expenditure per FTE**. As might be expected, colleges that spend more achieve significantly better results. While we should be careful not to interpret this result as saying that increasing spending will necessarily increase certification rates, it does suggest that within the sample the colleges that receive more funding and / or are more able to attract other funding sources perform better. It is thus important to not conflate the concept of lower costs per enrolment with the concept of lower cost per graduate; as is discussed in greater depth in later sections

[22] Note that other factors could also affect relatively low direct programme costs, rather than just reducing the practical component of programmes. For example, if colleges are able to re-use textbooks and / or toolkits over multiple years (the degree to which this happens appears to vary widely across both time and colleges) that would substantially reduce programme costs without compromising the nature of programme delivery

[23] It should be noted however that certification rates are not yet available for 2014 at the time of writing, and therefore 2014 expenditure data is compared to 2013 certification data; which potentially reduces the accuracy of the analysis

- **NC(V) Certification Rates increase by 2.1% for every 100 additional student enrolled in a programme**. At first glance, this result appears counter-intuitive; as education theory suggests that smaller class sizes typically result in better student performance. However this result does not relate to smaller class sizes, but rather states that colleges perform comparatively better in programmes in which they have a larger number of enrolments than others. This is likely reflective of colleges being able to provide better student support and teaching in subjects where they have a sufficiently large base of students. If this result is observed more widely it would justify encouraging colleges to increase enrolments on the programmes that they present well, although this might reduce student access to smaller programmes. This provides some support for the creation of Centres of Specialisation, as is being implemented by the DHET[24].
- **Colleges that spend more on staff development (as a proportion of their total compensation bill) have significantly higher certification rates.** Since staff development comprises only a fairly minor portion of total expenditures (and less than 1% of compensation spending typically) it is potentially an important mechanism to improve performance. However, it is likely that the exact nature and practical usefulness of staff development will be at least as important as the amount of money spent on it.
- **Low throughput rates often also result in small class sizes at later levels of NC(V) and NATED programmes.** This increases the costs per student, as generally the same amount of lecturing time is required even when classes become very small. In response, colleges often centralise the delivery of certain programmes to ensure sufficient class sizes at later levels
- **Low throughput and certification rates severely hamper the potential impact of TVET colleges**. Given the low throughput rates, the costs per graduate are exceedingly large in many colleges as expenditure is apportioned to very few graduates. The proportion of students completing an NC(V) qualifications within 6 years is on average only 10.6%[25], resulting in an average spending per graduate[26] of approximately R400,000 for NC(V). NATED spending per graduate is on average approximately R66,000[27].

[24] DHET 2015 (How to become a Centre of Specialisation, 2015)

[25] Throughput rates are based on 2013 certification rates and dropout rates

[26] A graduate here is defined as someone who completes all three level of NC(V) (Levels 2 to 4) or three levels of NATED (either levels 1 to 3 or levels 4 to 6)

[27] As no cohort studies tracking expenditure and throughput rates have been done in the TVET sector, costs per graduate are calculated based on the TVET expenditure model created for this project and the average cost and performance calculations are taken from the TVET PER performed by DNA Economics

Key points and policy issues

Public Technical and Vocational Education and Training (TVET) colleges have experienced significant growth in enrolments and funding in recent times. Between 2010/11 and 2014/15, TVET enrolments increased by 96% (358,393 to 702,282). Over the same period, total TVET government funding has increased by 83% (R4.27bn to R7.8bn); with state appropriation funding increasing by 47% (R3.95bn to R5.82bn) and NSFAS funding increasing by 526% (R0.32bn to R1.99bn). While the tremendous growth in NSFAS funding has enabled many more learners to access TVET colleges, the resultant rapid enrolment growth has caused a reduction in total per-learner funding from R11,914 to R11,132 in nominal terms or from R11,914 to R8,950 in real terms over the period; likely compromising the quality of training provided.

Low throughput and certification rates severely hamper the effectiveness and impact of TVET colleges. For example, based on 2013 performance data, it is estimated that only about 10.6% of learners complete the 3-year National Certification Vocational (NC(V)) qualification in six years or less. Thus, even though the average spending per NC(V) learner per year is only R26,738, the average total spending over six years to produce an NC(V) graduate is estimated to be R454,260.

Direct (non-NSFAS) college funding is determined through a formula that allocates funding based on the number of enrolments in each programme and an assumed normed cost for each programme. This formula creates an incentive for a college to increase its enrolments and takes no account of the throughput rates achieved by that college.

The expenditure analysis suggests that colleges spend only a relatively small proportion of their funds on the practical components of learning and that training is mostly theoretical in nature. As a result, it appears that the higher funding given for more practical NC(V) programmes, subsidise, to some extent, the spending on lower funded, less practical programmes. The limited practical training provided also results in learners gaining mostly theoretical knowledge, with insufficient workplace-relevant and practical skills. The inability of many colleges to produce high-quality practical training also inhibits their ability to attract employer-directed SETA grant funds and hence grow enrolments in high priority

5 COMMUNITY COLLEGES

5.1 Overview of sector

The DHET has recently adopted a shift from Adult Basic Education and Training (ABET) to Adult Education and Training (AET) as proposed by the Ministerial Committee on Adult Education of 2007. This paradigm shift from adult education to adult learning was introduced to align adult education policy and practice with international trends, which locate adult education within a lifelong learning framework. This shift signifies an orientation towards adult learning that recognises all forms of adult learning, be they formal, informal or non-formal. Whereas ABET focuses on formal education and training equivalent to Grade 9 (or 10 years of schooling), AET focuses on all forms of learning up, and equivalent to Grade 12. The need for adult learning programmes remains significant if South Africa wants to raise the general education levels of its citizens. Adult education and training (AET) has historically been a relatively low priority sector within the PSET system and has consistently received low levels of funding in many provinces. This has resulted in generally poor quality training provision and a reliance on the infrastructure of other institutions (such as schools or community centres).

There are about 15 million youth and adults (aged 15 years and older) in South Africa who do not have 10 years of schooling.[28]Although traditionally the focus was on adults of all ages the NEETs crisis (over 3 million young people not in employment or education and training) has resulted in a greater focus on youths in these centres.

5.1.1 Role of the sector

A key element of the White Paper is the establishment and expansion of Community Education and Training colleges (CET or Community Colleges). These colleges are primarily responsible for the provision of AET which was previously provided by AET (formerly ABET) centres, and in particular Public Adult Learning Centres (PALCs).

The AET sector is currently in a period of significant transition, with administration and oversight recently being shifted to being a national function, including the transferring provincial AET employees onto national payrolls. From 1 April 2015, the control and administration of PALCs was transferred from Provincial Education Departments (PEDs) to the DHET, with the function shift also resulting in PALCs now being referred to as Community Learning Centres (CLCs). A single (interim) community college has now been created within each province, with pre-existing PALC now re-branded as community learning centres that report into these provincial colleges. Community Colleges are multi-campus institutions made up of clusters of pre-existing and newly created CLCs. It will however take some time before the newly created structures significantly impact on the nature and quality of programme delivery, particularly as the overall level of funding available to the sector has not been increased substantially. Partnerships will also be encouraged

[28] Quantec Estimate of StatsSA Census, 2015

with private sector and NGO institutions, and it is expected that some community, not for profit, and private institutions will also be absorbed into Community Colleges in some cases.[29]

Each CLC falls under one of nine provincial-based Colleges, which are known as Interim Community Colleges (ICCs); all of which are the responsibility of, and funded primarily by, the DHET. Eventually, the White Paper prescribes that provincially-based ICCs be replaced by permanent Community Colleges at district municipality level. This will be a gradual process and will be informed by the lessons learnt during the planned establishment of pilot colleges in the coming years.[30]

Community College councils will be established that will be responsible for governance, with each council potentially governing more than one community college. The minister shall appoint a principal and vice-principal(s) for all Community Colleges, as well as managers for each of the Community Learning Centres. Several details of the management and governance of Community Colleges are, however, still to be determined via the piloting process

5.1.2 White Paper main points and targets

The White Paper envisages the establishment of community colleges to cater mainly for youth and adults who did not complete their schooling or who never attended school. It is envisaged that there will be a much more significant and focussed role for the sector in future, particularly given the substantial and varied educational needs of the millions of unemployed members of society that cannot be addressed fully by the TVET and University sectors. The colleges will incorporate existing public adult learning centres (PALCs) and will be provided with adequate infrastructure and a critical mass of full-time staff. In addition, it is envisaged that new campuses will be established to optimise coverage and expand enrolments to reach a target of one million by 2030. In terms of programmes the colleges are expected to offer, the white paper suggests the following:

- General Education and Training Certificate (GETC)
- National Senior Certificate for Adults (NASCA)
- SETA accredited and occupational programmes
- Non formal programmes

The community colleges will be required to be responsive to the needs of local communities where they are located and should focus on citizen and social education. To enhance relevance they will partner with community-owned or private institutions and will draw funding from SETAs and the NSF in addition to the core funding that will come from the fiscus. It is envisaged that the colleges would partner with government programmes such as the Expanded Public Works Programme (EPWP) and the Community Works Programmes (CWP) to enrich participation in the programmes through the provision of classroom based learning.

[29] (DHET, 2014)
[30] (DHET, 2014)

In relation to their contribution to the post schooling system the following table shows the role of the colleges in relation to universities and TVET colleges.

Institutions	Target population	Types of programmes
Universities	Learners with university entrance Matric results	Mainly level 7 qualifications and above, though with some programmes at levels 5 and 6 on the NQF
Public TVET colleges	Mainly learners who instead of Matric seek to achieve the National Certificate Vocational (NCV). Also young adults seeking to acquire occupational qualifications	Generally NQF levels 1-4, though with some programmes at level 5 and 6
Community Colleges	Young people who have left school and adults seeking to re-enter education and training in either occupational qualifications or in business skills to be self-employed/start a business	Mainly level 1 – programmes to enable the learner to obtain basic education to NQF level 1. Also occupational programmes at levels 2-4 accredited by SETAs

Source: Mzabalozo Adivisory Services

As can be seen there is the potential for some overlap between the work of TVET colleges and that of community colleges. However, the intention is that TVET should more clearly be located as part of the formal education and training system – a technical route to a school leaver certificate, whereas community colleges are for those who have left the formal system and seek to re-enter education and training, achieve basic levels of literacy and numeracy, or obtain skills for social and economic purposes.

5.1.3 Number of institutions

There are currently nine community colleges that were established in 2015 as part of the shift of administration from the PEDs to DHET. Under each community college are a number community learning centres. In all there were about 3,246 PALCs under the PEDs prior to the function shift. However the function budget data refers to 3,150 CLCs as follows:

Table 16: Number of CLCs by province (based on budget allocations)

Province	Total
Eastern Cape	304
Free State	204
Gauteng	47
KwaZulu-Natal	1,097
Limpopo	653
Mpumalanga	252
North West	148
Northern Cape	191
Western Cape	254
Total	**3,150**

Source: DHET VCET Budget Allocations

5.1.4 Enrolments

Enrolments in CET centres increased by 12% between 2013/14 and 2014/15. The DHET national examination database indicates that the pass rate for the level 4 general education and training certificate (GETC) is 63.5%.

Table 17: Enrolments in Public AET centres in 2014 and 2015

Year	2013	2014	2015
No of Students in Public AET Centres	**249,507**	257,927	293,248

Source: (DHET, 2015) *Statistics on Post-School Education and Training for 2013 and DHET VCET Stats for 2014 and 2015*

Gauteng has the highest number of enrolments despite having one of the smallest number of AET centres. This has been attributed to the structured and organised nature of the centres. North West Province recorded the lowest number of enrolments.

Table 18: Provincial Enrolments, 2014-2015[31]

Province	2014	2015
Eastern Cape	45,250	76,695
Free State	***	***
Gauteng	87,618	88,494
KwaZulu-Natal	61,000	62,000
Limpopo	34,059	34,059
Mpumalanga	***	***
North West	6,000	6,500
Northern Cape	24,000	25,500
Western Cape	***	***

Source: PED 2014/15 Annual reports

The AET curriculum consists of school-based academic courses, skills training courses and life-skills courses. AET learners are required to receive training in:

- Language, Literacy and Communication;
- Mathematical literacy, Mathematics and Mathematical Sciences;
- Natural Science;
- Arts and Culture;
- Life Orientation;
- Technology;
- Human and Social Science;
- Economic and Management Science.

Training may also cover:

- Small, medium and micro enterprises (SMMEs);
- Tourism;
- Agricultural science;
- Ancillary health care;
- AIDS education;
- Entrepreneurship;

[31] Enrolment for Mpumalanga, Western Cape and Free State not provided in the annual reports

- Human rights education;
- Voter education.

In addition to the ABET1-4 course offerings at the AET Centres include courses such as[32]:

- Grade 12 (CAPS);
- CAP Rewriters;
- Nated 550 (based on the old curriculum)

The following occupational courses are also offered in a number of AET centres to respond to community needs:

- Beadwork;
- Bricklaying;
- Cabinet Making;
- Carpentry;
- Catering,
- Construction;
- Computer;
- Dressmaking;
- Embroidery;
- Fashion Design;
- Gardening;
- Joinery;
- Needlework/ Sewing;
- Secretarial;
- Sewing; and
- Welding

In 2013, 68.7% of public PALC enrolments were in Adult Basic Education and Training (ABET) Levels 1 to 4, which provides adult learners equivalent qualifications to Grades 1 to 9 (i.e. NQF 1). Of the remaining students, 28.7% were enrolled in Grade 10 to 12 programmes and a small portion (2.5%) in other programmes; such as less formal or vocational programmes. Private AET centres comprised only 8,316 (3.2%) of total enrolments in the sector (DHET, 2015). [33]

5.2 Revenue

Community colleges are funded through voted funds. For many years, the PALCs were located under provincial education departments (PEDs) and these institutions were budgeted for under these organisations. As can be observed from the table below, the provincial budgets increased from R 1.22 billion in 2010/11 to R 1.73 billion in 2014/15 totalled For the 2015/16 financial year, an amount of R 1.78 billion from provincial departments of education (PEDs) will form part of DHET budget to cover community colleges. Despite the 45.5% increase in overall funding, the simultaneous increase in enrolments means that revenue (from direct government transfers) per learner decreased from R 6,714 in 2014/15 to R6,071 in 2015/16.

[32] ETDP SETA Sector Skills Plan, 2014

[33] Note that only 1761 Public AET centres (out of 3150), and only 62 private AET centres responded to the Annual Survey used to produce this data, and hence it should be interpreted with caution.

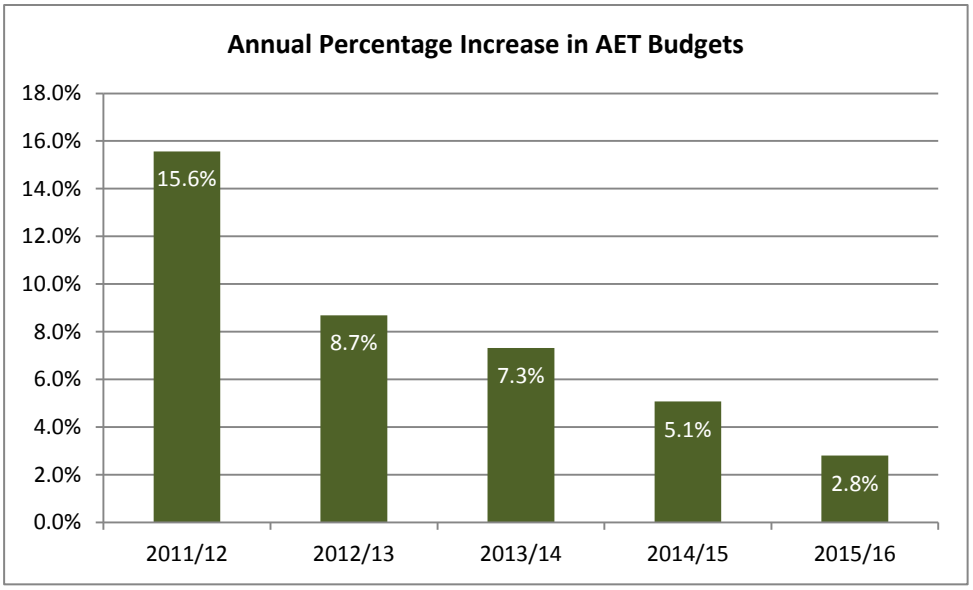
Table 19: CET funding allocation per province for 2010/11 to 2015/16 (R'000s)

Province	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Eastern Cape Province	290,757	321,958	346,397	377,356	392,282	387,431
Free State Province	107,299	127,756	137,476	164,026	193,265	206,757
Gauteng Province	261,225	347,706	379,481	416,983	423,471	421,962
Kwazulu Natal Province	132,824	155,366	161,144	178,617	177,353	187,232
Limpopo Province	132,337	151,895	170,920	143,202	145,264	161,822
Mpumalanga Province	99,963	111,900	137,431	138,591	154,611	156,563
Northern Cape Province	38,339	38,773	29,152	29,340	31,482	32,418
North West Province	127,959	124,742	137,011	162,241	174,369	184,322
Western Cape Province	32,152	33,098	36,920	37,912	39,793	41,846
Total	**1,222,855**	**1,413,194**	**1,535,932**	**1,648,268**	**1,731,890**	**1,780,353**

Source: DHET VCET Budget Allocations

The year-on-year budget increases for AET have been on a decline. This means provinces have consistently not prioritised AET and utilised available education budgets for other programmes. This decline in the AET budget allocations affect the state of AET provision and the perceived decline in quality of provision over the years.

Figure 5: Year of year AET budget increases



Source: National Treasury Provincial Budget Estimates

As a result of limited funding and policy focus in AET historically and the very recent function shift, the quality of the financial data available at the national level is generally very poor; with only funding disbursement, basic enrolment and performance data being available. Very little financial information is available for the community college sector, other than that related to DHET transfers and staff employed by the DHET. As a result, data on the other sources of revenue of CETs is not available at this time. A number of colleges will be visited to obtain this data.

5.2.1 Flow of funds

From 2015/16, the flow of funds has shifted from PEDs to DHET. Voted funds for the CETs will flow from DHET to the colleges. The DHET will only transfer funds for goods and services as well as capital expenditure to CETs whilst the personnel budget will be held centrally by the DHET since all CET employees are now DHET employees on PERSAL.

5.2.2 Funding basis

In terms of the norms and standards for the funding of CETs the total allocation to each CET College will be for personnel, goods and services, and capital expenditure and it will be based on the number of learners, approved programmes for the CET college and the total available budget.

Colleges are to be funded in accordance with the Continuing Education and Training Act of 2006. The funding norms will, during the period of transition, be based on the pre-existing conventions of each province.[34] As the majority of funding was given and determined by PEDs, great disparities exist at provincial level, with less than 1% of education budgets being spent on AET on average.[35]

As PEDs historically treated AET differently, using varied budget allocation mechanisms and rules, there will need to be a process of harmonisation of funding across provinces. It has been argued that certain provinces had neglected the AET sector, which has resulted in the DHET inheriting relatively small budgets as part of the function shift for some provinces. Going forward there is a need to ensure that accurate records are kept of the number of staff employed across all the CETs, the number of enrolments by programmes and the financial revenue and expenditure data of each centre.

Adult education appears to have been characterised by poor funding over an extended period., as well as poor monitoring and limited support from the province[36] Perhaps as a result, the White Paper highlights many weaknesses in the PALC / AET system, including insufficient resources, staffing, and infrastructure both in terms of quality and quantity.

5.2.3 Drivers of change in revenue

The colleges are not yet established in the manner anticipated in the White Paper for PSET, with transitionary measures currently in place. Currently there is one interim community college per province, with a large number of CLCs underlying it. The expectation is that there will eventually be one per district. Some SETAs are sponsoring colleges that focus on their sector's skills, and therefore could provide funds to colleges. The DTI and SEDA for instance, could consider the extent to which such colleges can provide training support to emergent businesses and cooperatives, which could become a significant revenue stream.

The main challenge that the colleges will face is the historically poorly funded national policy of improving numeracy and literacy levels (adult basic education or ABE). The colleges will remain to

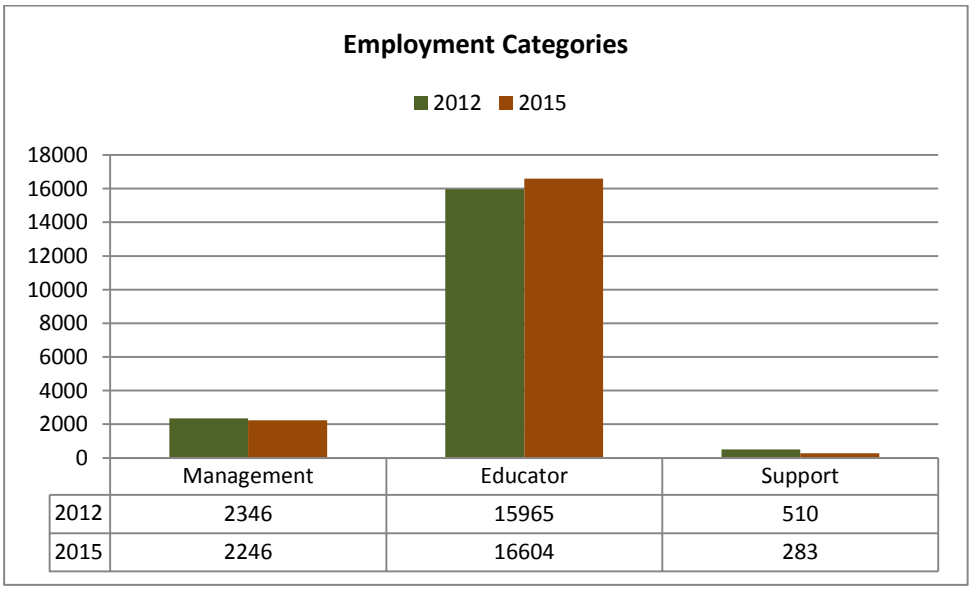
[34] (DHET, 2014)
[35] (Raphotle, 2012)
[36] (DHET Community Education and Training Task Team, 2012)

a great extent dependent on the funds made available for such training. Given the priority being given in the current policy environment to higher level occupational programmes it is unlikely that the limited funds available for ABE will increase substantially in the medium term.

5.3 Expenditure

As with revenue data, the recent function shift has resulted in very little expenditure data being available at national level, other than for that expenditure directly paid by government.

The main cost driver in CET centres is the number of AET learners enrolled. A high number of learners will necessitate for the employment of more educators at additional costs. Additionally there will be costs to cover learning material and other support material. The DHET employs over 19,000 CET centre staff that are spread across all provinces. In terms of the national norms and standards for funding community colleges, the DHET is the employer of the staff located in the CET centres and CLCs. Current DHET PERSAL statistics suggest that over 19,100 staff are employed in the Directorates or Sub-directorates and in regional offices for adult education and training across all provinces. The staff in these units is divided into three groups, namely educator staff, management staff and support staff. The number of people employed has increased from 18,821 in 2012 according to DHET EMIS data. At this point, a total of 15,965 or 85% were employed as full-time and part-time educators. 72% of the educator staff was employed on a part-time basis. At the current staffing levels, there is an equivalent of 15.3 learners per CET centre staff member.



KwaZulu Natal employed the highest proportion of staff (37%) as compared to the other provinces. Although it appears as if the Western Cape has a low number of staff, there is a high number of private AET centres, which are being funded by the province.

Table 20: Community College Staff per province

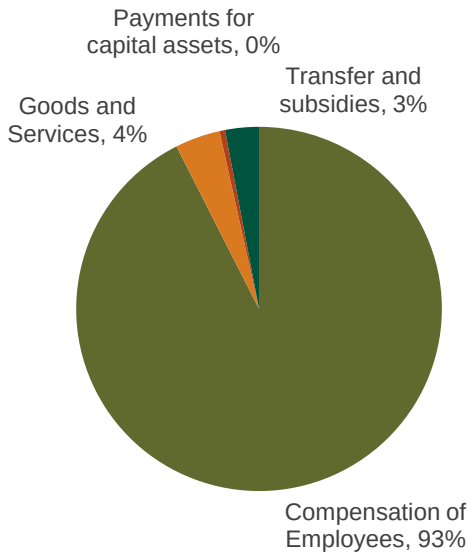
Province	Number of staff members
Eastern Cape Province	3,214

Free State Province	1,083
Gauteng Province	1,994
KwaZulu-Natal Province	7,038
Limpopo Province	2,157
Mpumalanga Province	1,479
Northern Cape Province	211
North west Province	1,409
Western Cape Province	548
Total	**19,133**

Source: DHET HR Records, 2015

Compensation of employees is currently the highest cost factor in the community colleges. The DHET aims to cap personnel costs at 63%, however currently, as shown in Figure 6 below, employment costs account for 93% of the total community colleges budget. This suggests that there isn't sufficient budget to cover the goods and services required for colleges to function effectively, although it is not clear how funding from other sources is spent at this stage.

Figure 6: Community College Expenditure for 2015/16

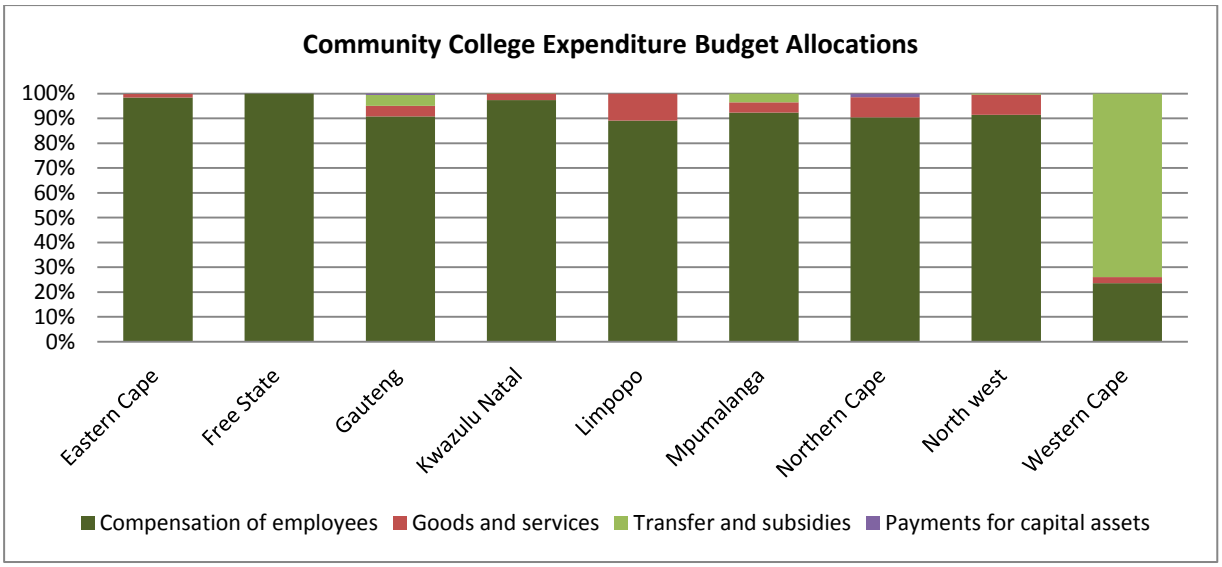


Source: DHET VCET Budget Allocations, 2015/16

Although the colleges are currently offering mainly GETC type programmes, the White Paper vision is to offer more occupational type programmes; some of which require materials and consumables. At the current enrolment levels, there is only R 233.96 goods and services allocated per learner. Based on estimates conducted by the Free State provincial education department, there is a direct cost of R 700.00 per learner for learning and teaching support materials (LTSM) and learner stationery. This excludes consumables for the functioning and administration of the CLCs as well as any training costs for educators.

Figure 7 shows the composition of expenditure by province. It is worth noting that the Western Cape spends a large proportion of this expenditure on transfers, in contrast to other provinces, where expenditure on compensation of employees is much higher. This can be explained by the service delivery model operated by the Western Cape, where funds for adult education are transferred to NPOs and private providers for the delivery of educational services. In other provinces, the provincial education department was responsible for operating these centres, recruiting teachers and delivering programmes.

Figure 7: Community college budget allocations by province



Source: National Treasury Estimates of Provincial Expenditure, 2014/15

Key points and policy issues

Community Colleges are primarily responsible for the provision of Adult Education and Training (AET) which was previously provided by the 3246 Public Adult Learning Centres (PALCs) under management of Provincial Departments of Education (PED). The AET sector is currently in a period of significant transition, with administration and oversight recently being shifted to the DHET nationally. A single (interim) community college has now been created within each province, with pre-existing PALCs now re-branded as community learning centres that report into these provincial colleges.

The number of students enrolled in these AET centres increased marginally from 249,507 to 293,248 between 2013 and 2015. In 2013, 68.7% of PALC enrolments were in ABET Levels 1 to 4, which provides adult learners equivalent qualifications to Grades 1 to 9 (i.e. NQF 1), with 28.7% enrolled in Grade 10 to 12 programmes and 2.5% in vocational learning programmes. The colleges are funded solely from voted funds and about R1.78 billion was transferred from provincial departments of education to DHET, to fund community colleges in 2015/16 with allocation to individual centres based on the historically spending of PEDs. Of the amount transferred, 93% is spent on compensation of employees, leaving very little for the management or equipping of the colleges. Community colleges were a neglected sector under PEDs with very little data available at national level.

PART D: THE UNIVERSITY SECTOR

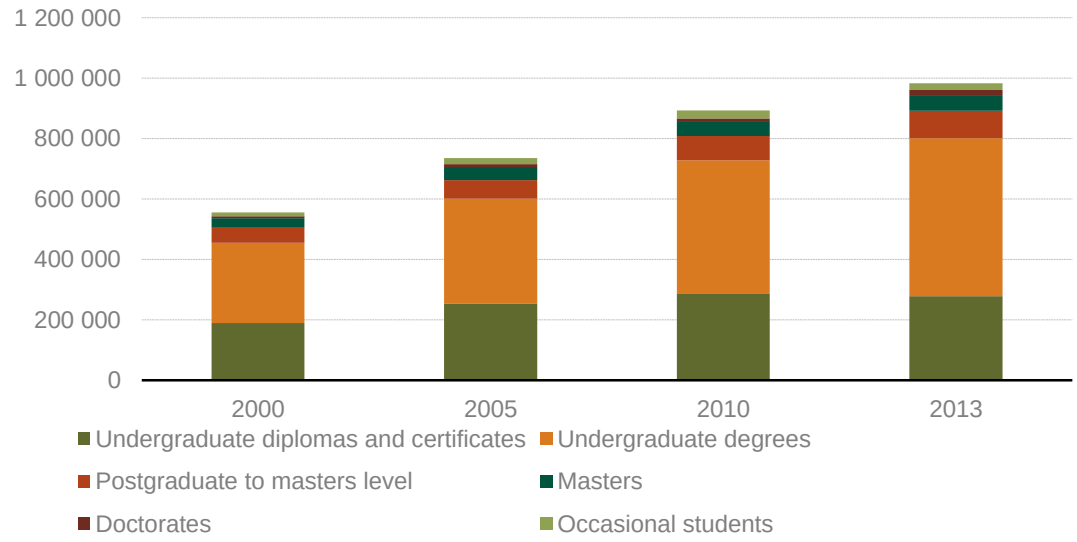
6 UNIVERSITIES

6.1 Overview of the sector

South Africa has 26 public universities comprised of 11 Traditional Universities, 6 universities of Technology and 9 Comprehensive Universities. The differences between these three categories of universities lies in their programme offerings. Traditional universities offer general formative and professional academic programmes including undergraduate, Master's and PhD graduate programmes while "Universities of Technology" are more focussed on providing undergraduate career-focussed programmes. Comprehensive universities combine attributes of both these types of universities.

The size of the university sector can be measured through its headcount enrolments. Headcount enrolment includes full-time and part-time contact students and students enrolled in distance education. Between 2000 and 2013, the headcount enrolments in universities increased by 77.2% from 555 161 to 983 698. On a yearly basis, head count enrolments grew at an annual average growth rate of 4.5%. This increase was largely due to rising enrolments in under-graduate degrees.

Figure 8: Headcount enrolments by qualification type, 2000 to 2013



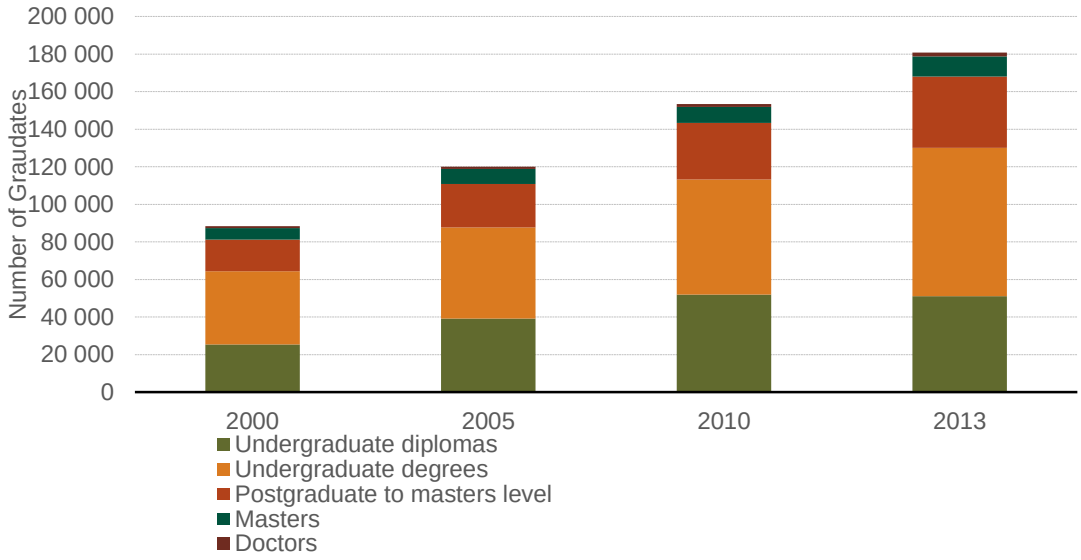
Source: Department of Higher Education, 2015a and DHET, 2015c

Whereas headcount enrolments reveal the size of the sector, graduation rates are a better measure of the success of the university sector. The number of graduates increased from 88 273 in 2000 to 180 823 in 2013. In 2013, graduates consisted of:

- 130 127 graduates at undergraduate level
- 37 836 postgraduate certificate postgraduate diploma and honours graduates
- 10 809 Masters graduates; and
- 2 051 doctoral graduates.

The overall graduation rate grew at a 5.7% over this same period, faster than enrolments. This may point to increased efficiencies within the university sector arising from the significant investments made in teaching development through the teaching development grant (DHET, 2009) as well as the foundation provision grant (DHET, 2012).

Table 21: Graduates by qualification type, 2000 to 2013



Source: Department of Higher Education, 2015a and HEMIS

6.2 Plans and targets

The National Development Plan 2030 articulates the contribution of the university sector to developmental outcomes (National Planning Commission, 2012) and sets targets to guide the development of the sector. Four specific targets are worth mentioning:

- The National Development Plan aims to increase Gross Enrolment Ratio to more than 30%.[37] The GER increased from 15.4% in 2003 to 19.5% in 2013 (DHET, 2015b). For the PSET system to achieve this target, it will have to achieve a 71% increase in enrolments from the 2013 baseline of 983 698 (DHET, HEMIS, 2015c) to 1.68 million.
- There is a need to increase graduates from 167 469 for private and public higher education institutions to a combined total of 425 000 by 2030. The increase will be largely driven by science, technology, engineering and mathematics graduates. In 2013, the total number of graduates for the public universities stood at 180 823 (DHET, HEMIS, 2015c). To meet the target, the university sector will have to increase the number of graduates they produce by 235%.
- The university sector should aim to produce more than 100 doctoral graduates per million of the population compared to the current 28 PhD graduates per million per year. To achieve the

[37] The GER is defined as the total headcount enrolment of all ages divided by the total population in the 20-24 age cohort. The ratio is calculated by dividing all enrolment in public universities by Statistics South Africa's official mid-year population estimates for the 20-24 age cohort.

target of 100 per million, the country needs more than 5 000 doctoral graduates per annum, against a figure of 2 051 in 2013 (DHET, HEMIS, 2015c)

- The percentage of PhD-qualified staff within the university sector must be increased from 34% to 75% and the number of graduate, postgraduate and first-rate scientists must be doubled (National Planning Commission, 2012). By 2013, the percentage of academic staff with PhDs had already increased to 41% (DHET, HEMIS, 2015c).

Table 22: National Development Plan Targets for 2030

National Development Plan Targets for 2030	Indicator	Actual for 2014	Target for 2030	2014 Numbers	Estimated numbers in 2030	Actual increase needed	Average increase needed per annum
Increase in enrolments	Gross Enrolment Ratio	18.40%	> 30%	969 155	1 680 000	710 845	3.50%
Increase in graduates	Number of graduates			185 373	425 000	239 627	5.30%
Increase in doctoral graduates	Doctoral graduates per million of population	42 per million	100 per million	2 258	5 000	2 742	5.10%
Increase in academic staff with PhDs	Percentage permanent academic staff with PhDs	43%	75%	7 825	26 000	18 175	7.80%

Source: DHET, 2015b; DHET, HEMIS, 2015c, StatsSA (2015); DHET, 2014 and Ministry of Higher Education and Training, 2014

The National Development Plan 2030 envisages that private higher education institutions will play a greater and better-defined role in the higher education landscape and contribute to the achievement of these targets (National Planning Commission, 2012).

The White Paper for PSET confirms these targets, and aims to reach a headcount enrolment of 1.6 million by 2030 in universities (Department of Higher Education and Training 2013). The targets set out in the National Development Plan and White Paper on PSET are an important consideration in costing the implementation of the White Paper.

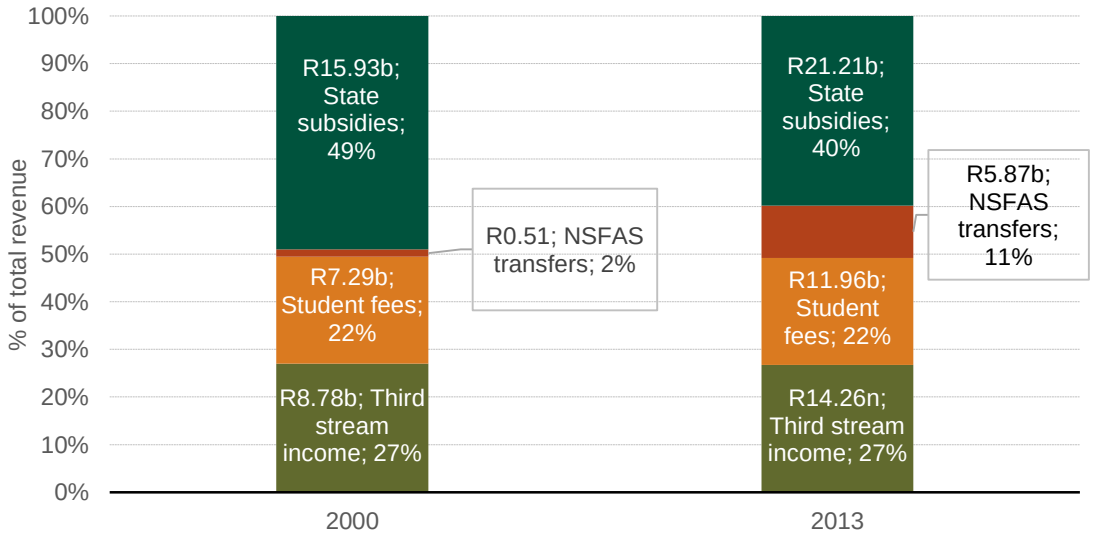
6.3 University income

6.3.1 Sources of income

In general, universities receive income from four distinct sources: government subsidies, student fees, the NSFAS and third stream income. Government subsidies include the block grants as well as earmarked grants. Block grants fund general and operational expenditure, whereas earmarked grants fund specific programmes or policy priorities. Fees include all tuition and residence fees paid by students to the universities. NSFAS transfers include tuition, accommodation, meals and a stipend for students that have received NSFAS loans. The “third stream” refers to all income generated through research contracts, donations, investments and facilities rental. In effect, this is a catch-all category for income that cannot be considered government grants or fees.

In 2013, universities received more than half of their total income from government subsidies and transfers. Figure 9 shows the different sources of income received by public universities in 2000 and 2013.

Figure 9: Changes in the sources of income over the period 2000 to 2013.



Source: Department of Higher Education, 2015a and de Villiers (2012)

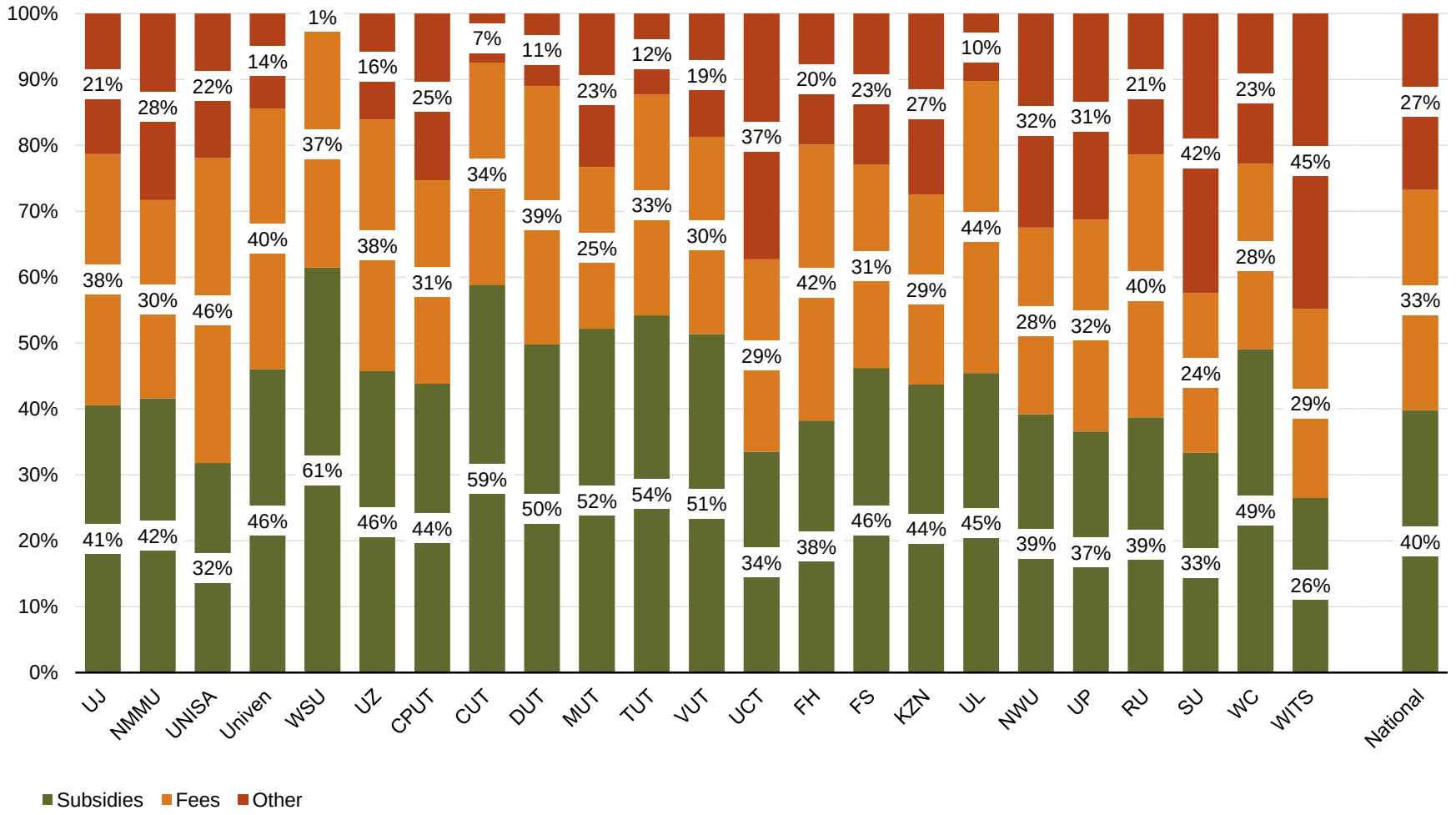
Between 2000 and 2013, government subsidies declined as a proportion of total income from 49% to 40%. In nominal terms, the government subsidy grew by about 33% from R15.9bn in 2000 to R21.2bn, at an annual average rate of 2.2% (well below inflation). This real decline in the subsidy was offset by a corresponding increase in NSFAS transfers, which more than doubled over this period.

This significant change in the approach to university funding was intended to direct a larger proportion of financial assistance at poor students, and to thereby promote access to higher education, particularly for the previously disadvantaged. It was also designed to curb the problem of 'top slicing' - spreading funding across a larger number of students in pursuit of higher enrolments and subsidies. This practice, which was adopted widely by universities, led to higher drop-out rates as students from low income households struggled to cover the full cost of study (National Treasury, 2015, p. vii).

The contribution of student fees (excluding contributions through NSFAS) and third-stream income has remained relatively constant from 2000 to 2013 as a proportion of total university revenue, growing on average by 3.9% and 3.8% per annum respectively. This is well below the average inflation rate, of 5.8%, recorded over this period (StatsSA, 2016).

The importance of the different sources of income to universities varies considerably across the sector. As Figure 10, reveals the reliance on the government subsidy as a proportion of total income is as high as 61% in the case of the Walter Sisulu University and as low as 27% for the University of Witwatersrand. Understandably, government subsidy remains an important source of funding for historically disadvantaged institutions.

Figure 10: Percentage distribution of sources of income per university for 2013



Source: Department of Higher Education, 2015a

The contribution of student fees to total income ranges from a minimum of 24% at the University of Stellenbosch to a maximum of 46% at UNISA. If UNISA is excluded from the analysis, the university with the highest proportion of student fees to income is Limpopo, which receives 44% of its income from student fees. On average, comprehensive universities derive 38% of their income from student fees compared to 32% for Traditional Universities and Universities of Technology.

The third stream income, as a proportion of total income, is as little as 1% in Walter Sisulu University and as high as 45% at the University of Witwatersrand. The analysis reveals that on average, third stream income accounts for 28% of all income received by traditional universities. This suggests that traditional universities are better placed to attract private and other sources of funding. There are many reasons for this. It is likely that these universities are well established, and can leverage their reputations to draw additional sources of funding. They may also have existing capacity to raise funds and large alumni from reasonably affluent backgrounds willing to contribute to their Alma Matta. Additionally, traditional universities tend to employ well-known academics and researchers that are a draw card for third stream funding.

Sources of third stream income are diverse. Some of these sources of income are earmarked for research projects, equipment, and infrastructure investment. These types of dedicated streams of funding do not contribute to funding tuition and related expenditure, although in some circumstances, an investment in a laboratory and equipment as well as bursaries will benefit students. A portion of third stream income is derived from activities performed by the university – such as consulting projects and facilities rental where non-tuition fees are charged in return for services. Income derived from services is particularly difficult to estimate as the annual financial statements fail to quantify the amount generated by universities.

A recent development has been for SETAs to fund research chairs in universities, whereby a number of posts will be funded and a number of Masters and PhD students will have their fees paid and receive a stipend. SETAs have been encouraged to form research partnerships as a means of strengthening research in their sectors. There are also a number of SETA-university partnerships focusing on high level occupational skills. The SETA can either cover the fees of a number of students (generally via NSFAS) or provide funding to students and employers for the work placements required for a particular occupational qualification or post-graduate internship leading to professional registration.

6.3.2 Government funding

Funding framework

Government funding to universities is based on a funding framework designed to fund enrolments and priority areas of government within higher education. The funding framework is built on three principles (DHET, 2013):

- **Affordability**: Government first decides how much it can afford to spend on higher education and then allocates funds to institutions, according to national needs and priorities.

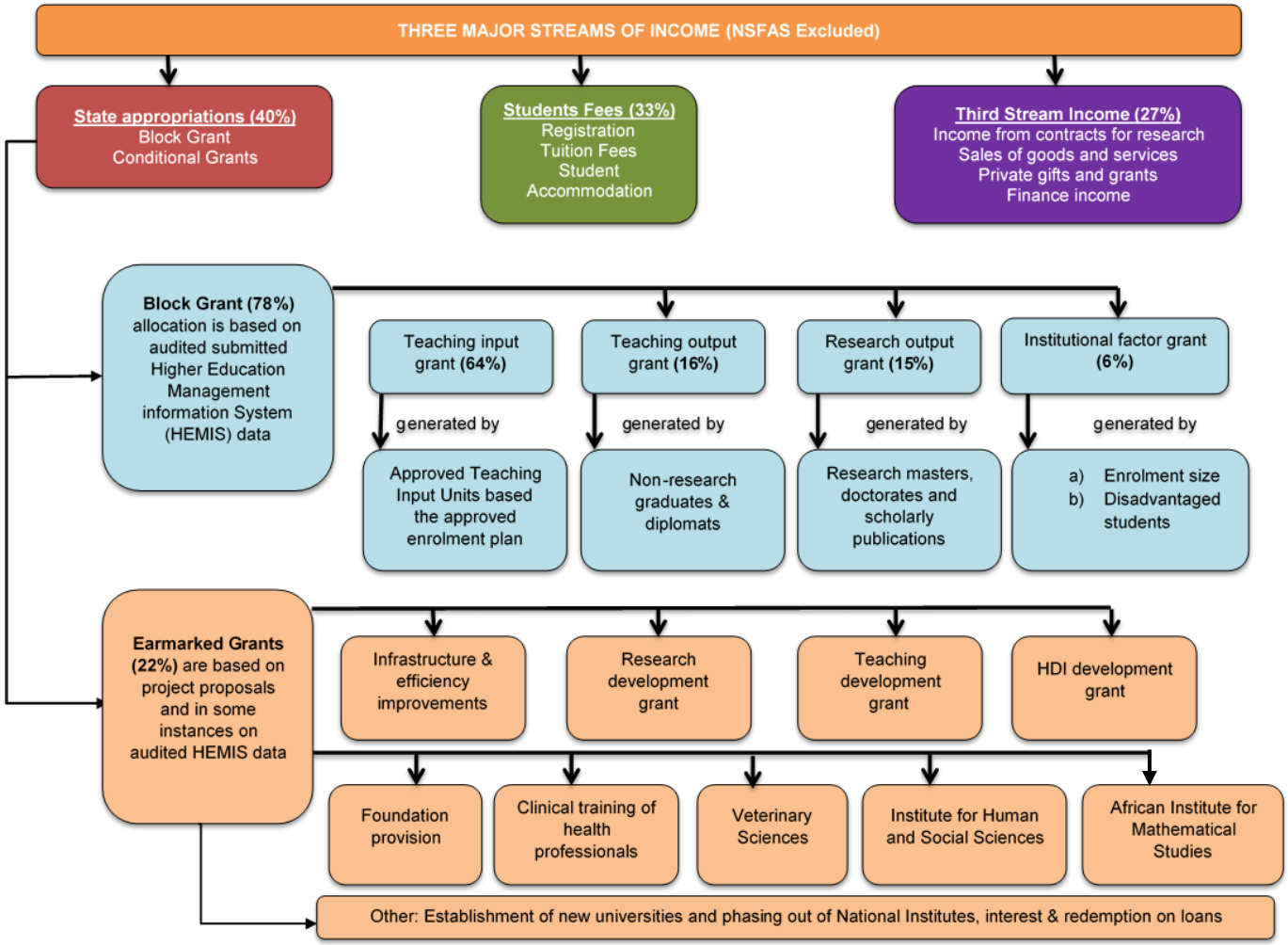
- **Distribution**: The funding framework becomes a distributive mechanism to allocate government funds to individual institutions, in accordance with the budget made available by government and after taking in account its policy priorities and plans.
- **Cost sharing**: Cost sharing of higher education by government, students and families is a crucial component of the funding framework and therefore, those students who can afford it should contribute to the cost of their tertiary education. (DHET, 2013)

The funding framework ties in with the higher education enrolment planning process. This was purposely done to align growth in student enrolments with the social and economic needs of the country, the capacity of the sector in terms of human and capital resources, and the fiscal resources available. The funding framework is also designed to give the Minister the ability to reprioritize funding allocations in line with priority areas and policy incentives. (DHET, 2013) In recent years, the Minister has negotiated university enrolment plans that aligned with his PME (Performance, Monitoring and Evaluation) targets and has consequently prioritised funding to ensure increased success rates and graduate output especially in areas of engineering, life and physical sciences, human and animal health, initial teacher education and postgraduate output in research masters and doctoral programmes (DHET, 2014: 13).

The funding framework makes use of a **block grant** as well as **earmarked grants**. The block grant is determined by a formula based on a set of weights. It consists of four components namely: the teaching input, the teaching output, the research output and the institutional factor grants. As Figure 11 shows the block grant made up 78% of the government subsidy in 2015/16, while earmarked grants account for the remaining allocation. The percentage of earmarked grants would be further reduced if the NSFAS allocations were excluded from the calculation (Ministry of Higher Education and Training, 2014).

The spilt between the block and earmarked grants changes on an annual basis, and is influenced by enrolments and the policy direction of the DHET. In 2015/16, the teaching input grant accounts for 64% of the block grant and is mainly influenced by enrolments. The teaching output grant is allocated 16%, the research output grant 15% and about 6% is set aside for the institutional factor grant (Ministry of Higher Education and Training, 2014). However, it appears that the share of earmarked grants has grown as a proportion of total government subsidy, signalling that government is increasingly making use of conditional funding as a way to steer the university sector.

Figure 11: Structure of government funding



Source: Compiled from the 2013 Annual Financial Statements of Universities (DHET, 2014) and the Ministerial Statement on University Funding 2015/16 and 2016/17 (Ministry of Higher Education and Training, 2014)

Block grants

The block grant consists of four components.

First, the **teaching input funding** grant funds universities for delivering teaching services and the supervision of postgraduate masters and doctoral students. The teaching input grant uses a funding grid for the distribution of grants to universities. The funding grid is based on the relative cost of offering teaching and research supervision in various fields of study. Teaching input funding is based on full-time equivalent enrolments, which are then weighted by field of study as well as the level of the qualification. The funding is based on the full-time equivalent enrolments per course and receives a weight linked to the Classification of Education Subject Material (CESM) category of the course. The funding ratios of the various CESM Categories are shown in Table 23 (DHET, 2013).

Table 23: CESM weights

Funding Group	CESM Categories	Funding Ratio on Under-graduate Level
1	07 education 12 law 18 psychology 19 public administration and services	1
2	04 business economics & management studies 05 communication & journalism 06 computer & information sciences 11 languages linguistics & literature 17 philosophy religion and theology 20 social sciences	1.5
3	02 architecture & the built environment 08 engineering 10 family ecology & consumer sciences 15 mathematics & statistics	2.5
4	01 agriculture & agricultural operations 03 visual and performing arts 09 health professions & related clinical sciences 13 life sciences 14 physical sciences 16 military sciences	3.5

Source: DHET, 2013

An additional weight is also allocated based on the level of the course. These weights are designed to allocate more funding towards contact and higher level programmes. Therefore, at undergraduate level, a weight of 1 is allocated, at honours and equivalent level a weight of 2, at Masters and equivalent, a weight of 4 and at doctoral level a weight of 4.

Enrolments in distance education receive a weight of 0.5 at undergraduate up to honours level. Masters and doctoral level enrolments in distance programmes receive the same weight at Masters and doctoral level. The comprehensive funding grid for courses in the four funding groups at the various levels and the modes of offering is shown in Table 24.

Second, teaching **output funding** funds graduates and encourages universities to ensure that students complete their studies. In other words, this component is designed to incentivise universities to focus on throughput rates and counteract some of the perverse incentives created by the **teaching input funding** component that focuses solely on enrolments. As throughput rates increase, universities therefore are entitled to a larger share of the teaching output funding component.

Table 24: Funding group weights, distinguished by contact and distance programmes

Funding group	Undergraduate & equivalent		Honours & equivalent		Masters & equivalent		Doctoral & equivalent	
	Contact	Distance	Contact	Distance	Contact	Distance	Contact	Distance
1	1	0.5	2	1	3	3	4	4
2	1.5	0.75	3	1.5	4.5	4.5	6	6
3	2.5	1.25	5	2.5	7.5	7.5	10	10
4	3.5	1.75	7	3.5	10.5	10.5	14	14

Source: DHET, 2013

Third, the **research output funding** encourages the publication of peer reviewed articles and books as well as the graduation of masters and doctoral students. Doctoral graduates receive the highest funding weight as an incentive to produce much needed graduates for research, innovation as well as the next generation of academic staff.

Finally the **institutional factor** is a redistributive mechanism designed to provide additional funding to smaller colleges and those enrolling more African and Coloured students. Universities with an FTE enrolment of less than 25 000 receive additional funding. The underlying rationale is that it is more expensive to provide the full range of services at a small university than in a larger university that benefits from economies of scale. Higher enrolments for African and Coloured students is also rewarded through additional funding.

Earmarked grants

Earmarked grants provide additional funding to the university sector based on their needs, and to steer these institutions towards achieving key policy priorities. The earmarked grant consists of a myriad of grants some of which are explained below (Ministry of Higher Education and Training, 2014).

- The **infrastructure and output efficiencies** grant aims to increase the capacity of the university system to cope with the growth in student numbers to provide the necessary infrastructure and equipment for improving the quality of teaching and learning and graduation rates. This grant provides an incentive for universities to deliver on the Performance Monitoring and Evaluation targets of the Minister.
- The **historically disadvantaged grant** provides development funds for the Historically Disadvantaged Universities (HDEs). These include Universities of Fort Hare, Limpopo, Venda, Walter Sisulu, Western Cape, Zululand, Mangosuthu University of Technology and Sefako Makgatho Health Science University. The funds from this grant are meant to establish systems that enhance financial management, and strengthen its teaching and academic enterprise.

- The **clinical training grant** provides funding to universities to fund the clinical training of health professional students in line with national priorities within the health system.
- The **foundation programme grant** provides funding for programmes aimed at improving the readiness of school leavers for tertiary education.
- **Teaching development and research development grants** provide financial assistance to universities to develop support programmes that enhance their ability to increase student success and graduation rates, as well as to enhance their capacity to produce research outputs.
- The **veterinary sciences grant** funds the clinical training of veterinarians and pays for the cost of running an animal hospital at the University of Pretoria.

Other earmarked grants are made to: the Institute for the Humanities and Social Sciences, which advances learning in the higher education system within the humanities and social sciences by ensuring collaboration and co-ordination amongst institutions; and the African Institute for Mathematical Sciences for developing post-graduate students in mathematics from historically disadvantaged backgrounds.

6.3.3 Allocations

Government funding to the university sector includes funding to universities and other related institutions such as the Institute for the Humanities and Social Sciences and the African Institute for Mathematical Sciences. These institutions provide support and help the sector to achieve specific goals, and are an important component of the university system.

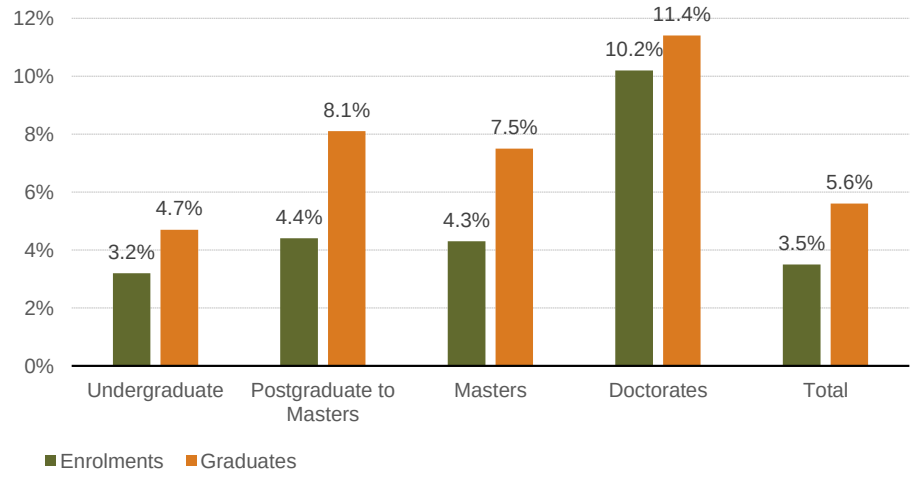
Table 26 sets out the allocations to the university sector broken down by type of grant or allocation. The analysis also includes the NSFAS contribution to the university, as loans given to students are an important source of funding for the sector. The block grant grew at an annual average growth rate of 8.7% over the period 2008/09 and 2015/16, compared to 15.6% for earmarked grants. The increase in **the infrastructure outputs and efficiencies grant,** that rose from an allocated amount of R1.1 billion to R2.3 billion over the period, accounts for most of the increase in earmarked funding. The faster growth in earmarked allocations suggests the DHET has used conditional and earmarked funding to steer the system toward certain policy priorities. Specifically, some of the earmarked grants have contributed towards:

- efficiency improvements (such as increased graduates and research outputs through the development funds),
- improved access and improved success rates through the foundation grant,
- enhanced infrastructure development targeted at student accommodation; and
- infrastructure provisioning for the scarce skills areas such as engineering, life and physical sciences, initial teacher training, human and animal health sciences et cetera.

Efficiency improvements in graduates are shown in Figure 13 below. The current funding framework was first introduced in the 2004/05 funding year with a three year migration. By 2008/09 the funding framework was fully introduced including funding for teaching development and foundation grants that provided incentives for improvements in graduation rates. The figure shows

that over the period 2008 to 2014, the average annual growth rates for graduates was much higher than the growth rates for enrolments, thereby indicating an overall increase in efficiency.

Figure 12: Average growth rates in Graduate compared to enrolments over the period 2008 - 2014



Source: DHET (2014). HEMIS

Table 25: The increases in research outputs for the university sector, 2008 to 2013

	2008	2009	2010	2011	2012	2013	Average Annual growth rate 2008 to 2014
Permanent Academic Staff	15936	16320	16684	16934	17451	17838	2.30%
Growth in actual research output units							
Publication units	8075	9089	9740	11176	12367	14009	11.60%
Research masters graduates	3783	4179	4648	5281	6076	6460	11.30%
Doctoral graduates	1180	1380	1421	1576	1878	2051	11.70%
WEIGHTED TOTAL	**15397**	**17409**	**18651**	**21184**	**24077**	**26622**	11.60%
Ratios of research output units per permanent academic staff member							
Publication units	0.5	0.6	0.6	0.7	0.7	0.8	
Research masters graduates	0.2	0.3	0.3	0.3	0.3	0.4	
Doctoral graduates	0.1	0.1	0.1	0.1	0.1	0.1	
WEIGHTED TOTAL	**1**	**1.1**	**1.1**	**1.3**	**1.4**	**1.5**	

Source: DHET (2014). HEMIS

Table 25 shows the increased efficiencies for research output since the full implementation of the current funding framework in 2008. Permanently appointed academic staff increased on average by 2.3% per annum, whilst publication units, research masters graduates and doctoral graduates all increased by more than 11% on average per annum over this period. Weighted research output units are equal to: publication units + research masters graduate units + (3 x doctoral graduates).

Allocations from the NSFAS to the university sector, increased on average by 8.7% per year from R1. 3 billion in 2008/09 to R4.1 billion in 2015/16. Since NSFAS is not a direct allocation to universities, it is shown as a separate budget item. The increases of the ratios of permanent academic staff to each of these research output types shows the increased productivity of academic staff and improvements in efficiency. This could possibly be linked to the sizeable financial incentives in the current funding framework for research outputs.

Table 26: Block grant and earmarked allocations to universities for the period 2008/09 to 2015/16.

Budget category	2008/09 (R'000)	2009/10 (R'000)	2010/11 (R'000)	2011/12 (R'000)	2012/13 (R'000)	2013/14 (R'000)	2014/15 (R'000)	2015/16 (R'000)	Average annual growth rate
1 Block grants	**11 451 503**	**12 700 520**	**14 532 751**	**16 386 795**	**17 433 861**	**18 438 584**	**19 561 234**	**20 538 361**	**8.7%**
1.1 Teaching inputs	7 746 610	8 497 186	9 792 984	10 909 568	11 658 601	12 148 219	12 713 266	13 141 519	**7.8%**
1.2 Institutional factors	806 746	884 912	849 701	946 582	1 011 573	1 054 055	1 103 392	1 170 372	**5.5%**
1.3 Actual teaching outputs	1 550 365	1 777 818	2 053 350	2 306 077	2 537 108	2 712 979	2 974 475	3 213 301	**11.0%**
1.4 Actual research outputs	1 347 782	1 540 604	1 836 716	2 224 568	2 226 579	2 523 331	2 770 101	3 013 169	**12.2%**
2 Earmarked grants	**2 070 910**	**2 596 675**	**2 983 990**	**2 965 928**	**3 468 998**	**3 950 183**	**4 593 859**	**5 704 866**	**15.6%**
2.2 Infrastructure & output efficiencies	1 095 000	1 462 000	1 585 000	1 633 810	1 800 000	2 000 000	2 200 000	2 301 200	**11.2%**
2.3 Capital funds for 2 new universities						150 000	500 000	1 000 000	
2.4 Operational funds for 2 new universities				50 000	100 000	150 000	159 000	201 014	
2.5 National Institutes in 2 provinces	30000	35 000	39 000	41 000	43 050	45 418	48 143	0	**Phased out**
NHE Northern Cape Pipeline Students								12 000	
2.6 HDI Development Grant								410 743	
2.7 Research development	174 105	197 358		6 808	176 820	176 820	187 429	199 000	**1.9%**
2.8 Teaching development	308 873	345 392		419 920	499 000	575 000	609 500	616 900	**10.4%**
2.9 Foundation provision	131 000	146 079	185 000	176 953	194 033	204 705	236 560	304 470	**12.8%**
2.10 Clinical training of health professionals	200 000	300 000	330 000	349 800	367 290	387 491	410 740	429 635	**11.5%**
2.11 Veterinary Sciences	58 737	66 846	102 000	116 000	121 800	128 500	136 210	141 764	**13.4%**
2.12 Institute for Human and Social Sciences								23 829	
2.13 Merger multi-campuses			148 000	148 000	148 000	118 400	94 720	44 864	
2.14 Interest & redemption on loans	70 000	40 600	31 065	19 637	14 605	9 255	6 757	4 447	**-32.5%**
2.15 African Institute for Mathematical Studies	3 195	3 400	4 000	4 000	4 400	4 594	4 800	5 000	**6.6%**
2.16 Sector Monitoring and Evaluation								10 000	
TOTAL	**13 522 413**	**15 297 195**	**17 516 741**	**19 352 723**	**20 902 859**	**22 388 767**	**24 155 093**	**26 243 227**	**9.9%**
3. NSFAS									
2.1 NSFAS 1)	1 322 375	1 444 668	1 591 359	2 644 221	3 377 902	3 693 295	3 914 893	4 094 978	**17.5%**
TOTAL NSFAS INC	**15 119 788**	**16 741 864**	**19 108 099**	**21 996 944**	**24 280 762**	**26 082 062**	**28 069 986**	**30 338 205**	**10.5%**
1 Block grants	**11 451 503**	**12 700 520**	**14 532 751**	**16 386 795**	**17 433 861**	**18 438 584**	**19 561 234**	**20 538 361**	**8.7%**
2 Earmarked grants	**2 070 910**	**2 596 675**	**2 983 990**	**2 965 928**	**3 468 998**	**3 950 183**	**4 593 859**	**5 704 866**	**15.6%**
TOTAL	**13 522 413**	**15 297 195**	**17 516 741**	**19 352 723**	**20 902 859**	**22 388 767**	**24 155 093**	**26 243 227**	**1.0%**

Excludes funds towards the administration of the National Student Financial Aid Scheme (NSFAS) from 2011/12
Source: Compiled by C J Sheppard from the Annual Ministerial Statements on University Funding.

The changes in the funding mix of block grants and earmarked grants to the university sector masks some important underlying trends, especially in the block grant allocation. These are discussed further below.

Block grant per capita FTE students

The block grant is a source of discretionary funding to the universities. This funding allows universities to cover their operational costs. The DHET has used this grant as a proxy to measure changes in funding to the sector. The results presented by the DHET are reproduced in Table 26. This analysis reveals that:

- the block grant allocation to universities increased by 128% in nominal terms between 2004/5 and 2014/15, or 30.5% in real terms;
- enrolments grew substantially within the university sector over the period. When combined, the net effect of inflation and higher enrolments have led to a real decrease of 1.35% in the block grant per FTE; and
- the resources available for the delivery of education per student FTE has therefore declined (Department of Higher Education and Training, 2015b, p. 4).

Table 27: Block grant allocations to universities from 2004/5 to 2014/15

Year	Block grant for universities in nominal terms (R 'million) (A)	Growth in nominal terms (%)	Inflation (CPI)*	deflator (B)	Block grant for universities in real terms (R' million) (C=A/B)	Growth in real terms (%)	HEMIS Student FTEs (D)	Per capita in real terms using FTE students (Rands) (C/D)	Per capita growth in real terms (%)
May-04	8 568	-	2.00%	1	8 568	-	505 473	16 950	-
Jun-05	9 145	6.70%	3.60%	1.02	8 966	4.60%	500 931	17 899	5.60%
Jul-06	9 956	8.90%	5.20%	1.06	9 421	5.10%	497 772	18 926	5.70%
Aug-07	10 234	2.80%	8.10%	1.11	9 205	-2.30%	518 560	17 751	-6.20%
Sep-08	11 550	12.90%	11.20%	1.2	9 614	4.40%	538 457	17 854	-0.60%
2009/20	12 701	10.00%	6.90%	1.34	9 511	-1.10%	569 708	16 694	-6.50%
Nov-10	14 533	14.40%	3.80%	1.43	10 176	7.00%	600 002	16 960	1.60%
Dec-11	16 387	12.80%	5.60%	1.48	11 051	8.60%	628 409	17 586	3.70%
2012/13	17 434	6.40%	5.60%	1.57	11 134	0.70%	634 548	17 546	-0.20%
2013/14	18 439	5.80%	5.80%	1.65	11 151	0.20%	665 856	16 747	-4.60%
2014/15	19 561	6.10%	5.60%	1.75	11 181	0.30%	668 705	16 721	-0.20%
Net % change in nominal terms in block grant from 2004/5 to 2014/15		128.30%	Net real change in block grant			30.50%	Net change in per capita FTE student allocation		-1.35%

Source: Extracted from Department of Higher Education and Training, 2015b

Total funding per capita

While discretionary funding in form of the block grant has declined in real terms, per FTE student, it is important to contextualise this decrease within developments in the university sector. To do so, we have recalculated the estimates from the DHET in Table 28, but have included all sources of funding in this analysis. The following important findings emerge:

- Whereas the block grant grew by 30.5% in real terms, growth in total funding to the university sector grew by 62.36% over the ten-year period. Aside from the increase in the block grant, increases in earmarked funding to universities and NSFAS grants and loans also contributed to this growth.
- Over the ten-year period, the changes in the composition of funding has had an impact on these growth rates. The DHET used earmarked funding to achieve transformation goals and policy priorities. In some cases, earmarked funding was separated from the block grant to promote certain priorities, such as in the case of the teaching output grant. In other cases, additional funding was made available through earmarked grants, as in the case of the infrastructure and output efficiency grant.
- Per capita growth in total funding per FTE grew by 22.73% in real terms compared to a decline of 1.35% if only the block grant is used. This means that the allocation of funding per student FTE has experienced relatively robust growth over the 10-year period, and may be a better measure of resource allocation in the system.
- Simply using the growth in the block grant can skew the analysis and findings. The real decline in the block grant is the result of changes in the composition of funding because of policy changes (like increasing access without the concomitant funding) and developments in the sector.

	Block grant for universities in nominal terms	Total funding to universities in nominal terms	Nominal growth in block grant (%)	Nominal growth in total university funding	Inflation (CPI)*	Deflator	Block grant for universities in real terms	Total funding for universities in real terms	Growth in real terms (%)	Total funding growth in real terms (%)	HEMIS Student FTEs	Per capita in real terms using FTE students (Rands)	Per capita growth in real terms (%)	Real per capital growth in total funding using FTE students (Rands)	Per capita growth in real terms (%)
	(R 'million)	(R 'million)		(%)				(R 'million)							
May-04	8 568	9 878	-		2.00%	1	8 568	9 879	-		505 473	16 950	-	19 544	
Jun-05	9 145	10 779	6.70%	9.12%	3.60%	1.02	8 966	10 568	4.60%	6.97%	500 931	17 899	5.60%	21 096	7.94%
Jul-06	9 956	11 755	8.90%	9.05%	5.20%	1.06	9 421	11 090	5.10%	4.94%	497 772	18 926	5.70%	22 279	5.61%
Aug-07	10 234	13 056	2.80%	11.07%	8.10%	1.11	9 205	11 762	-2.30%	6.06%	518 560	17 751	-6.20%	22 682	1.81%
Sep-08	11 550	15 119	12.90%	15.80%	11.20%	1.2	9 614	12 599	4.40%	7.12%	538 457	17 854	-0.60%	23 399	3.16%
2009/20	12 701	16 742	10.00%	10.73%	6.90%	1.34	9 511	12 494	-1.10%	-0.83%	569 708	16 694	-6.50%	21 931	-6.27%
Nov-10	14 533	19 108	14.40%	14.13%	3.80%	1.43	10 176	13 362	7.00%	6.95%	600 002	16 960	1.60%	22 270	1.55%
Dec-11	16 387	21 997	12.80%	15.12%	5.60%	1.48	11 051	14 863	8.60%	11.23%	628 409	17 586	3.70%	23 652	6.20%
2012/13	17 434	24 281	6.40%	10.38%	5.60%	1.57	11 134	15 466	0.70%	4.06%	634 548	17 546	-0.20%	24 373	3.05%
2013/14	18 439	26 082	5.80%	7.42%	5.80%	1.65	11 151	15 807	0.20%	2.21%	665 856	16 747	-4.60%	23 740	-2.60%
2014/15	19 561	28 070	6.10%	7.62%	5.60%	1.75	11 181	16 040	0.30%	1.47%	668 705	16 721	-0.20%	23 987	1.04%
Net % change in nominal terms in block grant from 2004/5 to 2014/15			128.30%	184.17%	Net real change in block grant				30.50%	62.36%	Net change in per capita FTE student allocation		-1.35%		22.73%

Table 28: Nominal and real decreases in total funding to the university sector, 2004-2014

Source: Adapted from (Department of Higher Education and Training, 2015b)

Funding levels

The university sector's funding framework was designed to align with its planning process. Where this alignment is lost, this can impact on funding levels. The funding framework is based to a large extent on enrolments, although there are also performance output allocations that influence total funding levels.

Since funding is linked to enrolments, it can create incentives for under and over-enrolments within the university sector. Under enrolment leads to vacant student places in a sector where there is a great demand for access. Another possible explanation for under enrolment is that some universities might inflate their enrolment projections because historically they were funded for all the projected numbers. This has led to objections from universities who have managed their enrolments responsibly because the funding paid to universities that under enrolled should rather have been used to increase the rand value of a teaching input unit, allowing all universities to benefit from the additional resources in the sector.

Over-enrolments on the other hand are not subsidised but the DHET has expressed concern that this negatively affects the quality of education. Universities are supposed to expand their enrolments responsibly within the available fiscal, human and capital resources to ensure a quality teaching and learning experience for the students. This places the university sector in a difficult situation – there are constant pressures from students that qualify to get access to university studies, and there are imperatives to increase the participation rate but available resources cannot meet the demand.

Enrolment planning is a key to accessing funding. The planning process works as follows. Each university prepares an enrolment plan for a period of six years, and negotiates their estimates with the DHET until some agreement is reached. Once agreement is reached on the enrolment and performance targets the final enrolment plan is signed off by the Council of the University for approval by the Minister. While plans can be revised every three years, the enrolments targets are meant to be adhered to.

The enrolment plans serve two purposes. First, they ensure that universities align their enrolment plans with national needs and priority areas. Second, enrolment plans provide the DHET with necessary information to budget and make decisions around the funding of human and physical resources to ensure a quality learning and teaching experience for the students. Performance targets are also set to ensure that universities strive to become more efficient and that student success and throughput rates are improved over time.

Contained in the enrolment plan, is an upfront agreement on how many teaching inputs would be funded for a period of 3 years based on the Ministerial Statement on Student Enrolment Planning. The latest Ministerial Statement on Student Enrolment Planning covers a period of 6 years from 2014/15 to 2019/20 (Ministry of Higher Education and Training, 2014).

Since there is an upfront agreement on the number of teaching input units that will be funded, universities that enrol considerably fewer students than what was agreed upon still received the full

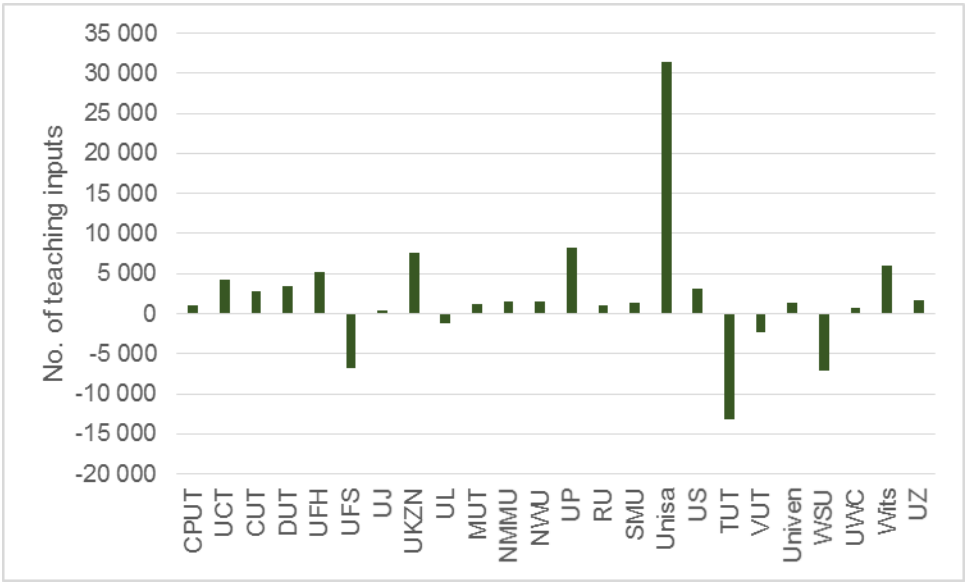
amount for the planned teaching input units. Since their actual teaching input units are less than the funded teaching input units, they in effect received more funding per actual teaching input unit in their Teaching Input Grant allocation. On the other hand, there are several universities, that enrol more students than planned, and these additional enrolments are not funded by the DHET.

Enrolment management is a complicated task. Often, enrolments are influenced by factors outside the control of universities, such as NSC results, student behaviour, available student and funding support. For this reason, a 2% variation in actual versus planned enrolment is allowed by the DHET.

The funding framework is built on a normative basis. The funding grid sets out the relationship between teaching input units and enrolments for a given course, at each level. If actual enrolments exceed planned enrolments, universities receive less funding per teaching unit. It implies that a proportion of teaching units in the university will be under-funded. Conversely, where planned enrolments exceed actual intake, the university's funding per teaching input increases. While under-enrolments can be seen as the inefficient utilisation of resources, over-enrolments has potentially serious and negative impacts on the quality of teaching, learning and student success.

It is possible to estimate the extent to which universities deviate from there agreed-upon enrolment targets by looking at the relationship between actual and funded teaching input units. We calculate these figures by applying the funding grid to planned and actual enrolments for universities to determine the teaching units required by the university. The difference reflects the level of under or over funding of teaching units within each university. Figure 13 shows the number of teaching input units per university in 2013. A positive number suggests that teaching inputs are underfunded because of over-enrolments whilst a negative number reflects the converse – under enrolments means that teaching units are funded beyond the benchmark set in the enrolment plan. This relates to the allocations made from the teaching input grant which is part of the block grant allocations.

Figure 13: Net difference between funded and unfunded teaching units, 2013



Source: Department of Higher Education and Training, 2015d

The analysis shows that the majority of universities have over-enrolled students, unsurprisingly, because of pressures from qualifying students for access to university education. As a result, some of their teaching units are not funded through the government subsidy. This problem is particularly visible amongst traditional universities such as the University of Witwatersrand, University of Pretoria, and University of KwaZulu-Natal. Unfunded teaching units, in these universities, are probably financed through other sources of incomes received by the university. This implies that a university's ability to fund more enrolments also depends on its ability to leverage other sources of income.

6.4 University expenditure

This section examines university expenditure and enrolments, and serves to identify the main factors that explain differences in expenditure between South African universities. The primary sources of data for this analysis are university income statements for the years 2007 to 2014 and the DHET's 2007 – 2019 enrolment plan (i.e. actual enrolment numbers for 2007 to 2013). Although the enrolment data is complete and accurate, there are large gaps in the income statement data and the analysis is therefore based on those universities for which complete and reliable data are available.

6.4.1 Aggregate university expenditure

Figure 14 shows aggregate expenditure across all universities in South Africa. Total expenditure equalled R52.9 billion in 2014 as compared to R15.2 Billion in 2004. On average, university expenditure grew at an annual rate of 13.2%. When compared to university expenditure, university income (subsidies, fees and third stream) has increased at a marginally faster rate, at 13.3% over this same period. The resulting average surplus over the 10 year-period is sizable, at 9.9% of total income. As at 2014, this surplus amounted to R4.2bn. According to the universities, this surplus is largely accounted for by the underestimation of third stream income sources[38] during the budgeting process. Greater than expected investment income and actuarial gains on provisions also contribute significantly to the surpluses. The size and cause of these surpluses, by university, warrant further investigation.

[38] Short courses and/or skills programmes, research grants and non-academic services such as facilities' rental

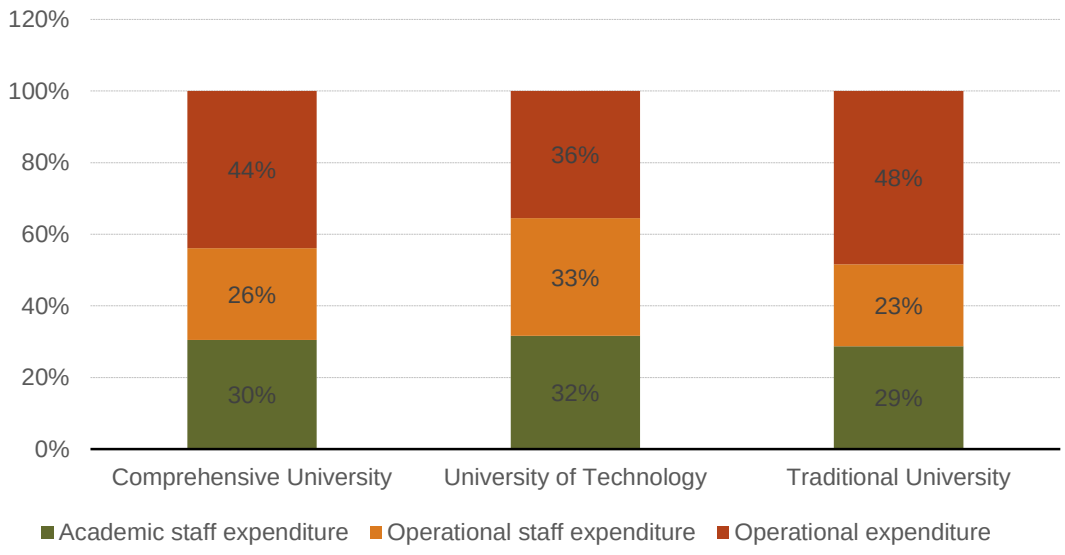
Figure 14: Total university expenditure, 2004-2014

Source: Department of Higher Education, 2015a

6.4.2 Composition of university expenditure

In general, university expenditure can be broken down into expenditure on academic staff, expenditure on operational staff and non-staff operational expenditure. Figure 15 shows the average composition of university expenditure by type of university for 2013. Spending patterns within Traditional and Comprehensive Universities are very similar. Whereas Comprehensives spend marginally more on staff, Traditional Universities allocate a higher proportion of their expenditure towards non-staff operational expenditure. On the other hand, Universities of Technology allocate a significantly smaller proportion to operational expenditure, with a much greater focus on operational staff expenditure. The specific drivers of this expenditure within and between these different institutions, is addressed in section 6.5.

Figure 15: University expenditure breakdown (2013)



Source: Department of Higher Education, 2015a

Table 29 looks at how the composition of expenditure has changed between 2008 and 2013, and also considers the change in expenditure per FTE student enrolment. Total expenditure per FTE has increased in real terms at an average annual rate of 1.5%. This increase has been driven equally by real growth in operational expenditure per FTE, academic staff expenditure per FTE and operational staff expenditure per FTE. It follows that the proportion of expenditure allocated to each component has remained similar over this time period. This implies that the main drivers of expenditure, within these universities, has also remained relatively constant over time.

Table 29: Change in expenditure per FTE over time (inflation adjusted) ('000)

2014 Prices	2008	2013	Real annual growth rate
Operational expenditure per FTE	R38.49 (45.7%)	R41.23 (45.6%)	1.4%
Academic staff expenditure per FTE	R24.82 (29.5%)	R26.65 (29.5%)	1.4%
Operational staff per FTE	R20.87 (24.8%)	R22.59 (25.0%)	1.6%
Total expenditure per FTE	R84.17	R90.48	1.5%

Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

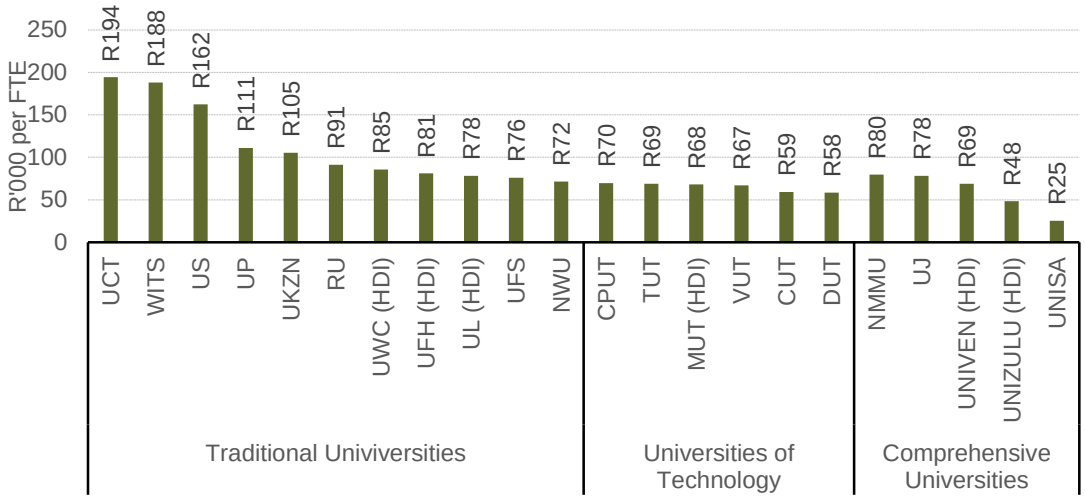
6.4.3 Expenditure per student FTE

Traditional universities spend significantly more per student FTE than universities of technology and comprehensive universities. On average, expenditure per student FTE at traditional universities is R112 580, compared to R66 100 at the universities of technology and R60 030 at comprehensive universities. Moreover, the four traditional universities that spend the most per student FTE, spend on average 113% more per student FTE than the four universities that spend the least.

The skewed distribution of expenditure within the sector reflects the entrenched inequity between previously advantaged and well-funded universities and disadvantaged ones. These differences can also be explained by the specific drivers of expenditure in these universities. For instance, UCT, WITS, US and UP have very few students per academic staff member, a high proportion of academic staff have very advanced tertiary qualifications (PhDs), and a higher proportion of students are enrolled in postgraduate courses.

The unequal distribution of expenditure per student FTE is less pronounced but still apparent between comprehensive universities. Specifically, those universities classified as historically disadvantaged spend significantly less per student, than UJ and NMMU. The distribution of expenditure is however much more equal between universities of technology. This may be because these universities generally have a narrower academic mandate, and the range of courses and the composition (and cost) of their student body us unlikely to vary substantially.

Figure 16: Expenditure per student FTE, 2013



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

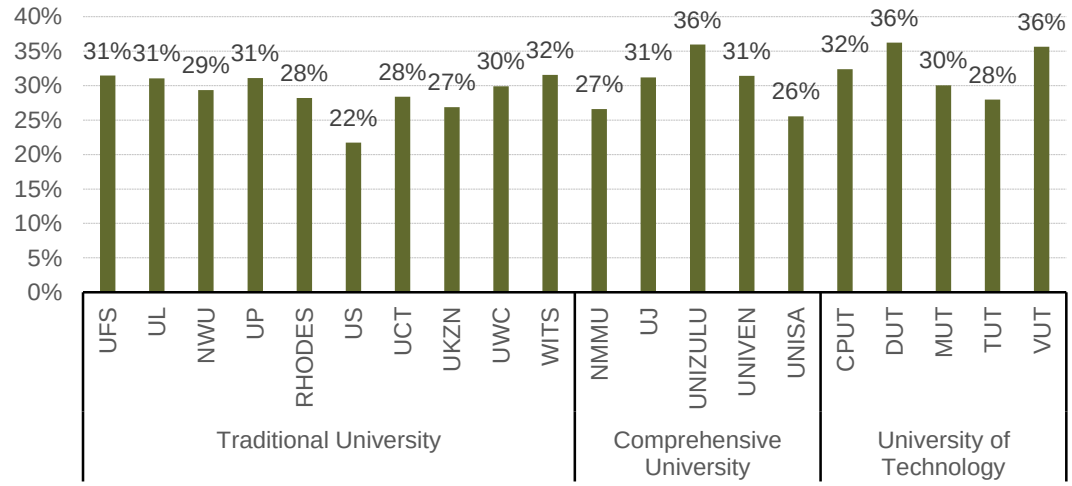
The university funding model will clearly need to account for the stark differences in student costs, and the drivers of these costs, across all of these different institutions. The main drivers, within each component of university expenditure, are explored further below.

6.5 Cost drivers in the South African university sector

6.5.1 Drivers of academic staff expenditure

On average, 30% of all university expenditure is spent on the compensation of academic staff. This includes all staff involved in lecturing and research at a university. Moreover, there is little difference in the relative amount spent on academic staff between the different types of universities. Whereas universities of technology and comprehensive universities spent 32% of total expenditure on academic staff in 2013, traditional universities spent 29%

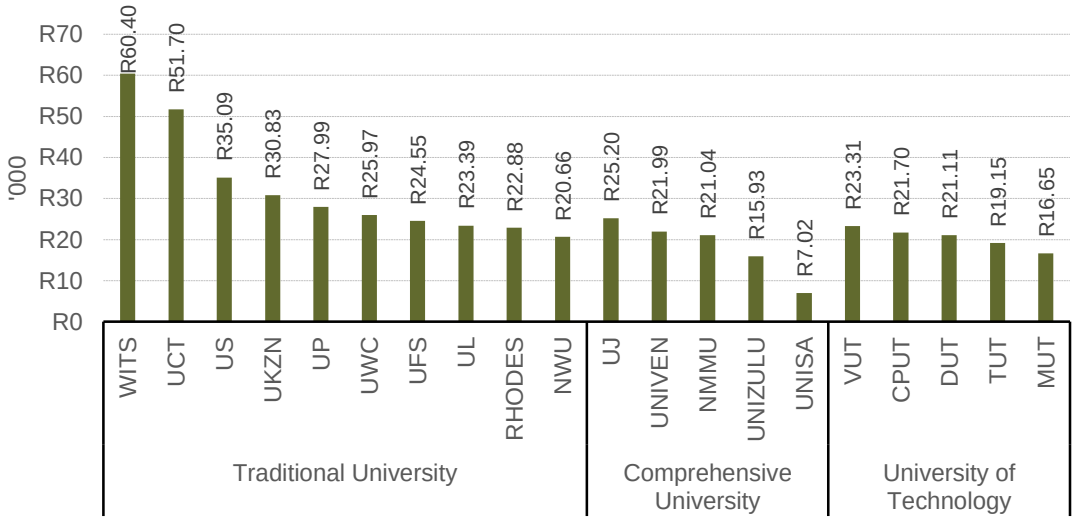
Figure 17: Academic staff expenditure to total expenditure, 2013



Source: Department of Higher Education, 2015a

Although the variation between universities in the proportion of total expenditure allocated to academic staff is marginal, the variation in what universities actually spend on academic staff per student FTE is significant. Interestingly, but not surprising, the ranking of universities in Figure 18 is very similar to the ranking in Figure 16, where total expenditure per student FTE was compared. This suggests that there is a strong relationship between what universities spend on academic staff and what they spend in total. Understanding the drivers of academic staff expenditure is therefore especially important in this sector.

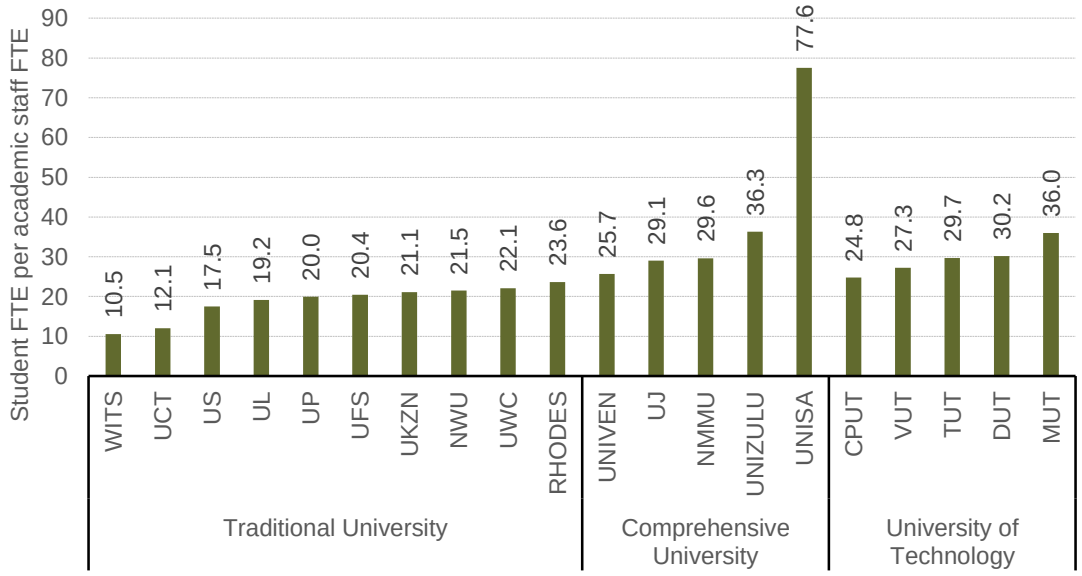
Figure 18: Academic staff expenditure per student FTE



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

One of the key determinants of academic staff costs in the university sector is the ratio between students and academics. On average, traditional universities have one academic staff member for every 18.8 FTE students, substantially lower than the 29.6 students per staff member at universities of technology and 30.2 at comprehensive universities[39]. UNISA, due to its vastly different institutional structure, is excluded from these calculations[40].

Figure 19: Student FTE per academic staff FTE



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

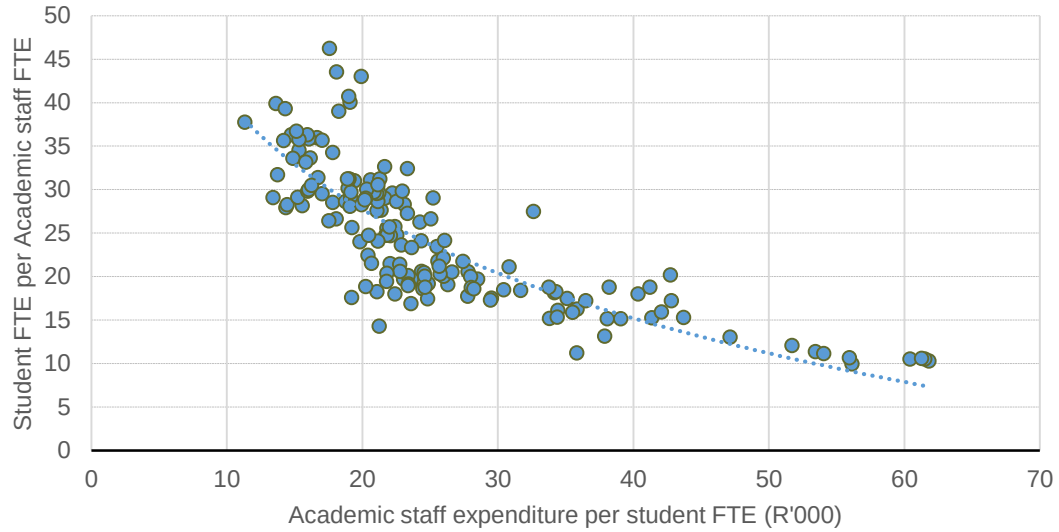
In order to test the actual relationship between the student to academic staff ratio and university expenditure, we estimate these ratios for each university, and then compare them to the academic staff expenditure per FTE. The results, as reflected in Figure 20, provide useful insights into the allocation of academic resources and the quality of provisioning in universities. Specifically, universities that assign fewer students, on average, to each academic staff member, will spend more on academic staff for every FTE student enrolled. Likewise, Figure 21 shows that universities with lower student to academic staff ratios, tend to spend more in total per student FTE.

There are a number of factors which influence the student to staff ratio within individual universities. This includes the university's specific business model and approach to the delivery of tertiary education, the proportion of students in post-graduate studies (covered in section 6.6.2), and the proportion of distance-learning students within the institution. All of these institution-specific factors therefore need to be considered in determining the additional cost involved in raising the capacity, and the total number of graduates, of the university sector.

[39] Due to its vastly different mandate and subsequent institutional structure, UNISA has been left out of this analysis.

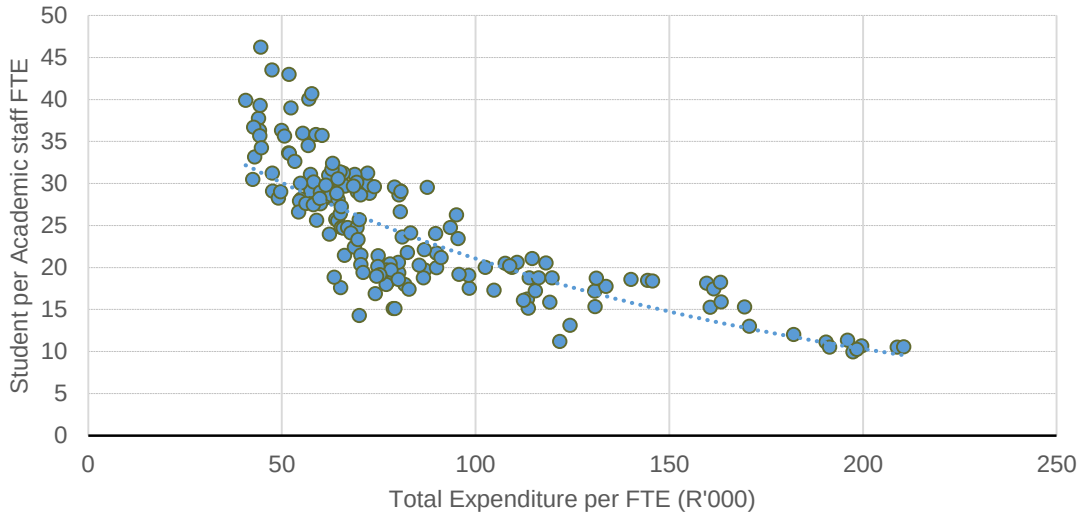
[40] UNISA's significantly lower academic staff expenditure per student FTE, as illustrated in Figure 13, can be explained by a student FTE to academic staff ratio more than twice that of the university with the second most student FTEs per academic staff FTE.

Figure 20: The effect of the ratio of student FTEs to Academic Staff FTE on academic staff expenditure per FTE (2007 - 2014)



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

Figure 21: The effect of the ratio of student FTEs to Academic Staff FTE on Total expenditure per FTE (2007 - 2014)



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

Expenditure on academic staff is not only dependent on the number of staff within each university, but also on the unit cost of these staff. By regressing the composition (highest qualification) of all academic staff across all universities (excluding UNISA) from 2007 to 2014, against total expenditure on academic staff, a number of relationships emerge. The full results from this analysis are presented in **Error! Reference source not found.**.

Firstly, as expected, there is a strong relationship between the proportion of academic staff with higher-level qualifications and academic staff expenditure (this is inferred from the greater

coefficient for "Doctoral degree" presented in the regression analysis output). Raising the number of doctoral level staff at South African universities, as proposed in the National Development Plan, will have cost implications.

Secondly, the analysis reveals that universities of technology pay the highest salaries, followed by comprehensive universities and lastly, traditional universities. This result may be explained by the fact that universities of technology have a stronger focus on the science, engineering and technology as well as business studies fields; areas in which they are most likely to compete with the private sector for skills.

Finally, Historically Disadvantaged Institutions spend, on average, more per academic staff member than other, more established, universities. This may be necessary in order to attract skilled staff to more distant locations, where travel and housing might be more costly.

The cost of academic staff is a major driver of overall university expenditure; and the unit costs of academic staff vary significantly by the type of institution. Whereas some of these costs can be explained by the qualification and skills of these academics, other institutional factors seem to be at play. This suggests that a more comprehensive review of academic salaries across South African universities may be needed.

6.5.2 Drivers of operational staff expenditure

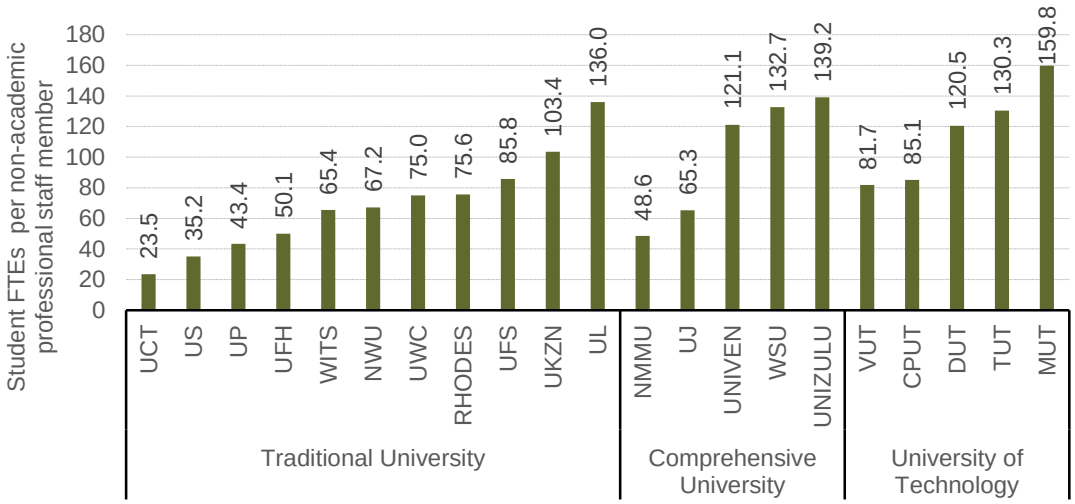
Expenditure on operational staff, which includes all expenditure besides on non-academic staff, constitutes a significant proportion of a university's total expenditure. As illustrated in Figure 15, there is a much greater variance in the proportion of expenditure allocated to operational staff than there is in the proportion allocated to academic staff. Traditional universities, on average, allocate 23% of total expenditure to this component, compared to 26% in comprehensive universities and 33% in universities of technology.

To identify the main cost drivers behind operational staff expenditure, the analysis differentiates between non-academic professional staff[41] and non-professional staff[42]. Specifically, we consider whether the variation in total operational staff expenditure between universities is explained by the number of professional and non-professional operational staff relative to student FTE enrolment.

Figure 22 shows the number of student FTEs per non-academic professional staff member (the smaller the value of this ratio, the more non-academic professional staff there are for each student FTE). There is clearly a high degree of variation between categories of universities, and within each category. Likewise, **Error! Reference source not found.** reveals significant variation in erms of the number of students per non-professional staff member.

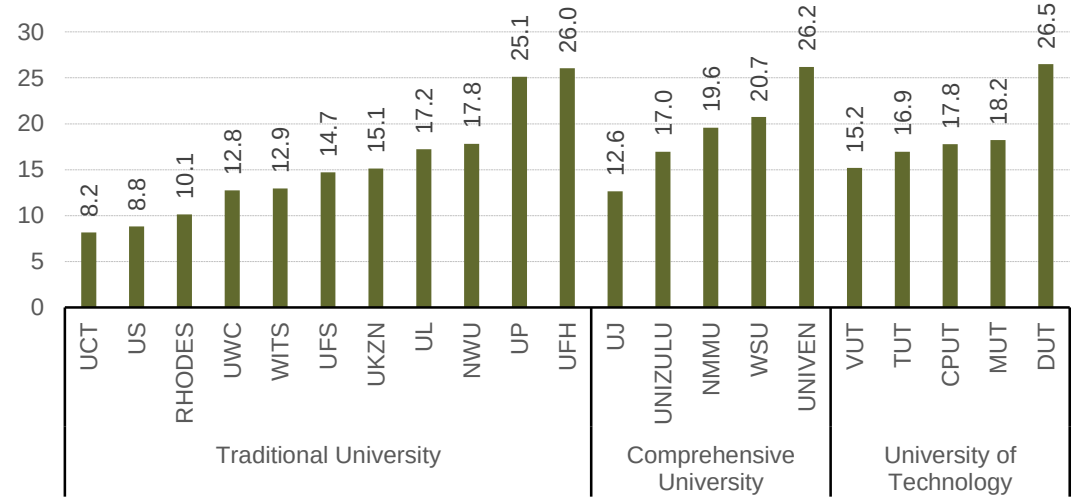
[41] Executive/management professionals and support professionals.
[42] Technical staff, non-professional administrative staff, craft/trades staff and service staff.

Figure 22: University comparison in terms of non-academic professional staff numbers, 2013



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

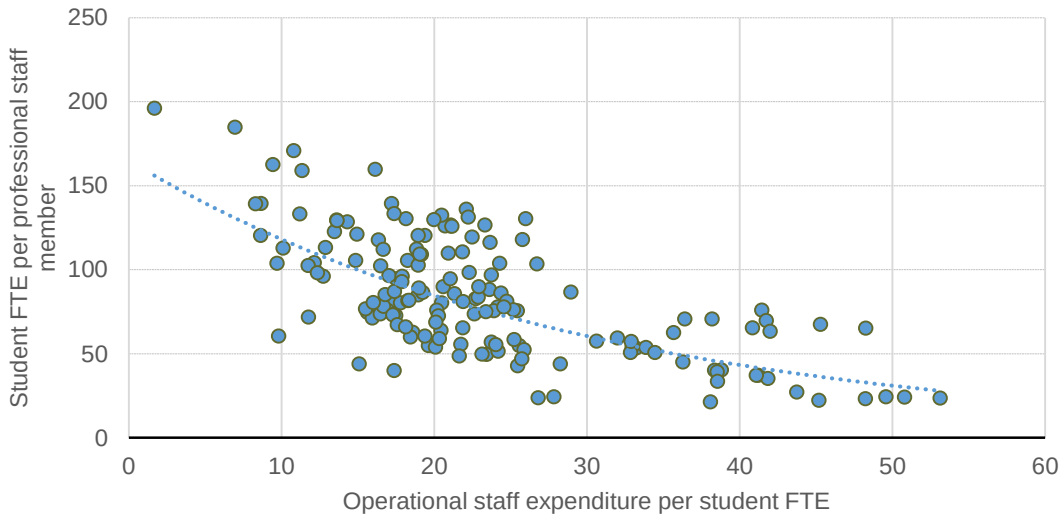
Figure 23: Number of students per non-professional staff member



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

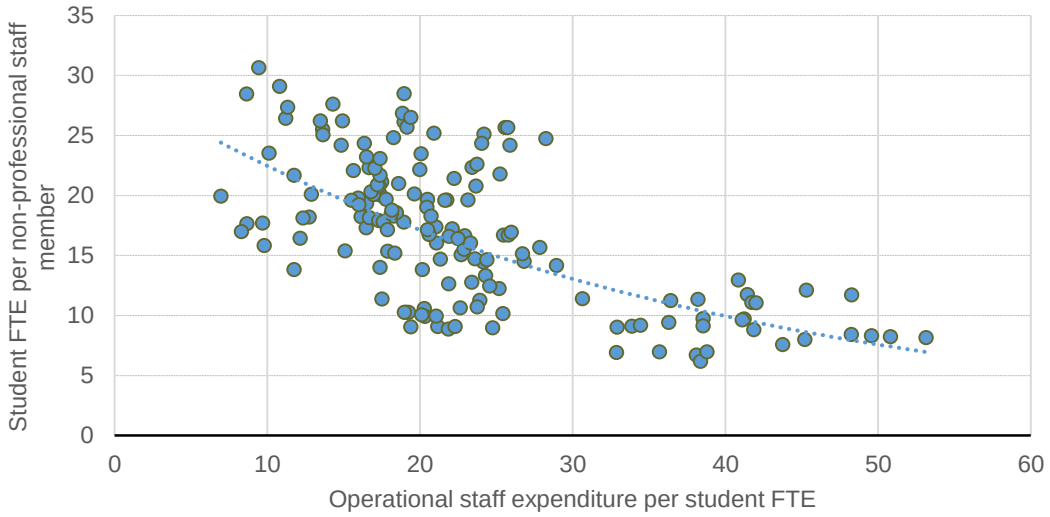
Figure 24 and Figure 25 show the relationship between operational staff expenditure per FTE and the number of student FTEs per non-academic staff member. In both cases, there is a strongly negative trend. This implies that the number of operational staff, per student, are important cost drivers in the sector. Further analysis shows a consistent and positive relationship between what universities spend per FTE student on operational staff, and what universities spend in total per FTE student. University staffing models clearly have an important bearing on overall costs; universities that tend to spend more on operational staff also tend to spend more in total.

Figure 24: Relationship between the ratios of student FTE to the number of non-academic professional staff with expenditure on operational staff per student FTE



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

Figure 25: Relationship between the ratios of student FTE to the number of non-professional staff with expenditure on operational staff per student FTE



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

6.5.3 Drivers of operational expenditure

The third, final and largest component of university expenditure is operational expenditure (all expenditure other than salaries and benefits paid to university staff). Identifying the main cost drivers within this catch-all component is more difficult, because it includes a large number of non-homogeneous elements, each of which is likely to display its own combination of cost drivers.

Moreover, there is no comprehensive and consistent set of data available on all of these elements across all universities.

For the purpose of this analysis, confidential and detailed data from a single university was used to identify the main contributors to this component. These are summarised in Table 30. According to this university, the single largest driver of these costs, and operational expenditure in general, is student FTE. However, without additional data, it is not possible to test the effects of different expenditure drivers on any of these specified operational expenditure items.

Table 30: Sample university operational expenditure breakdown and possible expenditure drivers

Operational expenditure	Percentage of total operational expenditure	Operational expenditure sub-category	Percentage of operational expenditure category	Possible drivers of expenditure
SUPPLIES AND SERVICES	**37%**	Research Grants	16%	University staff research capacity and qualifications
CORPORATE OVERHEADS	**32%**	Travel And Subsistence	10%	University policy and location
		Contract Cleaning	14%	University's physical size, university outsourcing/in-sourcing policy
		Contract Security Services	21%	University's physical size, university's insourcing/outsourcing policy and location
		Municipal Services	30%	University's physical size and location and relevant inflation
		Municipal Rates	14%	University's physical size and location
MAINTENANCE AGREEMENTS	**6%**	Maintenance of Software Contracts	50%	Number of students and courses presented
SUPPLIES AND SERVICES - EARMARKED	**12%**	Travel - Shuttle Service	46%	University's policy and location
BAD DEBTS	**7%**	Bad debts	100%	University's debt policy and average economic status of students
BURSARIES	**5%**	Bursaries	100%	University's bursary policy

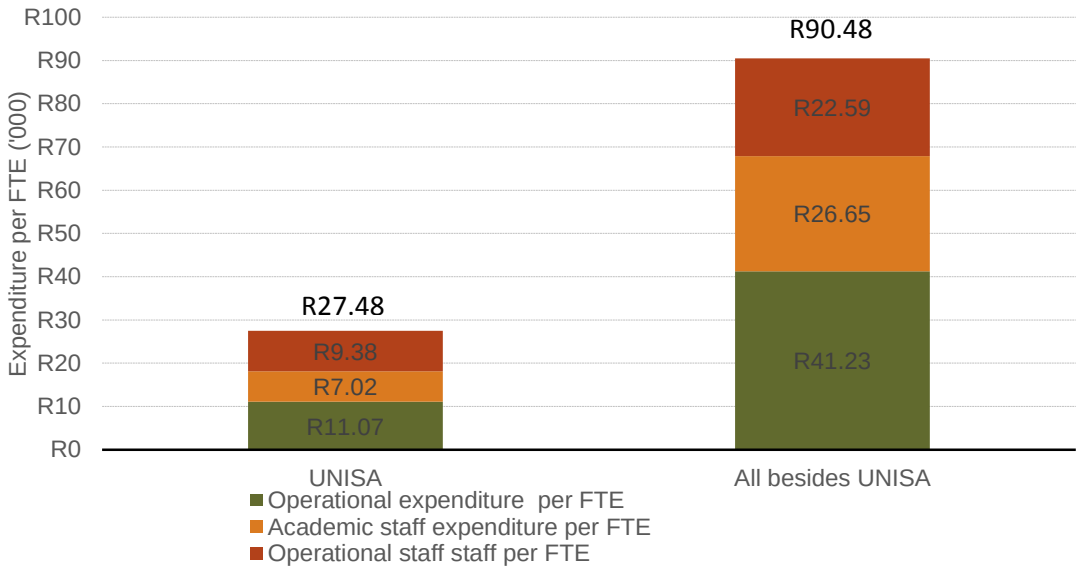
Source: Confidential source

6.6 Other cost considerations

6.6.1 UNISA and the case for distance learning

In line international trends and the growth in popularity of Massive Open Online Courses (or MOOCs), the White Paper on PSET envisages the increased use of distance education to enhance access to higher education in South Africa. Currently, UNISA is the largest provider of distance learning at the tertiary level. Figure 26 compares expenditure per FTE at UNISA to the average of all other universities in 2013. As would be expected, UNISA spends significantly less on operations and staff per student.

Figure 26: UNISA compared to the rest, 2013



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

Through the previous analysis, we have determined specific drivers of expenditure per FTE. Table 31 shows the differences between UNISA and the other primarily contact learning universities in terms of these drivers. UNISA has three times the number of FTE students per academic staff FTE, more than 6 times the number of student FTEs for every professional staff member, and nearly 3.5 times the number of student FTEs for every non-professional staff member. The amount of infrastructure required by staff, per FTE student, would also be much lower.

Table 31: Cost drivers comparison between UNISA and the rest

Expenditure drivers	UNISA	All beside UNISA
Student FTE per Academic staff FTE	77.6	24
Student FTE per non-academic professional staff FTE	583	89.9
Student FTE per non-professional staff member	55	16

Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

Distance learning clearly has the ability to drive costs savings in this sector. However, the benefits of this model cannot be considered on cost factors alone, and some consideration needs to be given to the performance of individual students. In 2013, UNISA was responsible for 36.1% of all students enrolled at universities in South Africa, but only responsible for 19.3% of graduations. Table 32 shows the throughput results of a cohort study conducted by the Council for Higher Education. The differences in performance between primarily contact-learning universities and UNISA is stark.

Table 32: Throughput rate comparison

Qualification	All besides UNISA - 6 year cohort	UNISA - 8 year cohort
360 degree credit undergraduate course	49%	5%

3-year undergraduate degree	59%	14%
4-year undergraduate degree	63%	16%

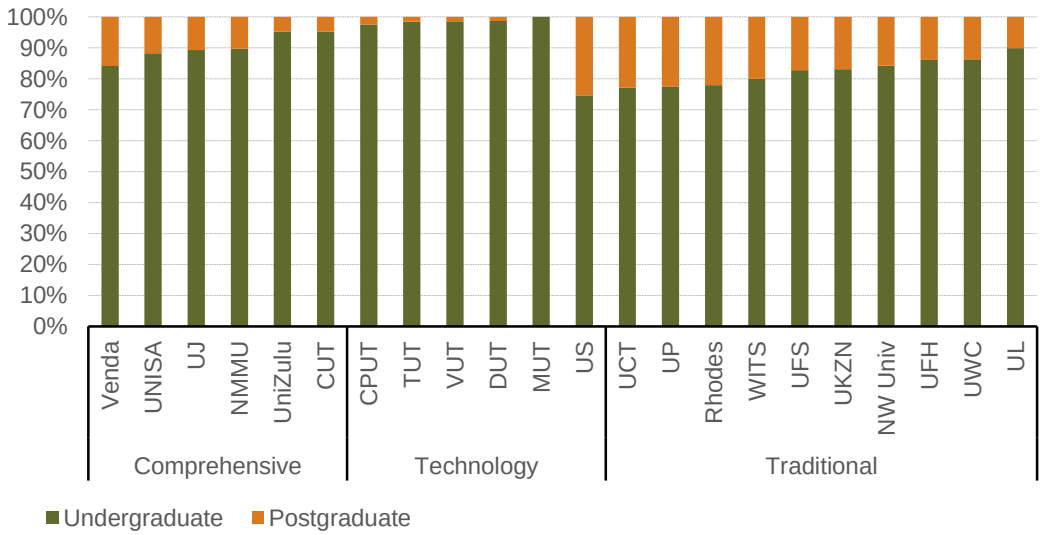
Source: CHE (2015)

Although expenditure per FTE is much lower at UNISA than at the other universities, performance is generally poorer. The cost-effectiveness of UNISA, and distance learning in general, requires further analysis; and a different approach to distance learning might need to be developed by other (traditionally contact) universities in order to improve throughput rates. This could be done by, for instance, increasing the number of and improving the teaching ability of academic staff or by expanding infrastructure to include smaller campuses across the country for increased student support.

6.6.2 Distribution of student FTEs across qualification levels

Another factor which may impact on cost differentials between universities, is the number of post-graduate students as a proportion of total enrolments. Figure 27 shows that postgraduate enrolment at traditional universities was on average 18.2% of total enrolment in 2013, significantly higher than the average of 1.9% at universities of technology and 10.6% at comprehensive universities.

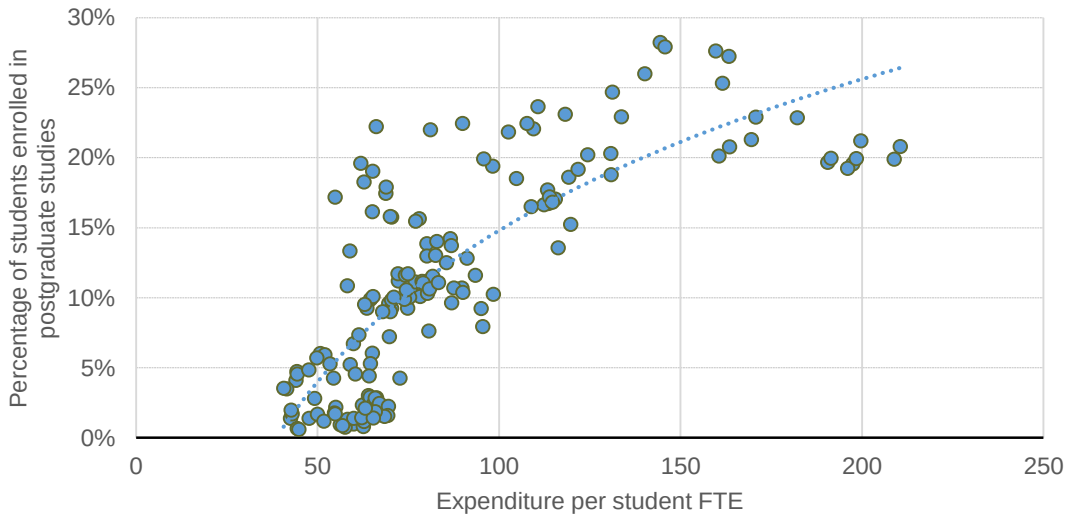
Figure 27: Undergraduate-postgraduate split across universities, 2013



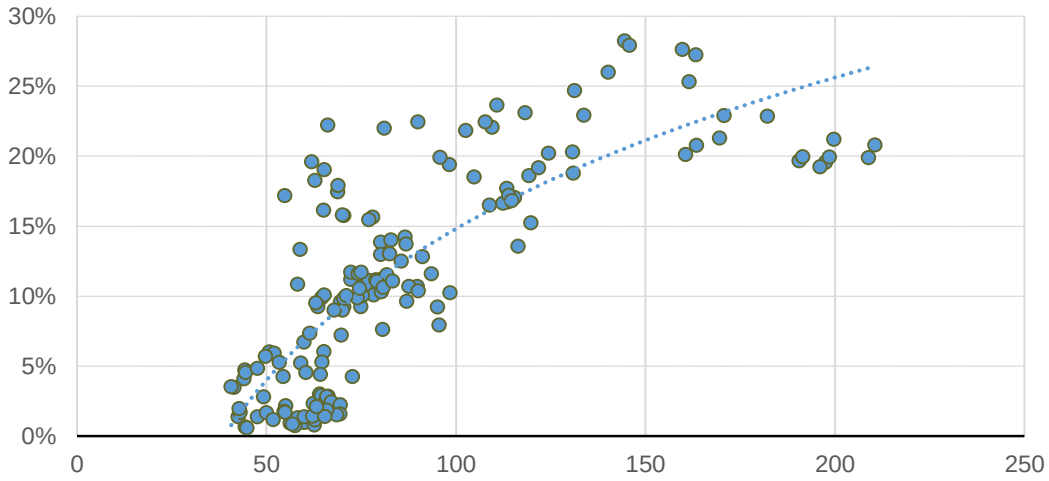
Sources: Department of Higher Education, 2015a and Department of Higher Education (2015e)

Figure 28 illustrates the relationship between expenditure per student FTE and the proportion of students enrolled in postgraduate studies. It shows a strongly positive relationship between these two variables. Universities with higher levels of expenditure have a larger proportion of students enrolled in postgraduate degrees. The university funding model's sensitivity to the composition of the student body, and in particular, the number of students registered for postgraduate study is therefore validated by the data.

Figure 28: Relationship between expenditure per FTE enrolment and the proportion of students enrolled in postgraduate studies, 2007 - 2014



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

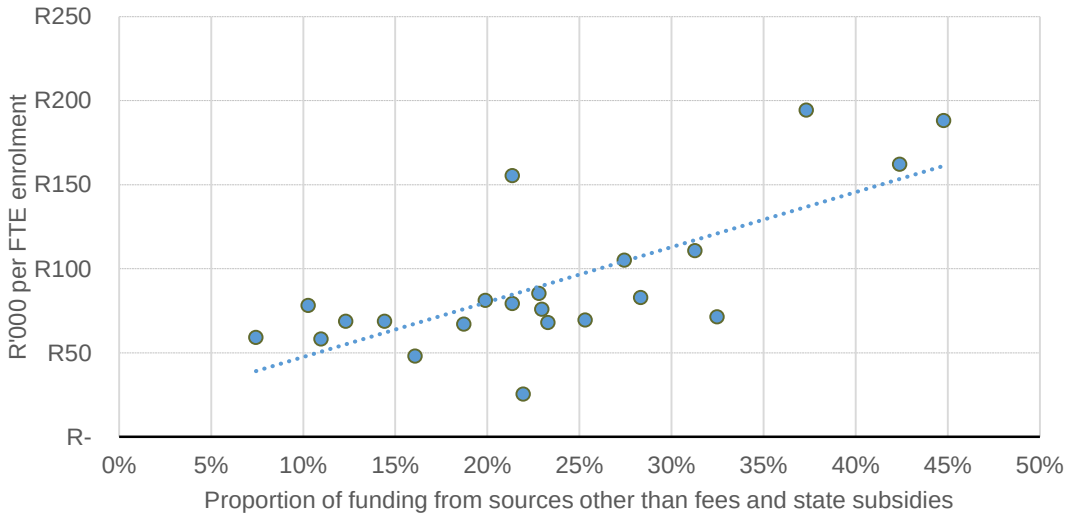


Source ***Department of Higher Education, 2015a and Department of Higher Education (2015e)***

6.6.3 Relationship between third stream income and expenditure

A university's expenditure per student FTE will depend largely on the amount of funds a university has available to spend. The current formula allocates funding to universities based on objective criteria, and NSFAS bursaries are influenced by the proportion and mix of students from different income levels. If these two revenue sources are excluded, there appears to be a positive and strong correlation between the proportion of funding other 'third stream' income, and expenditure per student FTE, as shown in Figure 29.

Figure 29: Relationship between third stream funding and expenditure per student FTE



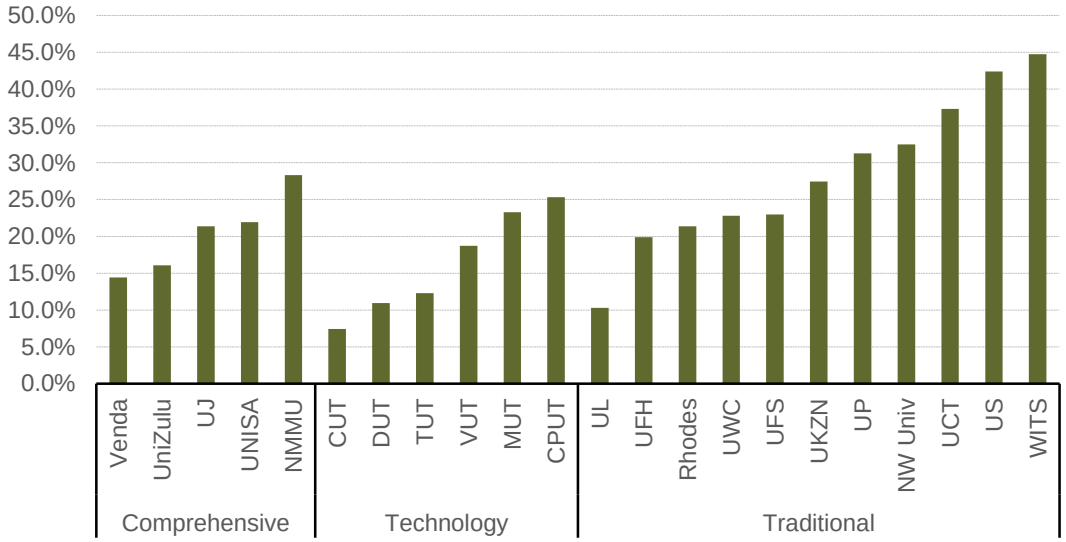
Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

Figure 30 confirms this trend and shows that traditional universities typically benefit from a large proportion of 'third stream income', which accounts on average for 28.1% of their total funding, compared to 20.4% at comprehensive universities and 16.3% at universities of technology.

Universities' ability to raise third stream income has a direct impact on the quantity and quality of resources that they are able to acquire, and therefore directly influences total expenditure through the mechanisms already discussed. The direction of causation is however somewhat circular. Universities that acquire, for instance, more and higher quality academic staff will also be able to raise more third stream income through contracted consulting work, for example. The marketability of academic staff is however not the only factor that influences a university's ability to raise third stream income. Other factors include reputation, geographic location, academic focus and in more general terms, the university-specific business model.

Improving the ability of universities to increase third stream income could decrease the university sector's dependence on state funding. However, the analysis reveals stark differences in the actual capacity of universities to do so; and it is likely that this is sometimes for reasons beyond their immediate control. For instance, a university located in a rural area will never be able to generate as much income from contracted consulting as those that are geographically closer to business. Further investigation into the determinants and sources of third stream income will provide more useful information on the possibilities for diversifying funding sources at each university over time.

Figure 30: Proportion of third stream funding raised by universities (2013)



Source: Department of Higher Education, 2015a and Department of Higher Education (2015e)

6.7 University performance

The main focus of this paper is on the funding and expenditure of the PSET system, and in this case, the university sector. Whereas one would expect to see a direct relationship between expenditure and performance, this is not always a case. University performance is determined by a much wider range of factors, including but not limited to the quality of primary education of the average university student, the teaching ability of the lecturers and the types of programmes presented at the different universities.

Controlling for all of these factors to isolate the impact of funding and expenditure on university performance is therefore a complicated and data intensive exercise, that goes beyond the scope of this report. Nevertheless, The Council for Higher Education has published throughput rates at an aggregate level for undergraduate studies, looking specifically at a 2006, 2007 and 2008 cohort of students, that were expected to finish in 2011, 2012 and 2013 respectively. Table 33 presents the results of these cohort studies.

It is clear that on the basis of these measures, the performance of the university sector has been improving over time. It would be useful to undertake further and more detailed analysis to assess whether changes in funding and expenditure policies and patterns, across different universities over this period, have contributed to this improved performance.

Table 33: University performance

Qualification	2006 cohort	2007 cohort	2008 cohort
360-credit diplomas	46%	47%	50%
3-year degrees	56%	55.9%	59%
4-year degrees	54%	58%	63%

Source:CHE (2011), CHE (2012) and CHE (2013)

Key points and policy issues

Between 2000 and 2013 the total headcount enrolment at South Africa's 26 public universities increased by 77% from 555 161 to 983 698, at an annual average growth rate of 4.5%. Total funding from government to the university sector has increased at an equally rapid rate, by 62.36% in real terms between 2004 and 2014; resulting in a net real increase in total funding per FTE of 23% over this period.

This increase masks some important trends in the composition of university funding. In particular, there has been a marked shift away from direct, block grants to the universities; and a corresponding increase in Government's contribution to the NSFAS to support students in paying their fees. Moreover, expenditure per FTE varies considerably across the three categories of universities, and in general, reflects historically inequities. The largest variation occurs within traditional universities, where previously advantaged universities spend more than twice the amount per student FTE than those at the lower end of the spending spectrum.

A number of factors influence expenditure per student FTE. Amongst the more important are the student to academic ratio, the number of non-academic professional and non-professional staff relative to the student count, and the mix of undergraduate to postgraduate enrolments in a university.

The cost of academic staff is also a major driver of overall university expenditure; and the unit costs of academic staff vary significantly by the type of institution. Whereas some of these costs can be explained by the qualification and skills of these academics, other institutional factors seem to be at play. This suggests that a more comprehensive review of academic salaries across South African universities may be needed.

Finally, there is a strong correlation between expenditure per student FTE and the ability of the university to source third stream income. Whereas this enables more established universities to diversify and supplement their funding, it may also serve to reinforce the unequal pattern of university spending and performance in the sector.

PART E: SKILLS SYSTEM AND WORKPLACE TRAINING

7 WORKPLACE TRAINING

7.1 Overview

The framework for workplace training is provided by the Skills Development Act of 1998 as amended and the Skills Development Levies Act of 1999. The aim of these Acts is creating an educated and skilled workforce, increased productivity in the workplace and broader economic growth and development. Three National Skills Development Strategies (NSDS) have provided the strategic framework for skills development institutions to promote, fund and deliver on workplace training.

The focus of skills development institutions (including how they allocate funds) can shift over time. For example during NSDSI (2000-2005) there was a much greater focus on the training of employed workers, and raising productivity levels, than during NSDSII (2006-2010). During NSDSII, there was a drive to maximise the numbers of unemployed people in learnerships and artisan training, and there was a distinct focus on job creation. During NSDSIII, there has been a greater focus on skills linked to priority occupations, particularly programmes leading to full qualifications. Therefore, over time the priority for funding within SETAs has become programmes designed to lead to full qualifications that in turn leads to an occupation that has been identified as being "scarce" or in "high demand." Of all the post-schooling sectors, it is the skills development system that is charged most specifically with the delivery of skills to meet the needs of industry and the economy.

7.1.1 Number of institutions

There are 21 Sector Education and Training Authorities (SETAs). These institutions are established in terms of the SDA. In addition, the National Skills Fund receives 20% of the annual R14-15 billion levy income, which is intended to fund training for those that will not be able to access SETA-funded programmes. The legislation also allows NSF funds to be allocated to "government priorities", as determined by the DHET Director General.

7.1.2 Funded programmes

In general the operating model in SETAs is known as the "levy-grant system". This means that employers pay 1% of their employment costs to SARS who then allocate the money to a SETA. The SETA then provides the employer with 20% (previously 50%) of levies paid on submission of a workplace skills plan and PIVOTAL plan for the year ahead and a training report for the previous year. The employer can then apply for discretionary funding from the SETA. The SETA allocates these grants to support priorities in their Sector Skills Plan (SSP).

The SETA Grant Guidelines (Government Gazette, 2012) makes reference to the classification of workplace-based learning which should be further disaggregated and standardised across all SETAs as per the table below.

Table 34: Workplace-based learning categories

Learning Programme	Detail
Learnership	Registered learnership qualification on the NQF
Apprenticeship	Listed trades leading to an artisan qualification
"N" Diploma Internship	Part of a technical qualifications e.g. 18 to 24 months post N6
Vocational internship:	Part of a vocational qualification. e.g. Diploma, National Diploma, Higher Certificate and Advanced Certificate as per Policy 150 and the HEQSF
Professional Internship:	Part of a professional qualification e.g. Teacher, Social worker, Medical Doctor. [This form of internship is normally funded as part of the overall qualification.]
Candidacy	Post-graduation requirement for professional designation /registration e.g. Professional Engineer; Lawyer; Accountant.
Graduate internship	Improve chances of employability in those occupations where there is no formal, quality assured prescription for workplace learning e.g. filmmaker
Mentorship	Qualified person guides learner to competence

Source: Government Gazette, 2012 SETA Grant Regulations

These have all been captured in an acronym PIVOTAL, signalling the types of programmes that SETAs are required to fund, including Professional, Vocational, Occupational, Technical and Academic Learning programmes. SETAs are required to devote 80% of discretionary funds to such programmes.

SETAs are disbursing grants in support of the following programme types:

- Learnerships
- Internships
- Artisan development
- Bursaries
- Skills programmes
- Work Integrated Learning for public Universities and TVET colleges (workplace experience required as part of the course)
- Support to cooperatives, community based organisations, non-governmental organisations
- Adult education and training (AET)

Every year each SETA signs a service level agreement (SLA) with the DHET with agreement on targets for funding of learners. Table 35 outlines the number of learners that were funded by all SETAs per learning programme between 2012/13 and 2014/15.

Table 35: Number of learners funded by SETAs per learning programme from 2012/13 to 2014/15

Programme	2012/13	2013/14	2014/15
Learnerships	49,709	76,523	77,930
Internships	6,404	7,747	12,006
Artisan development	12,535	18,653	16,119
Bursaries	16,779	18,668	22,307
Skills programmes	84,844	93,875	137,283
Work Integrated Learning: Universities	2,201	3,859	7,590
Work Integrated Learning: TVET colleges	4,310	12,304	12,506

Programme	2012/13	2013/14	2014/15
Support community based organisations, non-governmental organisations	1,820	2,577	3,467
Adult education and training		15,366	11,393
Support to cooperatives and small businesses	18,693	14,420	11,960

Source: DHET SETA Performance Reports

It must be noted that SETAs fund education and training at both public and private institutions and the above table reflects the funded enrolment across all these institutions. Additionally funding is provided for both employed and unemployed workers. It has been estimated[43] that on average, 2.5 skills programmes are equivalent to a learnership, which is a full year programme. Similarly, a 3 year artisan programme can be viewed as 3 learnerships in succession.

One of the challenges in quantifying the number of learners being trained is the complex flow of enrolment data. SETAs will only pay out employers' mandatory grants if the employers have to submitted a Workplace Skills Plan (WSP) indicating the planned training for the coming reporting period, and an Annual Training Report (ATR) that gives account of all training provided to staff during the reporting period. Also to be submitted annually with the WSP and the ATR is a professional, vocational, technical and academic (PIVOTAL) programme training plan, which must be reported on implementation. Employers can then apply for discretionary grants to fund planned training. It is in the discretion of the SETA whether to approve applications for grants and SETAs each determine the criteria to apply.

SETAs then report based on the training reported to them by employers. DHET then aggregates the data reported in Quarterly Monitoring Reports (QMRs) and produces summaries of numbers trained in each learning programme category. Although some auditing is conducted to verify numbers and avoid double counting, a thorough audit would require visits to all workplaces and this would be a huge additional cost to the system. The figures provided therefore have to be regarded as approximate. Nevertheless, the figures are useful in showing the broad levels and types of training being funded, including the growth in priority forms of training that have been determined in NSDSIII and the SETA Grant Regulations.

7.1.3 White paper main points and targets

The white paper envisages that SETAs will in future have a sharper focus on established enterprises rather than the informal economy. It also envisages SETAs partnering with a (planned) Central Skills Planning Mechanism to improve labour market data and information on supply and demand for skills. Critically it sees the SETAs playing a much more significant role in partnering with public TVET colleges and universities in ensuring that learners enrolled in occupational qualifications obtain workplace training and exposure. Their role in engaging stakeholders in their defined sector to identify priority skills gaps and agree priority skills interventions is to be retained. Their location at the interface between education and training and the workplace, between education and training institutions and employers is underscored. There is provision for some

[43] A focus group was conducted with 4 large SETA CFOs in 2013

restructuring and rationalisation, but the importance of the SETAs in the provision of education and training to address the needs of the economy is reaffirmed.

7.2 Revenue

7.2.1 Funding basis

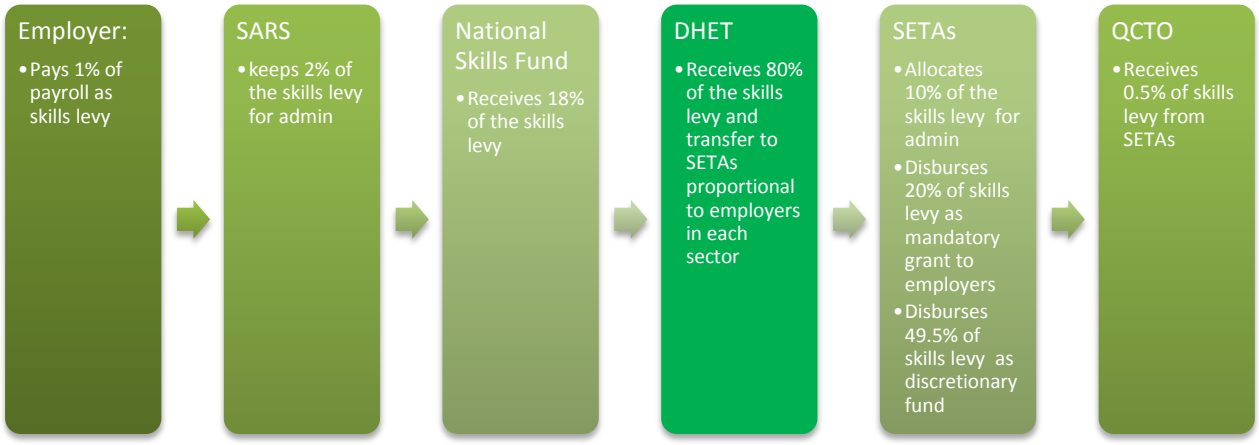
The main source of revenue for SETAs is the levies from employers which are paid in terms of the Skills Development Levies Act, (1999). Employers with annual payroll exceeding R 500,000 are required to pay 1% of their payroll over to the South African Revenue Service (SARS) as a skills levy. Skills levies received as well as unclaimed funds are generally invested by SETAs and this generates investment income for SETAs. In addition, although this is rare, some SETAs have embarked on joint projects with external parties and have as a result received some additional income from donors.

In an interview for this project, the MerSETA CEO suggested that in future SETAs would be expected to seek partnerships to leverage additional funds, for example partnering with the Expanded Public Works Programme (EPWP) or employers committing to skills development as part of Strategic Integrated Projects (SIPs). SETAs are increasingly developing project management capabilities that will enable them to manage multi-stakeholder projects that are not solely dependent on SETA funding, but rather externally funded programmes that are located in the SETA because of the expertise that exists there. This implies a more entrepreneurial approach that some SETAs would be able to replicate but others not, for various reasons including the type of sector they work in and the confidence that stakeholders have in their SETA to manage funds efficiently.

7.2.2 Flow of funds

Upon collecting skills levies from employers, SARS retains 2% to cover its costs, then pays the remaining 98% over to the DHET. The DHET then transfers 18% of the levies to the National Skills Fund, and the balance of the 80% is disbursed to SETAs on the basis of the contributing companies' Standard Industrial Classification (SIC) codes.

Figure 31: Flow of funds for the National Skills Levy



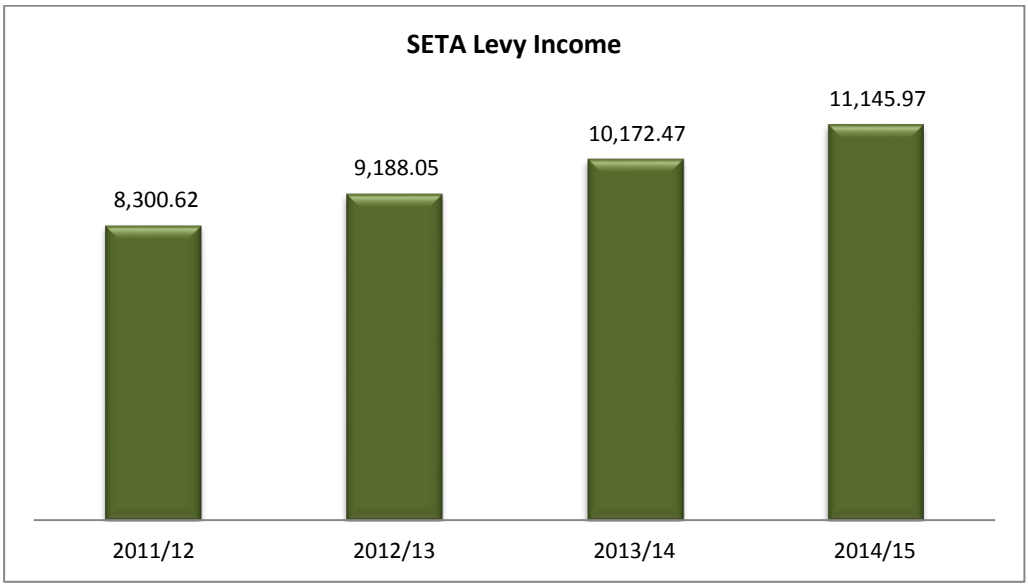
SETAs are then responsible for disbursing these monies to companies within their sector in the form of skills development mandatory and discretionary grants. The manner in which these grants are disbursed, and the amounts disbursed, are subject to Government Regulations (known as the SETA Grant Regulations) under the Skills Development Levies Act, and subsequent SETA Funding Policies and Guidelines. Historically employers were able to claim 50% of their levy paid on submission of a WSP. The current SETA grant regulations which were published by DHET in 2012 provide for 20% of the levy to employers as a mandatory grant subject to fulfilling a qualifying criteria. The reason for this is that in 2011 a Ministerial Task Team (MTT) was set up to examine SETA performance, In 2012 it reported that WSPs had become a compliance document, and was not reliable. Mandatory Grants were not incentivising priority training but simply being given to employers on submission of the WSP and ATR. The Ministerial Task Team proposed a reduction to 20% and that the main purpose of the WSP would now be the securing of accurate workplace data that could be used for supply and demand research. This was subsequently implemented in the 2012 SETA Grant Regulations. Whereas before 2012 the amount available was 20% of levy income, the amount available now is 49.5%. SETA are able to distribute these funds as discretionary grants or to fund projects that contribute to implementing their SSPs. SETAs also transfer any unclaimed mandatory grants to the discretionary funds for disbursement. The amount of unclaimed Mandatory Grant is quite substantial because very few employers (especially small employers) claim, as the systems are so complex and bureaucratic. [44]

7.2.3 Changes over time

In 2014/15 SETAs collectively received R 11.15 billion levy income, however taking into account other income such as investment income and penalties, total revenue exceeded R 12.29 billion. The levy income increased by 34% between 2011/12 and 2014/15, from R 8.3 billion in 2011/12 to the current levels (see Figure 32). SETA revenue is dependent largely on employer levy contributions meaning that as salaries increase and number of people employed increase the levy revenue increases.

[44] This paragraph drew from the following sources: Nedlac SETA review 2008, MTT report 2012, HRDC Skills System Review 2013

Figure 32: SETA National Skills Development Levy income (R millions) from 2011/12 to 2014/15



Source: Estimates of National Expenditure, SETA Annual Reports 2014/15

Levy income has increased on an annual basis by more than the general level of inflation in recent years, and a good deal more than the growth in GDP. This can partly be attributed to the lower limit of R500, 000 after which employers have to pay the Skills Development Levy (SDL). This amount has not increased in line with inflation and so more employers are required to pay the SDL each year. It can also be attributed to SARS efficiency – SDL and PAYE are collected together and so improvements in general payroll tax collection also impacts on the levy. It also probably reflects a general increase in salary levels, particularly in higher salary bands, which are more likely to be linked to increases in CPIX than increases in GDP.

One of the consequences of this is that income estimates made by SETAs tend to be lower than actual income received. Estimates that inform expenditure plans have tended to be conservative and based on current or past income, and so when additional income flows there are no plans to spend the additional funds. The expectation would be that SETAs would manage this flow of funds better. A SETA produces a five-year plan, then annual performance plans, and so if funds increase plans should be able to be accelerated to take account of additional funds. Many SETAs do manage cash flow well, but some of the largest SETAs, handling over R1 billion annually seem to be the worst at managing this and so accumulate substantial surpluses.

SDL allocations remained the same during the period 1999 – 2012. The impact of the 2012 Grant Regulations was to reduce the Mandatory Grant from 50% to 20% and to increase the amount of discretionary funds. The effect of the SETA landscape proposals, if they are implemented in their current form will be to increase the proportion of the levy income given to the NSF to just under 60%. Two thirds of that will be for POVOTAL or occupational ETD programmes.

7.2.4 Major challenges and developments

A number of reports have been produced that reflect the challenges in the skills development system and the performance of SETAs. These include the Singisi Report of 2008, the Nedlac

Report of 2009, the MTT report into SETA performance of 2011 and the HRD Council Skills System Review in 2013. Some of the key issues raised that are relevant to the funding discussion include:

- **Narrowing the focus of SETAs to do less but better**. SETAs have been found to be trying to do too many things and not doing them all well. The White Paper has started to address this to some extent, but the detail still needs to be worked out. The general consensus appears to be that SETAs should narrow their focus and do what they do better. This requires specific actions, for example:
    - If the SETA is to focus less on quality assurance and more on quality management, the QCTO needs to take over the quality assurance function and not delegate it back to the SETAs
    - If SETAs are to conduct less supply and demand research and focus on brokering agreement on priority skills needs and intervention the central skills planning mechanism needs to be functioning and providing the SETAs with sector relevant research
    - If SETAs are to focus on workplaces as part of occupational programmes, then commitment is needed in universities and public colleges to deliver high quality theoretical and practical training for these qualifications.
- **Cutting admin costs**. Administrative costs are high. For example, there are 21 sets of policies, systems and processes for grants. Some rationalisation and sharing of services is possible. However until such time as shared services are put in place, this duplication will continue.
- **Funding what works**. There is limited evidence of impact. Few evaluations have been conducted and where evaluations are done it is often difficult to obtain data as a lot of data is not kept by the SETAs. Although there is some evidence of learnerships and apprenticeships having successful outcomes (70% of learners obtaining employment in the sectors studied), there is limited evidence of economic impact and no cost benefit analyses have been done. After 15 years it is difficult for stakeholders to understand why so few impact studies have been done and why there is so little evidence that there is a reasonable return being made in terms of human development from the significant investments made. In the future it is worth considering whether funding should be dependent of SETAs demonstrating impact of past programmes.
- **Monitoring and evaluation**. If funding is to be determined on the basis of what works much better M&E is required. Although a commitment in NSDSIII (2011-2015) M&E has been week. It is proposed in the PSET White Paper that the National Skills Authority should take on the role of M&E for SETAs. The will need to put in place monitoring mechanisms in SETAs to measure performance regularly and to institutionalise impact evaluations across the system.
- **Freeing up reserves**. There is widespread concern over the accumulation of reserves (estimated at R11 billion). Although these have been audited and in general found to be committed these are very large sums that have been effectively taken out of the economy and are unused. By the time they are spent the R1 billion income to SETAs each month is likely to ensure that reserves will remain at a high level. It would be sensible to find ways of freeing up these reserves for use in other national priorities. The levy grant system (the ring-fencing of a 1% payroll tax) and the existence of SETAs as Section 3 public entities, both make it difficult for

this to occur. This is not to say that both the levy and the entity status of SETAs should be ended, but to emphasise that any attempt to change this (i.e. access the R11 billion for other purposes) will require substantial legislative and organisation change. Linked to this is of course the position taken by stakeholders and in particular organised labour and employers. Brokering consensus on change is not impossible, but will not be easy.

- **Public vs private**. There is a debate around the role of the public sector and private sector in the provision of occupationally directed education and training. Historically most of the funds allocated to SETAs were allocated to grants that went to employers, who in turn contracted in-house or private training providers. Since 2011 the balance has shifted with increasing amounts going to fund programmes in public universities and TVET colleges. However this is not done on the basis on what is done well or badly in the public or private sectors. One of the challenges in shifting levy funds from the private to the public sector is that the quality of programmes in the public sector (in relation to occupational qualifications and programmes) is not perceived as being of the quality of those provided privately. Employers generally prefer privately provided programmes. Some of this is perception, but there is also some evidence that privately provided programmes deliver quality, and are also more flexible and designed to meet employer needs. The White Paper clearly envisages the public sector playing a greater role in provision of occupational training. However the balance to be provided between public and private is unclear. The balance is something that could be discussed as could the issue of public-private partnerships that might allow the public sector to focus on certain types of provision, with the private sector continuing to do what it does well. It is possible to envisage agreement on a percentage of the levy income going to fund programmes in the private sector and a percentage going to fund programmes delivered in public colleges and universities or through public private partnerships.
- **Small versus large companies**. There is a concern that small businesses are paying the levy and that are getting limited benefits from this. SETAs generally preferring large employers when allocating discretionary funds and small enterprises find it increasingly difficult to access skills training via SETAs. Given the importance attached in national policy to expanded employment in or income generation from small and micro enterprises this is an important issue when determining how levy income should be allocated in the future.
- **Improving governance and oversight**. All the reviews of SETAs and the Skills System have strongly criticised both the governance of SETAs and the oversight role played by DHET.
    - In relation to SETA accounting authorities many were engaging in operational issues and failing to carry out their oversight role. Governance has been significantly reformed by means of the 2011 changes in the Skills Development Act, the adoption of a common constitution and (where governance fails) placing SETAs under administration. The problem remains, including SETAs that have been under administration still having governance failings. The current SETA Landscape proposal is for SETAs to become SETABs or Advisory Bodies. Effectively SETAs (SETABs) will be directly managed by the Department.
    - In respect of oversight the HRDC SSR report identified capacity issues in the Department, including weak financial oversight, monitoring that focused on numerical targets and not on qualitative performance, and a lack of capacity to intervene when things go wrong. The Department has responded by proposing the transformation of

the National Skills Authority (NSA) into the M&E oversight body for the skills system. In relation to funding the NSF has been overhauled and will be responsible for ensuring sound spending of SDL income.

Although employers and trade unions are engaged in the NSA and the proposals will be discussed in NEDLAC, it is unclear at this stage whether there is adequate support and buy in to make them work.

7.3 Expenditure

SETA expenditure mainly falls within three main spending categories: administration, mandatory grants and discretionary grants. In 2014/15 the SETAs collectively spent R 10.46 billion. The delivery model within the skills system is primarily grants to employers, though most SETAs also fund projects where training providers are contracted directly by the SETA to deliver training to identified groups or workers or learners.

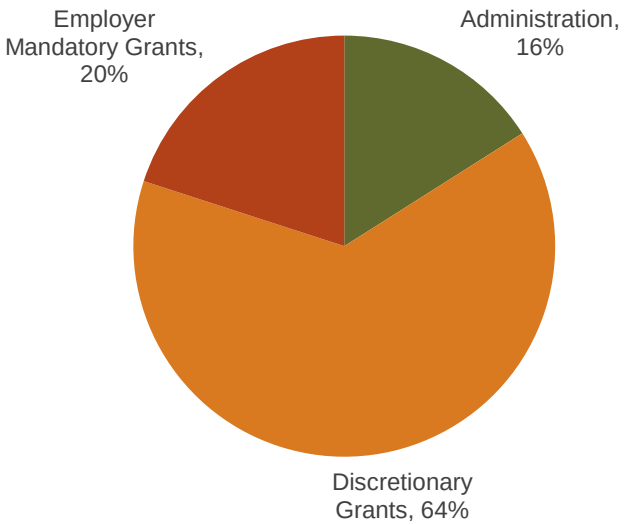
Table 36: Total SETA annual expenditure from 2011/12 to 2014/15 (R'000s)

Year	2011/12	2012/13	2013/14	2014/15
Total Expenditure	7,342,259	8,331,362	9,035,426	11,371,436
% y-o-y Increase (Decrease)		11.90%	7.80%	25.8%

Source: (National Treasury, 2015) Estimates of National Expenditure

There has been a consistent increase in expenditure by SETAs in the past three years (see Table 36). In 2012/13 expenditure increased by 11.9%, in 2013/14 by 7.8% whilst in 2014/15 it increased by 25.8% on the previous year. The bulk of SETA spend (64%) went to discretionary grants whilst 20% went to mandatory grants, leaving 16% for administration expenses.

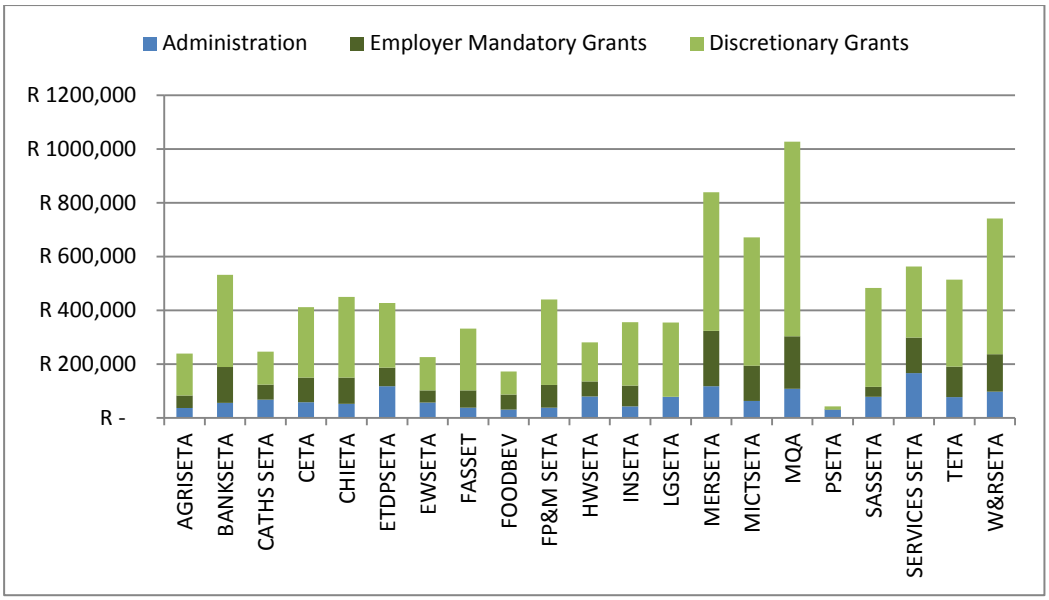
Figure 33: Breakdown of total SETA expenditure by category, 2014/15



Source: SETA 2014/15 Annual Reports

Despite the increase in expenditure, for 2014/15, all but two SETAs reported excessive variances between budgets and expenditure. It is only in the CHIETA and EWSETA where variances were not excessive. Variances are regarded as excessive when they exceed 10% of budgeted amounts. All except four SETAs reported surplus funds for the 2014/15 financial year. The SETAs that either had deficits or did not report surplus funds are AgriSETA, FP&M SETA, INSETA and SASSETA. As a result, at the end of 2014/15 SETAs had built up discretionary grant reserves of about R 11 billion which, most of which they claim are all committed in future projects. That means when new levy income comes in there will consistently be a moving reserve. The following figure presents the breakdown of expenditure per SETA during the 2014/15 financial year.

Figure 34: SETA Expenditure breakdown (R000s), 2014/15



Source: SETA 2014/15 Annual Reports

7.3.1 Administration

SETAs are required, in terms of legislation, to spend 10% of levy income on administration. Just over half of the administration expenditure goes to employment costs. In order to administer the disbursement of mandatory and discretionary grants a number of processes are undertaken which can be grouped as follows:

- Skills demand and supply analysis (including mandatory grant disbursement)
- Advocacy and career guidance
- Learner contracting and administration
- Qualifications and programme development
- Provider accreditation and QA
- Employer QA, monitoring and support
- Monitoring and Evaluation

Although processes differ from one SETA to the next, administration costs can be estimated across the core processes that each SETA carries out. For the 2014/15 financial year, it is estimated that

the administration expenditure of R 1.485 billion - which represents 94.4% of the administration portion of the levies - was allocated as shown in Table 37.

Table 37: Breakdown of SETA administration expenditure, 2014/15

Cost Element	% of total	Amount (R'000s)
Skills demand and supply analysis	10%	151,820
Advocacy and career guidance	8%	122,704
Learner contracting and administration	9%	136,519
Qualifications and programme development	7%	111,265
Provider accreditation and QA	11%	160,881
Workplace learning QA, monitoring and support	51%	761,921
Monitoring and Evaluation	3%	40,406
Total		**1,485,515**

Source: SETA 2014/15 Annual Reports

7.3.2 Mandatory grants

Mandatory grants are paid to employers who satisfy the criteria for release of such grants which include annual submissions of workplace skills plans (WSPs) and annual training reports (ATRs). SETAs are supposed to verify information contained in the WSPs and ATRs prior to releasing mandatory grants. In reality and in most instances, however, a technical validation is conducted to check for completeness of the templates prior to releasing the grants. In most instances SETAs require that employers submit their WSPs in order to qualify for discretionary grants.

Of the mandatory levy income of R 2.85 billion in 2014/15, only 64% or R 1.84 billion was paid out as mandatory grants. In other words, 36% of mandatory levy income was transferred to discretionary fund. The disbursement of mandatory grants has been termed "money in – money out" because upon paying a skills levy, employers have to meet set criteria to have some of that levy money (20%) paid back as a mandatory grant.

7.3.3 Discretionary grants

In terms of discretionary grants, funds are disbursed for the funding of learning programmes. They are not grants that employers are entitled to, but grants the SETA deploys to achieve its objectives in relation to the development of the sector. SETAs in terms of their grants policies set grants per learner for the different learning programmes. The learning programmes include year-long learnerships, 3 and 4 year apprenticeships, 6,12 and 18 months internships and bursaries that are disbursed annually. In addition a range of skills programmes are offered. Table 38 provides average costs for the different learning programmes that are funded based on an analysis of a few SETA grants policies for 2014/15. Although the grant per programme differ from one SETA to the next, grants for artisans have been standardised through the National Artisan Moderating Body (NAMB).

Table 38: Average costs of different learning programmes funded by SETAs, 2014/15

Learning Programme	Average Annual Grant (R's)

Learning Programme	Average Annual Grant (R's)
Learnerships	45,000
Internships	29,700
Artisan development	46,450
Bursaries	17,500
Skills programmes[45]	13,000
Work Integrated Learning: Universities	64,800
Work Integrated Learning: TVET colleges	19,500
Support community based organisations, non-governmental organisations	13,000
Adult education and training	2,160
Support to cooperatives and small businesses	13,000

Source: Analysis of SETA Grant Policies

7.3.4 Spending on learners in learning programmes

Whilst it is possible to set out average costs of the various programmes (see Table 38 above) it is not possible to provide unit costs per SETA. The reason for this is that generally SETAs neither deliver training directly (as they are not training providers in the way that Universities and TVET colleges are) nor do they generally contract training providers directly. SETAs give grants to employers; and it is then employers who either contract training providers to conduct training, or use in-house training capacity. To establish unit costs it would be necessary to explore not only the allocation of grants but also the actual spending by employers. Information of this nature has not been requested by SETAs and hence such data is not available.

In the National Artisan Development Programme EPR conducted in 2014 it was established that the average cost of training an artisan over a three year period was R300 000. Based on that figure and the incentives needed to encourage expansion of employer participation, a grant of R140, 000 was agreed as the contribution the SETAs will pay towards such costs. In order to establish unit costs for each programme it would be necessary to investigate each programme and the costs at each stage of the programme; which is not feasible within the timelines of this project.

The other limitation is that there are no available studies that can shed light on cost effectiveness. No cost benefit analyses appear to have been conducted by SETAs. It should be emphasised that a detailed expenditure analysis of occupational qualifications would need to explore costs in relation to three distinct areas: the theoretical learning (generally provided by universities and colleges), practical training (sometimes provided by universities and public colleges but more often by private providers and in-house trainers) and practical workplace experience and learning (which can only be provided by an employer). Estimating the costs in respect of the theoretical component is relatively straight-forward as these costs are available. However, the costs of practical and workplace training have to be examined per occupation and will vary significantly.

[45] As skills programmes can vary in length and credit value the programmes have been clustered to average 50 credits or just under half a one year programme. An average cost has been calculated.

7.3.5 Reviews of SETA functioning and performance

A number of studies have been conducted to examine the functioning and performance of SETAs. Each study has examined the allocation and management of funds. The following table sets out some of the key findings that are relevant to the expenditure review.

Study and date	Findings and recommendations	Recommendation	Action taken and Instrument used
Nedlac SETA Review 2008	Poor financial controls	Independent audit committees	Implemented in SDA amendment 2012 – common SETA constitution requiring an audit committee
	Mandatory Grant ineffective	Reduce it from 50%	Changed to 20% by SETA Grant Regs 2012
	Confusion on what SETAs should fund	Clarify which institutions fund SMMEs, government priorities, etc, In long term centralise funding	NSDS III provided framework SETA Landscape paper proposes central role for NSF
MTT into SETA performance 2012	Mandatory Grant not working	Reduce to 20%	Changed to 20% by SETA Grant Regs 2012
	Excessive spending on short courses not leading to qualifications	SETAs to be required to fund more substantial programmes leading to occupational qualifications	The Grant Regulations of 2012 require SETAs to spend 80% of discretionary funds on PIVOTAL programmes
	Expanded role of NSF to include SMME training and government priorities.	Increase proportion of levy income to NSF from 20% to 30%	Part of SETA Landscape proposal is to increase NSF proportion to 49.6%
Audit of discretionary	Most of SETA funds go to private providers via employers (95%)	NSDSIII directed SETAs to work more with public TVET colleges and universities	SETA Landscape paper proposes more of SDL income to go to NSF for skills development. This will enable funds to go to programmes delivered by public colleges and

Study and date	Findings and recommendations	Recommendation	Action taken and Instrument used
grant spending 2012			universities
	Cumulative under-spend 2006-2010 of R3 billion. Wrongful use of "committed" to carry over funds	Change rules related to committed funds in line with accounting practice.	Grant Regulations defined committed and provided for uncommitted funds to go to NSF
HRDC Skills System Review	Skills system in need of a major review – build a new system	Proposed central skills council to manage funds and allocate to performing structures (not just sector bodies)	Skills Landscape proposals partially centralise funding (60%) in NSF leaving 40% in the SETA(B)s

7.3.6 Further research

There are a number of questions that remain unanswered and which need to be explored in preparing options for PSET funding and the role of the SDL.

- More data is needed on the costs of occupational qualifications. The work done in respect of artisans (both in the EPR and by the Chief Directorate for Indlela in DHET) would need to be replicated in respect of other priority occupations in demand.
- As with Artisans, there is a need to clarify what the SETAs should be funding. Is it the responsibility of SETAs to fund the totality of training? Or is it their responsibility to focus on the practical and workplace component and its integration into formal programmes? During the Artisan EPR it was suggested that the focus should in fact be narrowed even further to be the workplace component, as this is where the biggest challenge is located – finding suitable workplaces for delivering the practical component of occupational programmes. This should be examined in the context of the proposed future reductions in funding to SETAs (Government Gazette, 2015). The proposals appear to suggest that much of the 60% (currently R9 billion) would be allocated to fund the workplace component of occupational (PIVOTAL) ETD programmes. This needs to be verified.
- Although the NSF will be able to allocate funds to public colleges and universities it is not clear whether the funding (directed as it is at the workplace training component) can in fact be classified as funding PSET. More clarity is needed on whether the PIVOTAL component can be dedicated to public colleges and universities providing PIVOTAL.
- Another question is the extent to which there is buy in from organised business and labour for the current proposals. Interviews are planned to explore this. It is known that BUSA is contesting the SETA Grant Regulations. It will be important to explore current employer thinking around the reforms being proposed.
- One of the current challenges is that parts of occupational training (theory and some practice) is funded from the fiscus and parts (workplace and some practical training) is

funded from SETA or NSF grants. This needs to be addressed by the development of an integrated funding model that enables a learner to be funded for all relevant training.

7.4 Surpluses and reserves

7.4.1 Why reserves

SETAs have generally not spent all their funds in one financial year and have tended to build up reserves that enable them to earn additional investment income. The reserves are generally built up through:

- Poor planning: the inability in some SETAs to plan for the advertising of grants, the processing of grant applications and the finalisation of funding agreements with employers.
- Poor management of grant disbursements leading to funds not being spent in accordance with planned budgets in the relevant financial year – in other words the unspent funds get carried over to the next year.
- In a small number of large SETAs levy income far exceeding budgeted revenue, thus creating surplus income
- Some employers not claiming mandatory grants resulting in unclaimed funds moved to discretionary reserves
- Non expenditure on discretionary projects due to grant beneficiaries not complying with grant criteria for release of grants
- The "committing" of funds to multi-year programmes. Even though SETAs receive a monthly income of approximately R1 billion, SETAs may allocate funds from the current year to programmes that will only be completed three to four years into the future.
- The challenges in SETAs were compounded to some extent by the decision in National Treasury to impose spending limits on SETAs. This impacted on spending of grants and added to surpluses.
- There is an additional problem in SETAs having a life span of 5 years. Staff and management contracts are determined by this timeframe and so there is instability in the system at the start of the 5 year period and in the final years. Consideration is being given in DHET to the new sectoral structures (STABs) being more permanent structures.

7.4.2 Regulation governing surpluses and reserves

The issue of surpluses in SETAs is a complex matter that the Department has been trying to address for many years. In 2011 legal advice was sought and careful wording was introduced into the SETA Grant Regulations of 2012 ((Government Gazette, 2012) number 35940). The practice had developed of SETAs stating that funds were "committed" when in practice they were not. SETAs would state that a programme or project had been approved by the Accounting Authority and that the budget for the programme or project was therefore committed. The 2012 Grant Regulations tightened the wording. The following extract shows the resultant wording:

> ***"surplus'*** *means a favourable residual balance in the statement of financial performance for the financial year ending on 31 March less current liabilities and commitments to training of learners in programmes funded from discretionary funds;* ***'commitments'*** *in this context mean that contractual*

*obligations exist at the end of the financial year that will oblige the SETA to make a payment or payments in the ensuing year; a '**contractual obligation'** means there is an agreement (written) with specific terms between a SETA and a third party whereby the third party undertakes to perform something in relation to a discretionary project for which a SETA will be obliged to make payment against the discretionary grant;"*

In addition to this tightening of the definition the following provision was introduced:

"At the end of each financial year it is expected that a SETA must have spent or committed (through actual contractual obligations) at least 95% of discretionary funds available to it by the 31 March of each year and a maximum of 5% of uncommitted funds may be carried over to the next financial year.

The remaining surplus of discretionary funds must be paid by the SETA by 1 October of each year into the National Skills Fund.

Where exceptional circumstances have led to projected under-spending of discretionary funds a SETA will be able to submit a business case to the Minister to request approval to carry over the surplus."

So the intention of DHET was to reduce surpluses and ensure that unspent funds were put to good use. During this period the NSF increased its capacity to spend (as it had also accumulated reserves previously) and national priorities such as artisan training and expansion of public TVET college programmes were identified. Some R3.5 billion in uncommitted funds have been transferred to the NSF as a result of these provisions. In 2014/15 the amount was R2.3 billion. In 2015/16 the amount is likely to be less because SETAs have become much better at "committing" funds, with some SETAs obtaining legal advice as to what can be included in commitments. So whilst there are unspent amounts in SETAs (estimated at R12 billion) the Auditor General has confirmed the view of SETAs that almost this entire amount is committed. So in the audited financial statements of SETAs the actual sums that are "surplus" are very small.

It needs to be noted that the SETAs are acting on the advice of the Auditor General. SETAs have been advised that they should not commit to spending moneys anticipated in future years. The problem is made worse (unintentionally) by the recently introduced focus on PIVOTAL programmes. PIVOTAL Programmes are those addressing key occupations in demand. These are being prioritised in the Grant Regulations and are often (as is the case with Artisans) multi-year programmes. About 80% of SETA discretionary spending has to be on PIVOTAL programmes. It is likely that SETAs are now funding more multi-year programmes than ever before and are doing so out of their reserves rather than from funds received in the current year. It would be advisable for DHET, the Auditor General and National Treasury to consider providing advice to SETAs that would enable them to commit to multi-year programmes and projects but without the prohibition on spending anticipated income. This would significantly reduce the build-up of reserves. It is suggested that a funding model might be developed that would enable multi-year programmes to be funded on the basis of future income. This would increase the number of learners being funded in the next two years.

It is also worth mentioning that the SETA Grant Regulations have been a subject of a court case led by BUSA, whereby organised business successfully convinced the high court to set the

regulations aside. The regulations however remain in force subject to the DHET either issuing new regulations or appealing against the court judgement.

The court case appears to state that the reduction in Mandatory Grants from 50% to 20% is unlawful, as is the reallocation of unspent funds to the NSF. The Department is appealing and so the Regulations are still in place at the time of writing. BUSA's case was that the Mandatory Grant (then 50% of levies paid) was being spent on skills development by employers. In reducing the grant to 20% SETAs were being expected to spend the remaining 30% as part of their discretionary grant funded programmes. SETAs had demonstrated in the past that they could not spend the funds they had and so adding to these funds would reduce the level of spending on skills development. According to Busa transferring unspent funds to the NSF was also not an answer as the NSF had also build up reserves due to non-spending of the 20% of levy income that they had been receiving since 2000. This may have been the case in 2013, but since then capacity has been built in the NSF and not only is it spending money as it receives it, all the previously accumulated reserves have either been spent or committed.

There are differing views on the BUSA case and the argument it puts forward for maintaining the status quo. Several reports (NEDLAC SETA review, MTT report of 2012, and the SSR TTT report for HRDC) all indicated that the Mandatory Grant had become a compliance grant and that there was little evidence of it incentivising training. The SETA Grant Regulations may have been found to be unlawful in that the Skills Development Act does not allow for the changes, but the central thrust of policy is unlikely to change. Once agreement is reached on the restructuring of grants, legislation will be needed to underpin the changes. These changes will need to be discussed in NEDLAC before being implemented.

7.4.3 Breakdown by SETA

The following table shows the income and expenditure per SETA during the latest audited financial year (2014/2015), as well as the surplus or deficit for this one year.

Table 39: SETA income and expenditure, 2014/15

SETA	Total Revenue	Total Expenses	Surplus / Deficit
AGRISETA	R 326 613	R 324 594	R 2 019
BANKSETA	R 680 476	R 531 618	R 148 858
CATHS SETA	R 284 614	R 246 073	R 38 541
CETA	R 640 257	R 412 300	R 227 957
CHIETA	R 465 655	R 450 387	R 15 268
ETDPSETA	R 571 425	R 600 764	R -29 339
EWSETA	R 253 053	R 226 171	R 26 882
FASSET	R 429 432	R 410 739	R 18 693
FOODBEV	R 309 692	R 248 783	R 60 909
FP&M SETA	R 362 148	R 440 860	R -78 712

SETA	Total Revenue	Total Expenses	Surplus / Deficit
HWSETA	R 463 903	R 281 006	R 182 897
INSETA	R 400 473	R 448 873	R -48 400
LGSETA	R 513 336	R 622 530	R -109 194
MERSETA	R 1 385 848	R 839 578	R 546 270
MICTSETA	R 700 276	R 680 434	R 19 842
MQA	R 993 280	R 1 027 853	R -34 573
PSETA	R 88 121	R 42 428	R 45 693
SASSETA	R 309 033	R 483 640	R -174 607
SERVICES SETA	R 1 570 701	R 563 506	R 1 007 195
TETA	R 651 060	R 662 071	R -11 011
W&RSETA	R 894 260	R 911 926	R -17 666
TOTALs	**R 12 293 656**	**R 10 456 134**	**R 1 837 522**

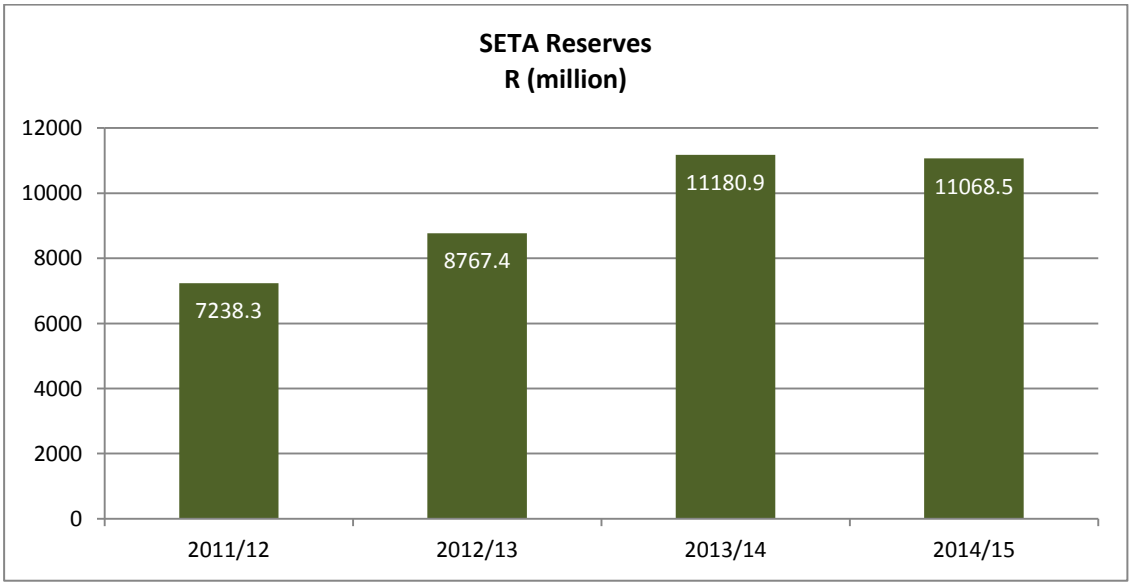
Source: SETA 2014/15 Annual Reports

As can be seen more than half the 21 SETA have very small surpluses. It is a small number of the very large SETAs that account for the surpluses accumulated during this period.

7.4.4 Surpluses and accumulated reserves

SETA surpluses and accumulated reserves have been on a consistent rise. Between 2011/12 and 2014/15 SETAs increased their reserves by 53% from R7.2 billion to R 11.07 billion (see Figure 35). After 2013/14 financial year, about R 3.5 billion was transferred to the NSF. Had this not occurred, the reserves would have totalled about R14.5 billion, a 101% increase from the 2011/12.

Figure 35: Total SETA Reserves from 2011/12 to 2014/15



Sources: National Treasury ENE, 2014/15, SETA Annual reports, 2014/15

Table 40 shows the reserves built up in each SETA after surpluses from 2014/15 have been added.

Table 40: Individual SETA reserves as at the end of 2014/15

SETA	Total Revenue	Total Expenses	Surplus / Deficit	Surplus / deficit as a % of revenue
SERVICES SETA	R 1 570 701	R 563 506	R 1 007 195	64.10%
PSETA	R 88 121	R 42 428	R 45 693	51.90%
HWSETA	R 463 903	R 281 006	R 182 897	39.40%
MERSETA	R 1 385 848	R 839 578	R 546 270	39.40%
CETA	R 640 257	R 412 300	R 227 957	35.60%
BANKSETA	R 680 476	R 531 618	R 148 858	21.90%
FOODBEV	R 309 692	R 248 783	R 60 909	19.70%
CATHS SETA	R 284 614	R 246 073	R 38 541	13.50%
EWSETA	R 253 053	R 226 171	R 26 882	10.60%
FASSET	R 429 432	R 410 739	R 18 693	4.40%
CHIETA	R 465 655	R 450 387	R 15 268	3.30%
MICTSETA	R 700 276	R 680 434	R 19 842	2.80%
AGRISETA	R 326 613	R 324 594	R 2 019	0.60%
TETA	R 651 060	R 662 071	R -11 011	-1.70%
W&RSETA	R 894 260	R 911 926	R -17 666	-2.00%
MQA	R 993 280	R 1 027 853	R -34 573	-3.50%
ETDPSETA	R 571 425	R 600 764	R -29 339	-5.10%
INSETA	R 400 473	R 448 873	R -48 400	-12.10%
LGSETA	R 513 336	R 622 530	R -109 194	-21.30%
FP&M SETA	R 362 148	R 440 860	R -78 712	-21.70%
SASSETA	R 309 033	R 483 640	R -174 607	-56.50%
TOTAL	**R 12 293 656**	**R 10 456 134**	**R 1 837 522**	**14.90%**

Source: SETA 2014/15 Annual Reports

7.5 Tax incentives

There is a provision within SARS tax rules that allows a company taking on a learnership of apprenticeship to claim R30, 000 on enrolment and a further R30, 000 on qualifying. This currently costs the fiscus around R2 billion per year. This is an additional amount paid to employers. It is paid whether or not a company is receiving a grant from their SETA. This means that an employer taking on an apprentice would over the three year period receive R140,000 in grants and a further R60, 000 in tax savings. Whilst this is a potential area of savings it is also believed to be playing an important role in incentivising employers. In the Artisan PER an analysis of MerSETA apprenticeships showed that the number of artisans being trained is some 40% more than the number funded by grants from the SETA, It would appear that employers weigh up the income from grants and the tax benefits and make commitments accordingly. The tax relief is an important consideration. Whilst it is possible to reduce spending in both the grant itself and the tax benefits, there would almost certainly also be a reduction on the number of apprentices taken on by employers

Key points and policy issues

Skills development receives approximately R14 to15 billion in skills development levy income, which is spilt between the SETAs (80%) and the NSF (20%). The skills development levy income for SETAs increased by 64% between 2010/11 and 2014/15, from R8.4billion in 2010/11 to R13.8bn. In 2012/13 SETA expenditure increased by 11.9%, in 2013/14 by 7.8% whilst in 2014/15 it increased by 25.8 % on the previous year to R 11 billion.

Over the last three years, there has been a substantial increase in training funded by SETAs and the NSF. The core business of SETAs can be viewed as the disbursement of grants to stakeholders in each sector to fund priority training and development that meets sector needs. SETAs are meant to fund training of employed workers as well as facilitate training and access of new entrants (school, college and university leavers) into the place of work. Learning programmes funded include bursaries, internships, learnerships and short term skills programmes. The number of learners funded by SETAs increased from 197,295 in 2012 to 312,561 in 2014, growing at an annual average growth rate of 23%. The bulk of SETA spend (64%) went to discretionary grants whilst 20% went to employer mandatory grants, and 10% to SETA administration/operational expenses. The 20% for Mandatory grants is always underspent because many employers do not claim. Surpluses are put into the discretionary fund budget and used for grants to fund priority skills.

SETA surpluses and accumulated reserves have been on a consistent rise. Between 2011/12 and 2014/15 SETAs increased their reserves by 53% from R7.2 billion to R 11.07 billion. However, these accumulated reserves are “before commitments” on future projects. Taking the commitments into account the remaining surplus was R1.5 billion in 2011/12 to R2 billion in 2014/15. After 2013/14 financial year, about R 2.5 billion of uncommitted SETA funds was transferred to the NSF.

PART F: SELECTED FUNDERS AND THE WAY FORWARD

8 NATIONAL STUDENT FINANCIAL AID SCHEME

The National Student Financial Aid Scheme was established in terms of the National Student Financial Aid Scheme (Act 56 of 1999). It provides financial aid (student loans and bursaries) to poor, but academically eligible students at public higher education institutions and Technical and Vocational Education and Training Colleges. [46] The NSFAS' funding model is built on the premise that the scheme not only administers funding but also recovers loans. Loan recovery is crucial to developing a sustainable funding system for the university sector, although it is unlikely that the NSFAS would ever be completely self-sustaining.[47] In relation to the college sector, given the academic background, the economic circumstances, and future earning potential of students in this sector, it is possible that loans may not be the right funding mechanism. Perhaps as a result, NSFAS provides only bursaries in the TVET sector.

8.1 Total revenue

The NSFAS receives funding from three main sources: appropriations, other state entities (e.g. DBE, NSF) and private donors (e.g. trusts). The appropriated funds transferred from the DHET are grants specifically given to the NSFAS for:

- management of the entity itself;
- student loans at universities;
- bursaries for students at public higher education institutions; and
- bursaries awarded to TVET Colleges.

The NFSAS also receives funding from other organs of state including NSF, SETAs and other government departments.[48] Examples of funding from other departments include the Funza Lushaka of the Department of Basic Education; the Ntabankulu Project implemented on behalf of the Department of Labour, and the Social Workers Grant of the Department of Social Development. In these cases, the NSFAS acts as the implementing agent, and is responsible for administering a bursary or loan scheme. This principal-agent relationship is based on a pre-agreement that sets out the qualifying criteria for access to this funding.

As shown in Table 41, NSFAS revenue has grown quickly over the last three years, increasing from R3.4 billion in 2010/11 to R9.8 billion in 2014/15, an average annual rate of 30%. This rapid increase reflects the decision of government to provide additional funding to the university sector in the form of financial aid to students. This can be seen in the growth of the grants received for student awards (non-exchange), which increased at an average annual rate of 33% between 2010/11 and 2014/15.

[46] (NSFAS, 2015)
[47] (National Treasury, 2015, p. 47)
[48] (DHET, 2012)

The NSFAS receives a substantial part of its income from interest revenue. This includes interest on student loans disbursed and interest on funds invested[49]. In 2013/14, the NSFAS piloted a new system to allow students to pay for their consumption expenditure on food, accommodation, books, and travel allowances using an electronic voucher system. The revenue earned by the NSFAS on this voucher system is referred to as the Sbux Commission in the table below[50].

Table 41: NSFAS Revenue, 2010/11 - 2014/15

R' 000	2010/11	2011/12	2012/13	2013/14	2014/15
Administration	29 824	79 921	100 249	102 532	132 355
Grants received for student awards (non-exchange)	2 834 221	5 110 403	7 326 998	7 911 873	8 765 174
Interest revenue (exchange)	567 738	524 249	678 087	655 457	852 617
Commission Revenue – Sbux (exchange)				284	2 625
Unallocated debtors receipts (non-exchange)	930	54	16	24	13
Other income (exchange)		14	124	0	17
Total Revenue	3 432 713	5 714 641	8 105 474	8 670 170	9 752 801

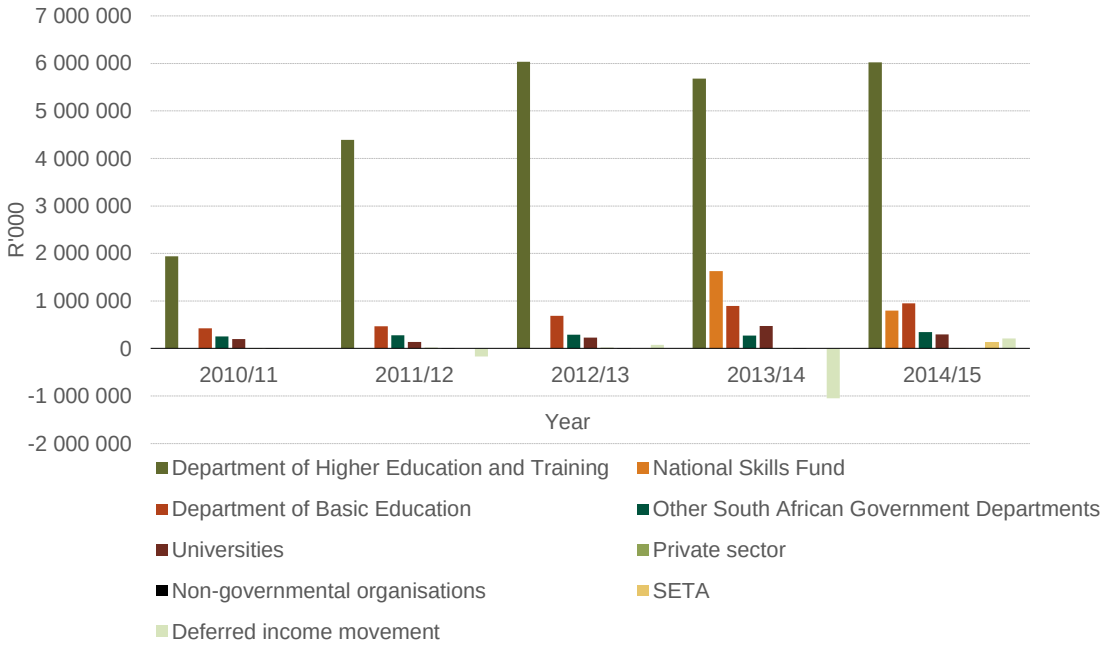
Source: Adapted from (National Treasury, 2015)

The NSFAS receives grant funding from a wide range of organisations, as shown in Figure 36. Over the past five years, the following changes in the amount and level of grants received are worth noting:

- The grant from the DHET is the primary source of revenue for the NSFAS. Its contribution to student awards increased from 83% to 90% of total grants between 2010/11 and 2014/15. As shown previously, part of the growth in grant revenue was meant for the expansion of enrolments in TVET colleges.
- The DHET grant to the NSFAS decreased between 2012/13 and 2014/15, with a concomitant increase in NSF funding to NSFAS as noticed in Figure 32 below. The NSF PER reports that in that year, the Director General instructed the NSF to use its reserves to cover the NSFAS funding shortfall. As a result, the NSF transferred R 1.6 billon of its reserves to the NSFAS.
- Less funding (approximately R798 million) was made available by the NSF in 2014/15, in part because DHET grant funding recovered, but also because the fund had committed most of its reserves by the end of 2013/14.
- Bursary funding from the Department of Basic Education has increased over the five-year period in line with efforts to recruit and train more teachers for the basic education system.

[49] (NSFAS, 2015, p. 110)
[50] (NSFAS, 2015, p. 106)

Figure 36: Grants received for student awards

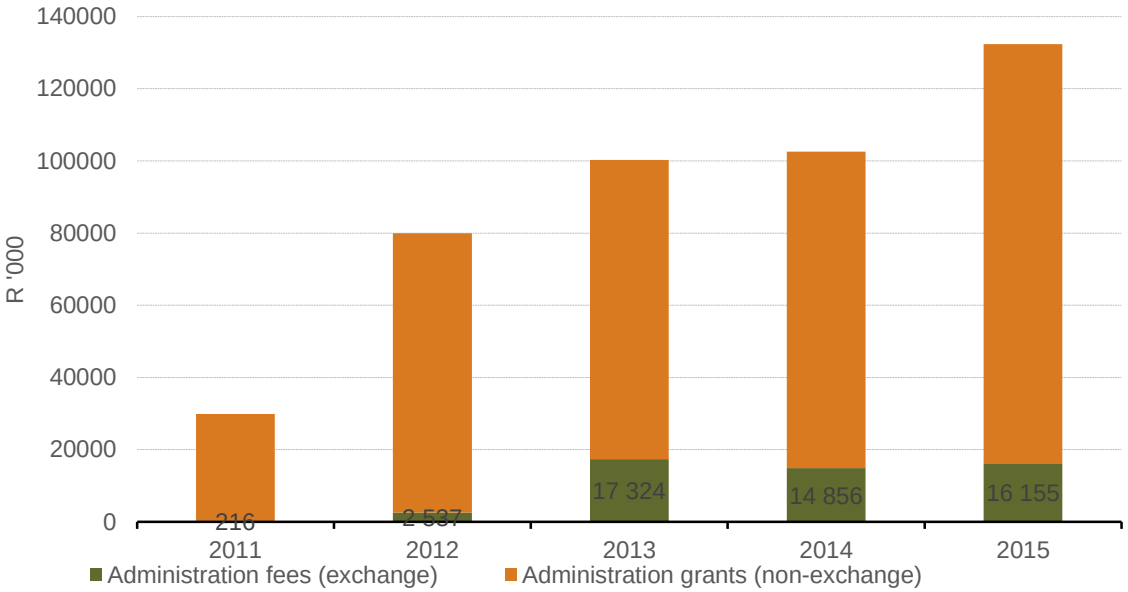


Source: Adapted NSFAS Annual Reports.
Note: The figures for DHET in 2013/14 NSFAS Annual Report (page 73) show a transfer to DHET of R7.3 billion. However, the restated figures in 2014/15 Annual Report (page 107) reveals the 2013/14 transfer to be R5.681 billion.

Grant and loan disbursement, as well as loan recovery, tend to be administratively-intensive tasks. The NSFAS receives funding to cover its administrative costs from two main sources. The first is an administration grant received from the DHET. The second source is from administration fees charged for the management of grants on behalf of other institutions such as SETAs, government departments, the NSF and private companies.

Figure 37 shows that administration fees have grown from R216 000 in 2010/11 to R16.2 million in 2014/15. It points to the greater role played by NSFAS in managing disbursements on behalf of other institutions in the university and college sectors. In 2014/15, administrative fees received from the NSF accounted for 67% of total fees, with 25% being paid over by SETAs. It is important to note that the administration grant rose from R29.6 million in 2010/11 to R116.2 million in 2014/15. This increase was approved by the DHET to increase the NSFAS's capacity to manage higher levels of administration associated with the implementation of the new student funding model

Figure 37: Administration revenue

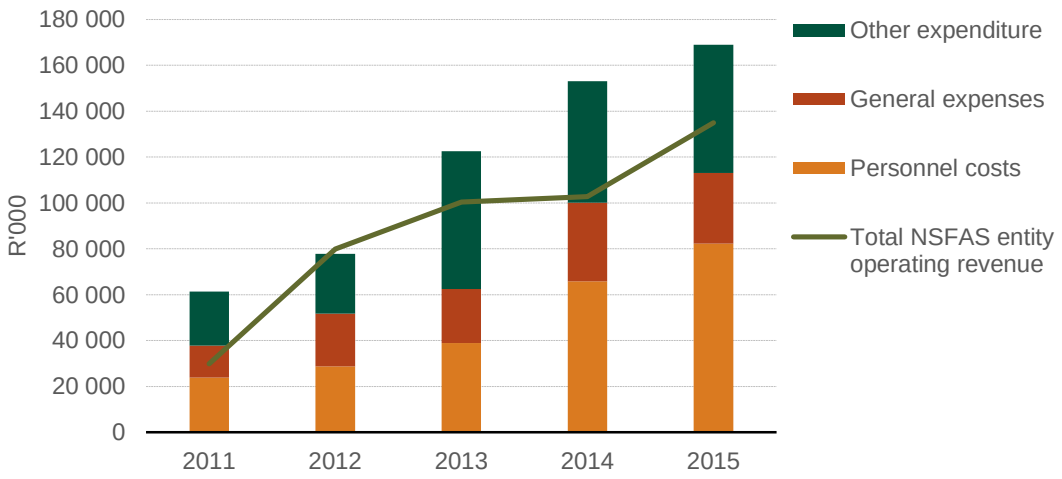


Source: Adapted from **(National Treasury, 2015)**

8.2 Operating revenue and expenditure

Changes in the scale of disbursements, operating model and administrative inefficiencies have taken a toll on the NSFAS' financial position. Since 2012/13, total operating expenditure has exceeded total operating revenue. Simply put, the NSFAS is spending more than it receives for its operations, and continues to run a deficit. Personnel costs constitutes the largest component of operating expenditure, increasing from 39% of expenditure in 2010/11 to 49% in 2014/15, as observed in Figure 38 below. Expenditure on equipment and other IT related infrastructure has also increased as the institution seeks to adopt new technology to improve their operations.

Figure 38: Revenue vs Expenditure



Source: Adapted from (National Treasury, 2015)

Table 42: Operating surplus/deficit

R' 000	2010/11	2011/12	2012/13	2013//14	2014/15
Revenue					
Administration	29 824	79 921	100 249	102 532	132 355
Commission Revenue – Sbux (exchange)				284	2 625
Other income (exchange)		14	124	-	17
Total NSFAS entity operating revenue	**29 824**	**79 935**	**100 373**	**102 816**	**134 997**
Expenditure					
Personnel costs	23 837	28 730	38 917	65 862	82 288
General expenses	13 938	23 094	23 555	34 269	30 768
Other expenditure	23 565	25 930	60 018	52 903	55 916
Total NSFAS entity operating expenditure	**61 340**	**77 754**	**122 490**	**153 034**	**168 972**
Deficit/surplus for the year	***-31 516***	***2 181***	***-22 117***	***-50 218***	***-33 975***

Source: Adapted from (National Treasury, 2015)

In 2014/15, the NSFAS administration deficit as a proportion of total administrative expenditure was 20%, an improvement on the previous year, when the deficit peaked at 33%. The increases in operating expenditure are due to a combination of factors. Administrative expenses have increased in line with the growth in grants. As disbursements have grown, the NSFAS has also responded by increasing its capacity to manage these grants.

The piloting of a new operating model has also changed the structure and resourcing needs of the institution. The NSFAS piloted a student-centred model with 15% of NSFAS funded students in 2014/15. The model seeks to establish a direct relationship between the NSFAS and the student

from the application stage to graduation.[51] It is envisaged that operational expenditure will increase as this model (IT intensive) is rolled out to more NSFAS recipients. This further explains the increases in general and other expenditure in Table 42.

In order to assess the extent to which administrative expenditure has increased, it is useful to analyse this increase in relation to disbursements. Table 43 shows that the ratio of administration expenditure to awards has increased significantly. Whereas in 2011, the NSFAS spent R16.30 on administration for each R1000 disbursed, in 2015, administrative expenses had risen to R27.10 for every R1000 disbursed. This constitutes a 66% increase in administrative expenditure, compared to a 144% increase in disbursements over the period

Table 43: NSFAS operational expenditure and the administration to awards ratio

R 000s	2011	2012	2013	2014	2015
Loans & Bursaries awarded before conversions	3 678 429	5 965 551	7 710 871	8 701 406	8 962 470
Operational expenses	59 830	72 838	101 758	148 525	168 972
Administration to awards ratio	*1.63*	*1.22*	*1.32*	*1.71*	*2.71*

Source: Extracted from (National Treasury, 2015)

8.3 Disbursements

Table 44 shows that funds allocated to the NSFAS increased from R3.7 billion to R9 billion at an average annual rate of 25% between 2010/11 and 2014/15. The largest component of funding is the NSFAS loan scheme, which is distributed to universities according to a weighted formula, based on the number of disadvantaged students in the institution as well as the average full time cost to study at the institution.

Although funding is mostly disbursed to universities, the proportion of funding to TVET Colleges through the NSFAS TVET grant has risen substantially. Disbursements to TVET Colleges expanded from 8.7% of total funding in the 2010/11 to 22.2 % in 2014/15.

Table 44: NSFAS Funding per institution

Type of institution	2010/11	2011/12	2012/13	2013/14	2014/15
Universities	R 3 343 531	R 4 833 866	R 5 871 490	R 6 729 070	R 6 969 941
TVET Colleges	R 317 998	R 1 116 591	R 1 822 497	R 1 953 253	R 1 991 488
Other Institutions	R 16 900	R 15 094	R 16 884	R 19 082	R 1 042
Total	R 3 678 429	R 5 965 551	R 7 710 871	R 8 701 405	R 8 962 471

Source: Extracted from (National Treasury, 2015)

The award loans on a means-tested basis. Institutions must take these means testing parameters into account when formulating their awards policy. Nonetheless, a recent study by the DHET, referred to in the NSFAS PER, found that universities had very different approaches to managing

[51] (NSFAS, 2015, p. 12)

their NSFAS loans and bursaries.[52] It is for this reason that the NSFAS is looking to change the service model, establishing a more direct relationship between the NSFAS and the student, and thereby minimising any perverse incentives associated with transferring student fees directly to universities. It is uncertain whether the potential gains from this new service model, will offset the additional costs involved in administering a more sophisticated system. The current piloting of the should demonstrate any net savings to the scheme before it is rolled out to all NSFAS students.

It is important to note that the NSFAS has performance based incentives built into their awards framework to encourage students to pass and complete their studies. The current rules are as follows:

> *"If a student passes all their courses in a year, then 40% of their loan for that year will be converted into a bursary. A student who passes half their courses will get 20% of the loan converted into a bursary. A further incentive introduced by the President in 2011, is the loan of the final year is converted to a bursary once the student passes the final year.[53]"*

This type of incentive works in two opposing ways. Incentives to complete qualifications on time, increases throughput rates and reduces the cost of university graduates to the fiscus. However, for NSFAS, when loans are commuted to bursaries, it reduces the potential pool of funding that can be recovered. Moreover, in rewarding students, NSFAS is providing substantial debt relief to those students that are likely to be in a position to make repayments, as they will qualify earlier to make repayments. NSFAS PER estimates that the introduction of this incentive led to "the conversion of R1.8 billion of R4.2 billon loans into bursaries" (National Treasury, 2015). Notwithstanding the low recovery rates, this means that NSFAS has an even smaller pool of funding to recycle, thereby further increasing its dependence on government or alternative sources.

In relation to loan recoveries, the NSFAS PER raises a number of important findings that have a bearing on the costing model. Loan recoveries have declined sharply from a peak of 35.3% in 2006 to 3.7% in 2014. This decline can be traced back to the rapid increase in disbursements. While it is expected that the lag time between higher disbursements and repayments would reduce loan recoveries, recovery rates have been hamstrung by a combination of policy factors, legislative changes, the economic downturn, and administrative inefficiencies that limit the NSFAS's ability to recover its monies[54].

The NSFAS PER draws attention to the negative impact of changes in the National Credit Act (2005) on loan recovery. By removing all blacklisted borrowers from credit bureaus in order to comply with the Act, the NSFAS has effectively lost the leverage it exerted over many of its borrowers. Moreover, instructions from the Minister to discontinue with backlisting removed one the more important enforcement mechanisms the NSFAS had at its disposal. In addition, the NSFAS PER reports that the NSFAS stopped using 'emolument attachment orders' altogether, even

[52] (DHET, 2015b)
[53] (National Treasury, 2015)
[54] (National Treasury, 2015, p. 49)

though it was still permitted to do so.[55] The combined effect of these factors has had a dampening effect on loan recoveries, and has contributed to the funding shortfalls faced by the institution The NSFAS is not blameless in the low recovery rate and must bear some responsibility for problems in the administration of the scheme; for example, its internal system was unable to produce and send statement to debtors in 2014 (NSFAS, 2014, p. 26)

Exhibit 1 is an extract from the NSFAS PER and shows the average value of awards to universities and colleges.[56] University students receive almost three times as much as TVET college students. A substantial part of the awards made by NSFAS to university students is in the form of loans, which can be converted to bursaries under certain conditions. In relation to TVET colleges, NSFAS provides grants that are not repayable. This has led the Funding Review Committee to argue that the NSFAS disbursement to TVET colleges should be converted to a general subsidy from the DHET. This would reduce the administrative burden on NSFAS, and ensure that those students that attend TVET colleges from poor households, are not burdened with debt when they leave or drop-out.

Exhibit 1: Average value of loan, grant and bursary awards

	Average value of awards				
Rands	**2010**	**2011**	**2012**	**2013**	**2014**
Student awards by type of institution					
Universities	22 533	22 289	30 187	34 522	37 443
TVET Colleges (DHET Funded)	5 154	9 712	9 685	8 839	8 710
Other Institutions	33 666	43 750	39 448	41 126	104 160
Student awards by NSFAS component					
NSFAS loan scheme					
General Allocation	*19 266*	*19 145*	*25 359*	*28 943*	*32 017*
Final Year Programme	*-*	*29 908*	*37 140*	*41 224*	*41 971*
Teacher Allocation	*20 794*	*20 575*	*27 149*	*30 674*	*27 119*
NSFAS TVET grants					
TVET Grants	*5 154*	*6 756*	*9 665*	*8 792*	*8 708*
NSFAS managed bursaries					
Funza Lushaka	*45 884*	*49 797*	*56 980*	*61 501*	*65 690*
SETA	*-*	*-*	*18 404*	*33 678*	*38 488*
Students with Disabilities	*33 921*	*29 755*	*37 867*	*42 013*	*47 909*
National Skills Fund	*21 001*	*9 351*	*22 019*	*27 601*	*32 061*
SAICA Partnership	*31 126*	*34 844*	*40 121*	*43 780*	*46 508*
Other Categories	*29 239*	*16 467*	*19 035*	*19 192*	*28 538*
Other					
Historic Debt Relief	*-*	*14 904*	*-*	*-*	*-*

Source: Extracted from National Treasury, 2015.

Although the average value of the award to university students has increased, the extent to which it covers the full cost of study varies amongst universities. Using the NSFAS cap of R 67 200, Figure 39 uses data from the NSFAS PER to illustrate the funding gap.

[55] (National Treasury, 2015, p. 50)
[56] (National Treasury, 2015)

For example, the NSFAS contribution covers about 31% of UCT's full cost of study. This means that the student is expected to find the remaining 69% to cover their full cost of studying at the university. The non-funded amount is still unaffordable for most low-income households and some universities will use their own resources to 'top up' the NSFAS grant in the form of bursaries and scholarships.[57]

Key points and policy issues

The NSFAS was designed as an income-contingent repayment scheme to replenish the funding pool once students completed their studies and secured employment. The intention was to create a sustainable funding stream for the university sector, although it is unlikely to be completely self-sustaining over the long term.

In practice, the NSFAS has not worked out as planned. The rapid expansion in the funding administered by the NSFAS has placed significant pressures on the institution. Administrative inefficiencies coupled with policy and legislative changes has led to severe decline in loan recoveries, which fell by 61% between 2008 and 2014 (National Treasury, 2015, p. viii).

For instance, the negative impact of changes in the National Credit Act (2005) on loan recovery. By removing all blacklisted borrowers from credit bureaus in order to comply with the Act, the NSFAS has effectively lost the leverage it exerted over many of its borrowers. Moreover, instructions from the Minister to discontinue all backlisting removed one the more important enforcement mechanisms the NSFAS had at its disposal. In addition, NSFAS stopped using 'emolument attachment orders' altogether, even though it was still permitted to do so by following a judicial process. The combined effect of these factors has had a dampening effect on loan recoveries, and has contributed to the funding shortfalls faced by the institution The NSFAS is not totally blameless in the low recovery rate and must bear must responsibility; as its internal system were unable to produce and send statement to debtors in 2014 (NSFAS, 2014, p. 26)

The consequence is that the NSFAS is increasingly dependent on the fiscus and 'stop gap' funding from other institutions such as the NSF to remain viable. The piloting of new operating model has also changed the structure and resourcing needs of the institution. The NSFAS has piloted a student-centred model with 15% of NSFAS funded students in 2014/15. The model is founded on a direct relationship between the NSFAS and the student from the application stage to graduation. It is envisaged that operational expenditure will increase as this model (IT intensive) is rolled out to more NSFAS recipients

[57] (National Treasury, 2015, p. 47)

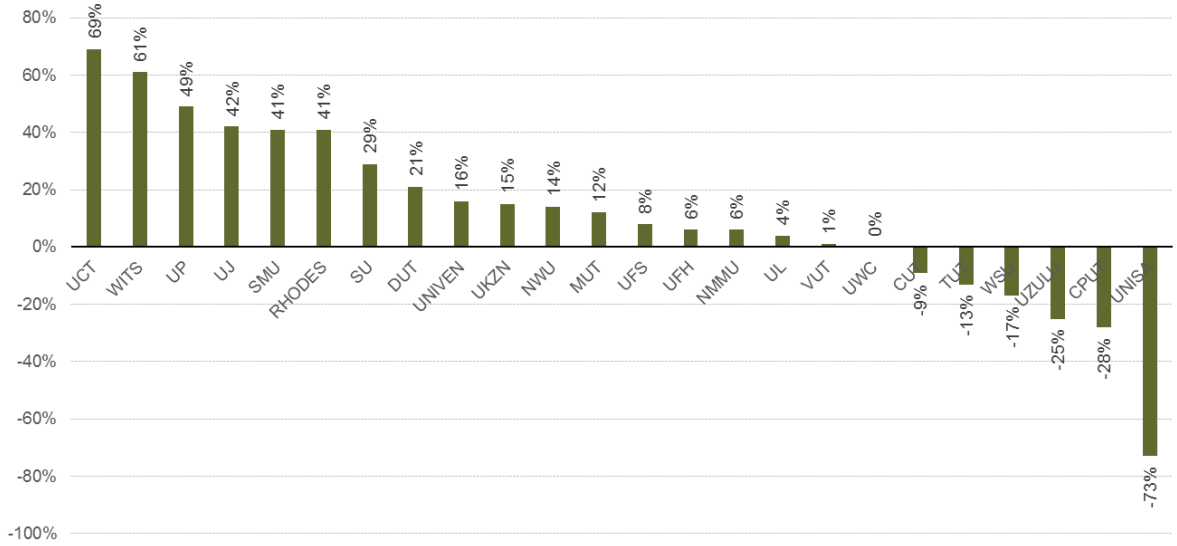


Figure 39: NSFAS cap versus full cost of study

Source: Extracted from National Treasury, 2015.

10 NATIONAL SKILLS FUND

The National Skills Fund (NSF) was established in terms of the Skills Development Act (1998). The Fund finances training programmes, supports capacity building programmes and funds research within education institutions. In its role as a funding agency, the National Skills Fund disburses funds to education institutions through a competitive and non-competitive application process.

10.1 Revenue

The National Skills Fund receives a statutory allocation in the form of the Skills Development Levy (SDL). This tax requires all employees to contribute 1% of their wage bill to fund learning and development. In terms of section 27 (2) of the Skills Development Act (1998), the NSF receives 20% of the skills development levies. The other 80% is shared between the SETAs, based on the contribution of employers in the sector to the levy. The SDL Income is categorised under 'revenue from non-exchange transactions'[58] in the NSF accounts, as shown in Table 45 below.

Table 45: Revenue of the NSF, (R'000)

	Audited outcome					
	2009/10	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**
Revenue from Non-Exchange Transactions	**1 615 606**	**1 732 871**	**2 032 771**	**2 270 798**	**3 592 955**	**5 397 033**
Skills Development Levies	1 563 111	1 732 871	2 032 771	2 254 021	2 514 907	2 750 601
Skills Development Levies received (20% of total SDL)	*1 563 111*	*1 732 871*	*2 032 771*	*2 254 021*	*2 514 907*	*2 768 542*
Plus / (Minus): Debtor / (Accrual) for levy under / (over) payment by the Department of Higher Education and Training	-	-	-	-	-	*(16 738)*
Movement in provision for levies less than threshold	-	-	-	-	-	*(1 203)*
Income from SETAs	-	-	-	-	*1 077 854*	*2 646 428*
Income from SETAs uncommitted surpluses	-	-	-	-	-	*2 586 023*
Income from SETAs towards TVET college infrastructure development	-	-	-	-	*1 077 854*	*39 350*
Finance income on discounted SETA receivables for TVET colleges infrastructure development	-	-	-	-	-	*21 055*
Other Income	*52 495*	-	-	*16 777*	*194*	*4*
Other: Bad debts recovered	*52 495*	-	-	*16 777*	*194*	*4*
Revenue From Exchange Transactions	**380 495**	**382 873**	**418 321**	**428 113**	**391 064**	**481 699**
Interest Received	*380 495*	*382 873*	*418 321*	*428 113*	*391 064*	*481 699*
Finance income	*372 520*	*379 488*	*409 601*	*389 518*	*356 893*	*422 992*
Finance income from investments at the Public Investment Corporation (PIC)	*372 520*	*379 488*	*409 601*	*389 518*	*356 893*	*421 802*
Finance income from other commercial banks	-	-	-	-	-	*1 190*
Finance income from advance payments to skills development programmes and projects	*7 975*	*3 385*	*8 720*	*38 595*	*34 171*	*58 707*

[58] Refers to transactions where the entity received revenue from another entity without directly giving similar value in exchange

	Audited outcome					
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
TOTAL REVENUE	**1 996 101**	**2 115 744**	**2 451 092**	**2 698 911**	**3 984 019**	**5 878 732**

Source: (NSF, 2015)

Until, 2012/13, the SDL comprised more than 75% of the ''total revenue of the NSF'. But, this changed in 2014/15, when the new SETA grant regulations were gazetted in terms of section 36 of the Skills Development Act.

Accordingly, the remaining surplus of the uncommitted discretionary funds from the SETAs had to be paid by 1 October of each year into the National Skills Fund. The regulation came into effect in 2014/15.[59] As a result, the proportion of SDL as a percentage of total revenue declined from 75% in 2013/14 to 47% in 2014/15. Over the same period, 'income from SETAs uncommitted surpluses' rose to 44% of the NSF's total revenue.

10.2 Expenditure

The Skills Development Grant accounts for almost all of the expenditure of the NSF, as denoted in Table 46 below. Grant disbursements increased from R476 million in 2009/10 to R3.2 billion in 2014/15. Of this, R2.3 billion (72%) was spent on training of learners, R827 million (26%) on strengthening of the PSET system and R53.8 million (2%) on research projects.[60]

Table 46: Expenditure of NSF, 2009/10 to 2014/15

	Audited outcome					
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Skills Development Grant Disbursements	476 429	564 373	1 304 949	2 579 534	3 136 638	3 216 922
NSF Administrative Expenses:	30 305	19 722	34 329	36 164	46 635	84 216
Employee costs	*13 854*	*12 892*	*14 051*	*17 732*	*24 307*	*29 229*
Operating expenses	*15 170*	*5 165*	*18 259*	*16 401*	*19 949*	*49 757*
Management fees and bank charges	*1 281*	*1 665*	*2 018*	*2 008*	*2 092*	*2 343*
Depreciation and amortisation			*1*	*23*	*287*	*2 887*
Levy Collection Costs To SARS	52 059	49 089	48 339	48 631	48 745	48 561
Total Expenses	**558 793**	**633 184**	**1 387 617**	**2 664 329**	**3 232 018**	**3 349 699**
Surplus / Deficit	**1 437 308**	**1 482 560**	**1 063 475**	**34 582**	**752 001**	**2 529 033**

Source: (NSF, 2015)

Over the last few years, grant disbursements have stabilised, but there was a 50% increase in revenue between 2013/14 and 2014/15. This has contributed to a rapid increase in the surplus of the fund, from R752 million (2013/14) to R2.5 billion (2014/15), and the corresponding growth in accumulated reserves.

[59] See discussion about this regulation in Section 8 of this report.
[60] (NSF, 2015, p. 76)

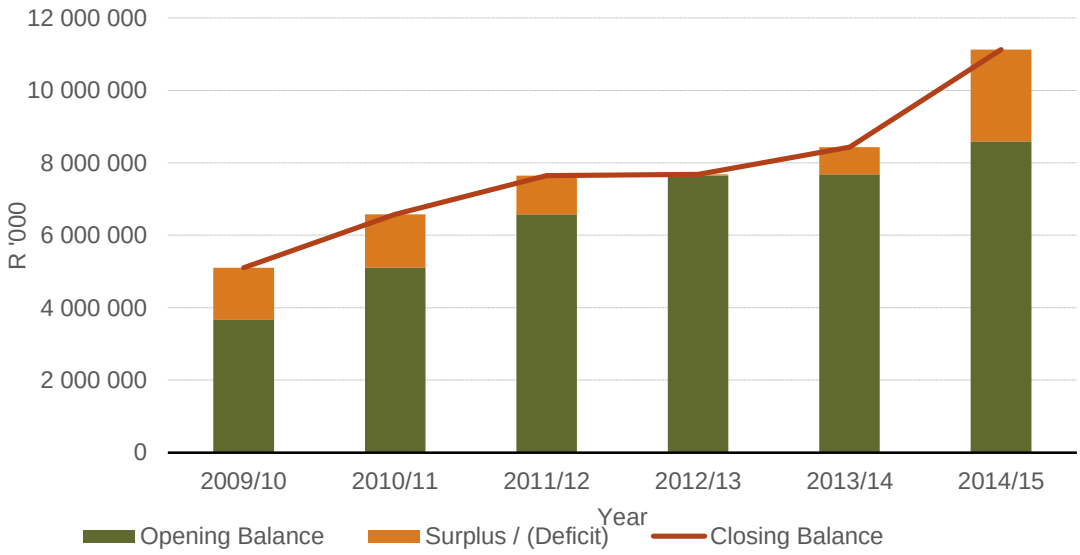
It is important to note that the R2.6 billion in income received from SETAs in 2014/15 represent uncommitted funds, which have been redirected towards the NSF. Shifting these funds to the NSF is part of the DHET strategy to reallocate funds from the skills and workplace training system to the university and college sectors. In doing so, the DHET has opened up new and more direct funding pathway to address shortfalls in the PSET system; though it is questionable whether this action is line with the purpose of the SDL and the original mandate of the NSF.

Table 47: NSF Accumulated Surplus, (R'000)

R'000	Audited outcome					
	2009/10	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**
Total Expenses	558 793	633 184	1 387 617	2 664 329	3 232 018	3 349 699
Surplus / Deficit	1 437 308	1 482 560	1 063 475	34 582	752 001	2 529 033
Accumulated Surplus And Reserves						
Opening Balance	3 662 354	5 099 662	6 582 222	7 645 697	7 680 279	8 594 914
Surplus / (Deficit)	1 437 308	1 482 560	1 063 475	34 582	752 001	2 529 033
Closing Balance	**5 099 662**	**6 582 222**	**7 645 697**	**7 680 279**	**8 432 280**	**11 123 947**

Source: NSF, 2015

Figure 40: Accumulated Surplus of NSF



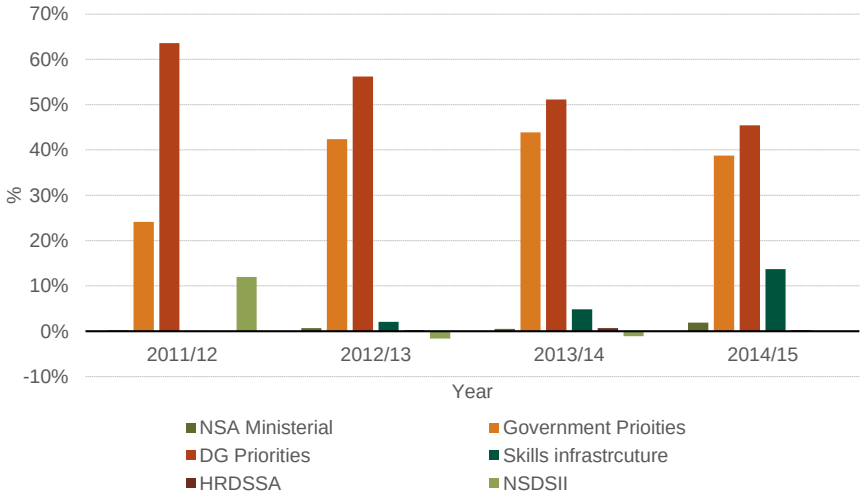
Source: (NSF, 2015)

Between 2013/14 and 2014/15, the NSF's administrative expenses increased by more than 80%, from R46.6 million to R84 million. This was mainly due to the increase of 149% in operating expenses. Specifically, this additional expenditure was used to secure the services of a consultancy to enhance organisational capabilities, systems and processes.[61]

[61] (NSF, 2015, p. 142)

The NSF classifies its expenditure by funding priority; as shown in Figure 41 below. This approach to classification is meant to demonstrate how the fund's expenditure aligns with policy and legislative priorities. But funding is often disbursed for a wide array of projects and whether it is congruent with current policy prerogatives is arguable. For example, "government priority" funding has previously contributed to support for offenders within the Department of Correction Services; "ministerial priority" funding has been used to institutional infrastructure for the National Council of Trade Unions; and "DG priority" funds have been spent on building trade union and civil society capacity.

Figure 41: Funding per priority, 2011/12 to 2014/1562



Source: Figures provided by the NSF : (NSF, 2012); (NSF, 2013) (NSF, 2014)
**Provisions relating to projects during the previous financial years*

The government priorities and DG's priorities, together constituted more than 90% of expenditure between 2011/12 and 2013/14 and 84% in 2014/15. The government priorities category funds skills development in areas such as the New Growth Path (e.g. Training in Tourism nodes as identified in the Global Competitiveness Project by Department of Tourism), Rural Development (Employment in EPWP) and Public sector capacity (NQF and NCV courses).

The main expenditure item within the DG priorities is bursaries. In 2014/15, about R1 billion of the total DG priority expenditure of R1.4 billion was disbursed for bursaries. Whereas the flexible mandate of the fund thereby enables the DHET to adapt the institution's funding priorities over time, this is likely to create uncertainty within the NSF about its role and objectives. More importantly, the grant regulations and the liberal use of the NSF as an intermediary may undermine the current financial and accountability framework established by the PFMA, by bypassing the appropriation process altogether.

[62] Information that was available

Key points and policy issues

Until, 2012/13, the SDL comprised more than 75% of the 'total revenue of the NSF'. But, this changed in 2014/15, when the new SETA grant regulations were gazetted. Accordingly R2.6 billion from SETA of uncommitted funds, were redirected towards the NSF. Consequently, the NSF's surplus has ballooned from R752 million (2013/14) to R2.5 billion (2014/15) with a concomitant accumulated surplus of R11.1 billion at the end of 2014/15.

Shifting these funds to the NSF is part of the strategy to reallocate funds from the skills and workplace training system to the university and college sectors. By doing so, the DHET has opened up new and more direct funding pathways to address the shortfall. Whether this policy shift is in line with the intended purpose of the SDL and mandate of the NSF is arguable. Nonetheless, this practice demonstrates that the lack of a clear mandate for the NSF allows this institution to be used as a financial intermediary in the PSET system.

The NSF classifies its expenditure by funding priority. This approach to classification is meant to demonstrate how the fund's expenditure aligns with policy and legislative priorities. But funding is often disbursed for a wide array of projects and whether it is congruent with the policy prerogatives is arguable. The shortcoming of this approach is that certain priority areas overlap.

This re-emphasises our point that the lack of a clear mandate for the NSF provides much flexibility for the DHET to decide on the institution's funding priorities. Over time, this is likely to create uncertainty for the NSF about its role and objectives. More importantly, the grant regulations and the liberal use of the NSF has an intermediary may undermine the current financial and accountability framework established by the PFMA, by bypassing the appropriation system.

11 WAY FORWARD

The main purpose of this review is to collect and synthesise the information required for the costing model. In doing so, it also provides for a comprehensive overview of recent trends and the current status of the PSET system. Furthermore, the review serves to document the information that is available across the different PSET sectors and institutions; and to highlight gaps in the data. Whereas some of these shortcomings will be addressed in the compilation of the costing model, others may require further analysis and fall outside of the scope of this particular study.

The next stage is in the project is to develop the costing model. This model should serve to provide policy makers with a clear view of the resource requirements needed under different expenditure scenarios and implementation assumptions. In the current fiscal environment, where resources are constrained, the costing model, along with a robust implementation plan, will assist Government to make the decisions and trade-offs needed to realise the intent and objectives of the White Paper.

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APPENDIX 1 METHODOLOGY

A 1.1 Approach

This report uses existing financial and performance data and research to explain the trends in income and expenditure within the PSET system. In preparing this report, the project team consulted key informants within the:

- Department of Higher Education and Training;
- National Treasury;
- National Skills Fund; and
- SETAs

The purpose of these consultations was two-fold. First, the consultations gathered information on developments on the implementation of the White Paper within the university and college sectors and in relation to workplace training. Second, the aim of these consultations was to assess the performance and financial data available within each of the components of the PSET system.

Table 48 describes the sources of data for the each of the components of the PSET sector and provides an indication of the quality of the data.

Table 48: Data sources and quality

Sector	Sources of data	Quality of data
TVET college	DHET annual reports TVET College annual reports TVET EPR NSFAS EPR	**Fair:** The quality of data varies considerably across TVET colleges. Some college-level estimates or expenditure and income are not reliable. Data on college-level income and expenditure is not available over time.
Community colleges	DHET annual report Provincial Education Department Annual Reports DHET VCET Budget Allocations Provincial Budgets Expenditure Review DHET HR Records	**Poor:** Data is available on the funding of the VCET sector by DHET and PEDS. This information relates mainly to the transfers of funds from PEDs to PALCs. Limited information is available to analyse the composition and trends in expenditure. Expenditure data is not disaggregated by PALCs and which makes it difficult to assess the expenditure patterns in the sub sector.
University sector	University annual reports and annual financial statements DHET database of financial information and ratios Enrolment plans and estimates NSFAS EPR	**Good:** Performance information in the university sector is detailed and robust. **Fair:** Universities produce annual financial statements that provide a fair amount of high-level information on the expenditure of these institutions. However, since there is no common reporting standards in the university sector, figures are generally not comparable between universities. Another problem is that high-level expenditure cannot be disaggregated further and this limits the amount of analysis that can be done. **Poor:** There is no information on the unit costs of programme delivery, except for the high-level estimates of the Full Cost of Study from universities.
Workplace training	Grant regulations and policy framework	**Good**: There is good information on the income and expenditure of SETAs.

Sector	Sources of data	Quality of data
	SETA annual reports DHET annual reports Artisan EPR	**Poor**: Except for the Artisan PER, there is no information on the actual cost of delivering other SETA-funded programmes.

Note: Sources are shown in the table.

To augment the quality of the analysis, this report draws extensively on the following Performance Expenditure Reviews:

- The Artisans PER conducted by Mzabalazo Advisory Services
- The NSFAS PER conducted by Cornerstone Economic Research
- The TVET PER conducted by DNA Economics
- THE NSF PER conducted by DNA Economics

We have used time series data from the university branch to project university expenditure over time. Appendix B contains the statistical output from this analysis. With the limited information available on the PALCs and community colleges, the project team builds a variant of a zero-based costing model.

A 1.2 Limitations of this study

- This expenditure and revenue analysis is limited by the availability of data across the different sectors within the PSET system. In general, performance information on enrolments, field of study, pass rates, and completion rates is better than financial information in the university and college sectors.
- Given the structure of this system and the multitude of institutions, much of the financial information lies in decentralised financial management system within universities and colleges. That said, the DHET is currently piloting a management information system that gathers financial information directly from TVET colleges.
- The differences between the academic and financial years complicates the analysis. In some instances, performance data is reported by academic year whereas expenditure data is reported by financial year. This creates problems when performance and financial data is combined for analytical purposes.
- Aside from the university sector, time series information is not readily available. In the TVET sector, for example, we had have to capture the expenditure outcomes of 50 colleges for the 2013/14, for which we have a full set of audited financials.

APPENDIX 2 THE RELATIONSHIP BETWEEN STAFF COMPOSITION AND TOTAL ACADEMIC STAFF EXPENDITURE (REGRESSION ANALYSIS EXCEL OUTPUT)

Total academic staff expenditure

Regression Statistics	
Multiple R	0.981207433
R Square	0.962768027
Adjusted R Square	0.95530832
Standard Error	132909.4659
Observations	171

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	7	7.49137E+13	1.0702E+13	605.8308873	3.6318E-113
Residual	164	2.89705E+12	17664926129		
Total	171	7.78108E+13			

Qualification/university type	*Coefficient*	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Doctoral degree	R1 125.34	102.59	10.97	0.00000000	922.77	1 327.91	922.77	1 327.91
Masters degree	R571.83	138.28	4.14	0.00005648	298.79	844.87	298.79	844.87
Other	R384.44	97.03	3.96	0.00011057	192.86	576.03	192.86	576.03
Temporary staff	R406.61	43.09	9.44	0.00000000	321.52	491.70	321.52	491.70
Comprehensive	-R121 712.67	33 144.96	-3.67	0.00032515	-187 158.54	-56 266.80	-187 158.54	-56 266.80
Traditional	-R158 921.83	36 896.31	-4.31	0.00002838	-231 774.86	-86 068.79	-231 774.86	-86 068.79
HDI	R82 703.28	27 439.62	3.01	0.00298800	28 522.80	136 883.77	28 522.80	136 883.77

APPENDIX 3 TVET EXPENDITURE ANALYSIS METHODOLOGY AND ASSUMPTIONS

A 3.1 College Sampling Approach

For the TVET expenditure analysis of the TVET Performance and Expenditure Review (PER), a sample of colleges for primary data collection was selected based on the following criteria:

- Availability of detailed college trial balance information to ensure accuracy by validation
- History of accurate financial data; based on having an unqualified audit opinion in a recent year
- Ensure a mix of urban (7) and rural / semi-rural (8) colleges
- Include colleges from 8 provinces
- Include 4 colleges from KwaZulu-Natal and 4 colleges from Western Cape to investigate the substantial observed performance and spending differences between these provinces

In practice, sufficiently accurate data was only received from 12 of the 15 colleges in the sample. For the three colleges that were excluded, the main reason for exclusion was respectively (1) disruptions due to student unrest during data collection period (2) illness to key college officials (3) inaccuracies in data supplied.

A 3.2 Methodology for calculating expenditure per FTE

The total cost per Full-Time Equivalent Student (FTE) was calculated as the sum of four expenditure categories:

1. Lecturing staff costs
2. Direct Programme Costs
3. Indirect Goods and Services Costs
4. Support and Management Costs

Table 49 provides a list of what data was collected to enable the calculation of the expenditure in each of these categories.

Table 49: Data included in each expenditure category and data sources by priority

	Lecturing Costs	Direct Programme Costs	Indirect Goods & Services Costs		Support and Management Costs
Data collected	FTE Lecturers per programme Lecturer salaries by post level	Learning materials (LTSM) Tools per learner Programme Consumables Apparatus Chemicals Teaching Aids	College Council Communication Contract Services Depreciation Extra-curricular Financial Costs General Consumables Maintenance Marketing Membership	Municipal Services Rent Residence Staff Development Student admin Systems Transport Travel Vehicles	Total support staff compensation Total management compensation

It should be noted that the calculations done include only the operational costs of running a college, and exclude any costs associated with expanding the capital infrastructure of the college. On-going capital maintenance and replacement costs are indirectly incorporated through the inclusion of expenditure items such as depreciation and maintenance.

The first two cost categories in the list above represent the costs that can (at least in theory) be directly attributed to a specific programme. These are the direct costs of providing tuition and training; i.e. the costs of lecturer's time assigned to the teaching and supporting their classes and the costs of learning materials, consumables and teaching aids that are employed directly in the presentation of a specific programme. [63] These direct costs are calculated at the level of the programme; i.e. using the data provided by colleges, we can determine how much colleges actually spent in 2014 on lecturing costs and direct programme costs for, for example, NC(V) Hospitality. This is then be divided by the number of students in each programme to determine the direct costs per FTE student in that programme.

The second two categories can be broadly categorised as "indirect" expenditures and comprise the overheads required to maintain the college. As mentioned in the Limitations section below, not all of these costs are completely indirect; but it is not practically achievable to allocate these costs to a specific programme. These indirect costs are calculated at the aggregate (total) college level and

[63] Note that the distinction between "direct" and "indirect" here is not whether an item relates directly to teaching (or not), but rather whether the item can be attributed reliable to a specific programme; e.g. NC(V) Office Administration.

then divided by the total number of full time equivalent students in the entire college; giving the total indirect cost per FTE student, which is then assigned to every student.

The primary data source in the analysis is the survey template that was created by DNA Economics and completed by the colleges in the sample, which was supplemented by financial and administrative data received from colleges. The template collected primarily the following data:

- Direct programme costs (textbooks, LTSM etc.)
- Lecturer salaries
- Number of Full-Time Equivalent (FTE) lecturers employed per programme
- Compensation expenditure split by lecturer, management and support staff

A 3.3 Limitations: Data and Analysis

A few key limitations of the analysis conducted should be highlighted:

- As the bulk of the expenditure analysis presented here was based on data collected from a sample of 12 colleges, it should emphasised that not all findings for the sample under consideration will necessarily apply to the entire TVET sector. More broadly, a vast array of complex contextual factors are likely to impact on the expenditure and performance of TVET colleges and the paucity of data in the sector makes it difficult to evaluate these factors.
- As might be expected of a primary data collection exercise in a sector known for inaccuracies and inconsistencies in data systems, expenditure data sourced from colleges were not always accurately available at the appropriate (usually programme) level due to weaknesses in college financial and management information systems. In such cases assumptions had to be made based on communications with college officials and the best judgement of the project team. We are confident that the impact of any such issues on the overall findings and trends observed are likely to be minor.
- Some of the expenditure categories that have been marked as “indirect” in the above analysis, such as depreciation and maintenance, are not truly indirect; since capital and maintenance will to some extent be more directly related to the provision of certain programmes. Therefore we would ideally want to allocate expenditure on such items more directly to the programmes that are most directly affected by these items. However, such allocation is not practically and reliable achievable, and it is also unlikely to meaningfully reflect the conclusions reached in the study (see PER for detailed discussion).
- As comprehensive performance (i.e. examinations) data for 2014 is only finalised in 2016, the most recent performance data available was 2013.

APPENDIX 4 SUPPORTING INSTITUTIONS

A 4.1 National Skills Authority (NSA)

The National Skills Authority is a statutory body established in terms of Section 4 of the Skills Development Act (1998). Its main functions are:[64]

- *Advice the Minister on –*
  - *National Skills Development Policy*
  - *National Skills Development Strategy (NSDS)*
  - *NSDS Implementation Guidelines*
  - *NSF Funding Allocation Strategic Framework and Criteria*
  - *SDA Regulations (excl. QCTO regulations)*
- *Report to the Minister on -*
  - *NSDS implementation progress*
- *Consult with the Minister on -*
  - *SETA Changes, Amalgamations, Dissolutions and Administration*
  - *SETA SLA Regulations*
  - *SETA Plans and DG Reporting requirements*
  - *SETA Grants*
  - *NSF Administration and Operations*
  - *Provincial Skills Development Forums*
  - *Skills Development Levies Act Regulations*
- *Liaise with the SETAs on*
  - *The National Skills Development Policy*
  - *The National Skills Development Strategy*
  - *Sector Skills Plans*
- *Comment on NFS Annual Financial Statements*

Going forward, the White Paper for Post-School and Education and Training calls for a restructured and refocused NSA that will concentrate specifically on monitoring and evaluating the Sector Education and Training Authorities (SETAs). This implies that the NSA will become an expert body with high-level monitoring and evaluation skills.[65]

A 4.1.1 Expenditure and Revenue

The NSA receives its funding through and appropriation from the DHET. It also receives funding from the NSF for specific programmes. The main areas of expenditure for this authority revolve around administration and include:

- Personnel expenses for Secretariat staff
- Administration and logistics (e.g. printing, travelling, venues, subsistence)

[64] (DHET, 2015, p. 4)
[65] (Nzimande, 2015)

The secretariat resides within the Skills Development Branch. The majority of their expenditure is for projects that are funded by the NSF as shown in **Table 50** below.

Table 50: NSA Expenditure, (R'000)

Item Description/Activity	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Compensation of Employees	2 244	2 490	2 474	2 628	2 765	2 890
Goods and services	1 242	2 688	1 359	1 594	1 772	1 853
Machinery and equipment	-	-	-	-	-	-
Allocation from NSF for Priorities of the NSA	-	-	2 922	17 303*	15 172**	58 524***

Source: (DHET, 2015),
Note: The following figures were revised to reflect amount in the audited AFS of the NSF:
* (NSF, 2013)
** (NSF, 2014)
*** (NSF, 2015)

The allocation from the NSA increased from R2.9 million in 2011/12 to R58.5 million in 2014/15 for Ministerial Priorities: This rapid increase in expenditure was spent on:

- National Public Dialogue and Advocacy
- Constituency Capacity Building
- Skills Marketing and Communication
- Provincial Skills Development Forums
- Capacity Building

The majority of the funding in 2014/15 were disbursed for Constituency Capacity Building (R26.7 million) and Capacity Building (R30.8 million).[66] The Constituency Capacity Building funded several labour organisations and other institutions (e.g. Women's National Council [WNC]; South African National Civic Organisation [SANCO]; and Association of Private Providers of Education, Training and Development [APPETD]) to realise the objectives of the NSDS III. The NSA also received funding to capacitate their Provincial Skills Development Forums[67] (PSDFs) initiatives[68]

A 4.2 South African Qualifications Authority (SAQA) and Quality Councils

The National Qualifications Framework is a comprehensive system for the categorisation, registration and publication of national qualifications. It consists of three sub-frameworks for:

- General and Further Education and Training,
- Higher Education; and

[66] (NSF, 2015, p. 138)
[67] The PSDFs are established in Provinces to ensure the implementation of the NSDS and key strategies in Provinces.
[68] (DHET, 2015, p. 13)

- Trades and Occupations.[69]

The NQF Act establishes SAQA as a statutory body, whose aim is to oversee the NQF and maintain its values. SAQA therefore co-ordinates the work of the QCs and other NQF partners.

A 4.2.1 Revenue

SAQA's main source of revenue IS a core grant from the DHET to cover administration costs and funding from the National Skills Fund (NSF) to implement the Career Development Services project, as denoted in **Table 51** below.

Table 51: SAQA income: 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Government Grant from DHET	41 335	41 435	45 723	49 401	55 008
Fees charged for the Evaluation of Foreign Qualifications	13 629	15 132	17 496	22 663	22 356
Fees charged for the Verification of Local Qualifications	1 516	3 664	1 538	3 267	4 064
Funding received from the NSF for the Career Development Services Project	8 679	19 579	42 630	43 122	25 510
Rental Income	1 541	1 752	1 627	1 392	1 177
Sundry Income	6 708	5 323	5 231	2 232	4 984
Interest Received	1 800	1 601	1 311	1 543	2 161
Total Income	**75 208**	**88 486**	**115 556**	**123 620**	**115 260**

Source: Financial data provided by SAQA

These two sources of income comprised nearly 70% of total income in 2014/15. Substantial income is also received from fees charged for the evaluation of foreign qualifications (19% in 2014/15) with a smaller proportion of income coming from fees charged for the verification of local qualifications (4% in 2014/15). Other sources of income amounted to 7% of total income in 2014/15 and include investment income from an accumulated surplus.

Growth in the DHET core grant has been above the rate of inflation in almost all years and funding from the NSF grew rapidly until recently as the project to improve career advice and development services was implemented. Income from fees charged for the evaluation of foreign qualifications also rose rapidly until 2014/15.

A 4.2.2 Expenditure

Table 52 below sets out SAQA expenditure by programme and economic classification for the period 2010/11 to 2014/15.[70]

[69] (SAQA, 2015)

[70] Expenditure figures by programme differ slightly from expenditure figures given in the Annual Reports, especially for 2014/15, but less so for preceding years. The reasons for this are not known but these expenditure figures by programme and economic classification are given to illustrate trends.

Table 52: SAQA expenditure: 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Programme					
Administration	35 892	36 757	36 096	38 717	49 145
Recognition and registration of qualifications and part qualifications	7 275	8 310	8 491	7 649	6 989
National Learners' records database including verification project	6 965	8 412	7 947	8 219	10 013
Foreign Qualifications Evaluation and Advisory Services	11 905	12 781	15 898	18 374	19 895
Career advice services	6 377	19 189	42 770	41 508	23 844
Research	4 647	4 050	4 768	5 150	3 910
International liaison	1 302	2 015	2 636	1 886	1 197
Total	**74 363**	**91 514**	**118 606**	**121 503**	**114 993**
Economic Classification					
Personnel Expenditure	44 153	52 599	61 924	68 092	66 755
Goods & Services	26 301	35 528	45 829	47 214	44 115
Capital Expenditure	3 909	3 387	10 853	6 197	4 123
Total	**74 363**	**91 514**	**118 606**	**121 503**	**114 993**

Source: Source: Financial data provided by SAQA

Expenditure grew rapidly in 2011/12 and 2012/13 driven by growth in the development of career services and to a lesser extent an increase in the evaluation of foreign qualifications. Administration is the largest single programme, comprising 43% of expenditure in 2014/15, followed by Career Advice Services (21% in 2014/15) and Foreign Qualifications Evaluation and Advisory Services (17% in 2014/15). Personnel compensation comprised 58% of total expenditure in 2014/15 and has remained constant over the years.

A 4.2.3 Surplus

Despite overspending in two years, SAQA has managed to amass an accumulated surplus of R37.5 million by the end of 2014/15 as noticed in **Table 53**. While SAQA had an accumulated surplus of R37.5 million at the end of 2014/15, its annual financial statement reflect commitments to the amount of R12.1 million.[71]

Table 53: SAQA surpluses 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Surplus (deficit) for the year	1 472	(3 012)	4 534	4 037	(7 915)
Accumulated surplus	38 677	35 978	40 512	45 429	37 514

Source: Financial data provided by SAQA

[71] (SAQA, 2015, p. 130)

A 4.3 Council on Higher Education (CHE)

The Council on Higher Education (CHE) is a statutory body established under the Higher Education Act (Act 101 of 1997), as amended, and is the Quality Council for Higher Education in terms of the National Qualifications Framework Act (Act 67 of 2008).[72]

A 4.3.1 Revenue

The main source of income for CHE is non-exchange revenue, which comprised more than 90% of all income in 2014/15 as observed in **Table 54** below. This is primarily in the form of a core grant by the DHET (R 42.7 million in 2014/15) which has been supplemented in recent years by deferred income from the DHET associated with the function shift of standards development to the CHE (R 1.2 million in 2014/15). Most of remaining revenue, more than 7% in 2014/15, is provided by exchange revenue associated with income from the universities to cover the costs of the accreditation of higher education programmes and courses.

Table 54: CHE Revenue 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Exchange Revenue	2 127	2 389	3 473	3 861	3 549
Interest received- investment	752	731	881	812	1 263
Non exchange revenue	36 141	37 762	41 102	43 185	43 928
Gain on disposal of assets and liabilities	22	0	0	0	0
Total Revenue	**39 042**	**40 881**	**45 457**	**47 858**	**48 740**

Source: (CHE, 2012); (CHE, 2013); (CHE, 2014) (CHE, 2014) (CHE, 2015)

A 4.3.2 Expenditure

The largest programme is Administration, which comprised 44% of all expenditure in 2014/15, followed by Programme Accreditation, which comprised 20% of all expenditure in the same year. Monitoring and Evaluation, Institutional Audits and Quality Promotion and Capacity Development were the programmes account for the rest of the remaining expenditure in 2014/15.

Table 55: CHE Expenditure by item 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Programme					
Administration	17 017	15 048	18 884	19 491	21 795
QPCD	3 741	3 726	3 159	4 056	4 019
Monitoring and Evaluation	4 228	2 507	3 481	6 854	6 159
Programme Accreditation	5 687	7 725	9 418	11 873	10 013
National Reviews	15	598	1 844	2 332	1 909
Institutional Audits	5 605	3 823	2 762	4 559	4 606
Standards Development	55	961	1 109	1 597	1 239
Total Expenditure	**36 348**	**34 388**	**40 659**	**50 762**	**49 740**

[72] (CHE, 2015)

	2010/11	2011/12	2012/13	2013/14	2014/15
Economic Classification					
Personnel	16 543	16 878	19 097	23 476	24 999
Depreciation and amortisation	1 778	1 623	1 568	1 859	2 251
Interest paid	51	41	19	155	1
Debt impairment	0	0	0	127	7
Repairs and maintenance	0	611	354	2 193	1 036
Loss on disposal of assets	0	39	5	36	0
Loss on exchange differences	0	0	0	0	0
General expenses	17 899	15 567	19 543	22 917	21 447
Total Expenditure	**36 270**	**34 758**	**40 586**	**50 762**	**49 740**

Source: (CHE, 2012)*;* (CHE, 2013)*;* (CHE, 2014) (CHE, 2014) (CHE, 2015)

The two largest items of expenditure are personnel and general expenses which together comprised more than 93% of expenditure in 2014/15. Depreciation and amortisation as well as repairs and maintenance accounted for almost all remaining expenditure in 2014/15. Personnel expenditure has risen slightly from 47% of total expenditure in 2012/13 to 51% in 2014/15. Despite spending more than 50% (R25 million) of its budget on personnel in 2014/15, the institution has spent a further R8.3 million on consultants. It would appear that the consultants were employed to undertake specific projects for the DHET such as[73]:

- Restructuring the Undergraduate Curriculum
- Student Governance in Public Higher Education Institutions
- Governance and Management in Public Higher Education
- Reflections on Academic Leadership in South Africa
- Placement Mechanisms
- Private Higher Education Management Information System

Due to under-expenditure and the rollover of unspent funds, CHE has accumulated a substantial surplus of R39.3 million in 2014/15, as shown in **Table 56**.

Table 56: CHE Accumulated surplus 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Revaluation reserve	0	0	0	4 914	4 914
Accumulated surplus	29 729	35 852	43 297	40 393	39 392
Net Assets	**29 729**	**35 852**	**43 297**	**45 307**	**44 307**

Source: (CHE, 2012); (CHE, 2013); (CHE, 2014) (CHE, 2014) (CHE, 2015)

A 4.4 Quality Council for Trades and Occupations (QCTO)

The Quality Council for Trades and Occupations (QCTO) is a Quality Council established in 2010 in terms of the Skills Development Act. Its role is to oversee the design, implementation,

[73] (CHE, 2015, p. 26)

assessment, and certification of occupational qualifications on the Occupational Qualifications Sub-Framework (OQSF). Another important role for the QCTO is to offer guidance to service providers seeking accreditation by the QCTO to offer occupational qualifications.[74]

A 4.4.1 Revenue

Non-exchange revenue provides almost all QCTO income in the form of grants. QCTO was established in 2010 and funded by a core grant from DHET. This grant was the main source of revenue during the first three years of operation. The QCTO's revenue for 2010/11 to 2014/15 is set out below.[75]

Table 57: QCTO Revenue 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Exchange revenue	0	123	837	1 314	1 393
Non exchange revenue	10 132	18 387	20 352	37 257	52 168
DHET grant	*10 132*	*18 387*	*20 352*	*21 747*	*23 168*
SETA grant				*15 428*	*28 500*
NSF				*280*	*500*
Total Revenue	**10 132**	**18 510**	**21 189**	**38 571**	**53 561**

Source: (QCTO, 2015) (QCTO, 2014) (QCTO, 2013) (QCTO, 2012)

From October 2012, the SETAs were required to pay 0.5% of their skills levy income to QCTO to cover quality assurance functions. SETA grants have since risen rapidly to provide more than half of all QCTO income in 2014/15. Other income is primarily from investment of surpluses from under-expenditure and the rollover of unspent funds. Income has risen in all years since QCTO's establishment and especially since the grants from the SETAs came into effect.

A 4.4.2 Expenditure

Personnel and operating expenses are the two most important items of expenditure and have both risen rapidly since QCTO has ramped up its operations since its establishment in 2010.

Table 58: QCTO Expenditure by programme 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Personnel	0	5 279	9 184	17 440	30 840
Depreciation and amortisation	0	9	125	951	2 573
Operating expenses	3 248	5 436	6 525	18 215	27 037
Conditional grant (NSF)	0	0	0	82	500
Total Expenditure	**3 248**	**10 724**	**15 834**	**36 688**	**60 950**

Source: (QCTO, 2015) (QCTO, 2014) (QCTO, 2013) (QCTO, 2012)

[74] (QCTO, 2015)

[75] It should be noted that the component grants of non-exchange revenue do not exactly match the total for 2013/14 but they are included to illustrate the trends in grant income.

Depreciation and amortisation and expenditure of a conditional grant from NSF comprised remaining expenditure in 2014/15. About 51% of expenditure in 2014/15 was on personnel, a proportion, which has risen from 48% in 2013/14 as QCTO, has recruited staff to increase its operations. The expenditure by programme and economic classification in Annual Performance Plan is not congruent with the figures with those in the Annual Report. The Annual Report does not report expenditure by programmes. Hence, no breakdown of expenditure by programme.

Substantial increases in expenditure in 2013/14 and 2014/15 have started to reduce the surplus built up in the early years of QCTO. Table 59 below sets out QCTO surpluses from 2010/11 to 2014/15.

Table 59: QCTO surpluses 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Surplus for the period	0	7 786	5 355	1 883	-7 389
Accumulated surplus	6 884	14 669	20 024	21 907	14 518
Net Assets	**6 884**	**14 669**	**20 024**	**21 907**	**14 518**

Source: (QCTO, 2015) (QCTO, 2014) (QCTO, 2013) (QCTO, 2012)

QCTO accumulated substantial reserves in its early years due to under-expenditure of funds as operations scaled up. Surplus funds decreased in 2014/15 as QCTO reached full operational efficiency.

A 4.5 Umalusi

The Umalusi Quality Council sets and monitors standards for general and further education and training in South Africa. It is governed and guided by the National Qualifications Act No 67 of 2008 and its establishment Act is the General and Further Education and Training Quality Assurance Act No 58 of 2001 amended 2008.[76]

It should be noted in the discussion that follows that Umalusi revenue and expenditure cannot be separated into components on the GET phase and on the FET phase. Revenue and expenditure figures are therefore presented with the major caveat that they are for Umalusi as whole rather than distinct figures for the FET phase of education, that the PSET system is concerned with.

A 4.5.1 Revenue

The main source of income for Umalusi is a core grant from the Department of Basic Education (DBE) which came to R 107.4 million in 2014/15 as can be seen in Table 60 below..

Table 60: Umalusi Revenue 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Non-tax revenue	42 115	74 829	39 196	23 471	30 546
Accreditation, certification and verification	*39 894*	*71 994*	*36 292*	*20 614*	*25 099*

[76] (Umalusi, 2015)

Other non-tax revenue	*2 221*	*2 835*	*2 904*	*2 857*	*5 447*
DBE grant	17350	18391	42 330	97 662	107 354
Total revenue	**59 465**	**93 220**	**81 526**	**21 133**	**137 900**

Source: Financial information provided by Umalusi

Most of the remaining revenue is provided by charges for accreditation, certification and verification of GET and FET qualifications. Expenditure

A 4.5.2 Expenditure

The largest programme is Administration, which comprised 34% of all expenditure in 2014/15, followed by Quality Assurance of Assessment, which comprised 30% of all expenditure in the same year.

Table 61: Umalusi Expenditure 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Programme					
Administration	24 232	27 346	31 836	36 131	44 771
Qualifications, Curriculum and Certification	6 012	6 182	8 620	14 555	17 549
Quality Assurance of Assessment	19 572	23 262	26 692	30 126	39 598
Evaluation and Accreditation	8 784	10 292	13 587	12 811	19 528
Statistical Information and Research	4 545	8 197	8 322	7 907	10 731
Total Expenditure	**63 145**	**75 279**	**89 057**	**101 530**	**132 177**
Economic Classification					
Compensation of employees	28 812	34 208	35 452	41 112	49 940
Goods and services	32 735	39 207	51 201	57 805	78 699
Depreciation	1 443	1 704	2 231	2 445	3 012
Transfers and subsidies	155	160	173	168	526
Total Expenditure	**63 145**	**75 279**	**89 057**	**101 530**	**132 177**

Source: Financial information provided by Umalusi

Evaluation and Accreditation (15%), Qualifications, Curriculum and Certification (13%) and Statistical Information and Research (8%) are the remaining programmes that comprised remaining expenditure in 2014/15. The respective shares of the programmes in total expenditure have been broadly the same over the last five years. The two largest items of expenditure are on goods and services and personnel, which together comprised more than 97% of expenditure in 2014/15.

Due to under-expenditure and the rollover of unspent funds, Umalusi has accumulated a surplus of R 71.2 million in 2014/15, as shown in **Table 62** below.

Table 62: Umalusi surpluses: 2010/11 to 2014/15, (R'000)

	2010/11	2011/12	2012/13	2013/14	2014/15
Surplus/(Deficit)	(3 680)	17 941	(7 531)	19 603	5 723
Accumulated surplus	35 480	53 421	45 890	65 793	71 216

Source: Financial information provided by Umalusi

A 4.6 National Artisan and Moderation Body (NAMB)

The National Artisan Moderating Body was established in November 2010 in terms of the Section 26A (1)(a) of the Skills Development Act (SDA), Act 97 of 1998. Its purpose is to monitor the quality of artisan training and testing, to assure the quality of trade tests and the trade testing system, and to make recommendations to the Quality Council for Trades and Occupations (QCTO) on the certification of artisans[77].

Currently, it is not a public entity nor a state owned company but an operational unit in the DHET with statutory functions.[78] The NAMB is located within the Chief Directorate: Institute for the National Development of Learnerships, Employment Skills and Labour Assessments (INDLELA). The NAMB was established in 2012/13 with its operational budget funded by the NSF.[79]

No expenditure data is provided with the DHET Annual Report on the funding of the NAMB. The NSF Annual Report indicates that it disbursed R19.6 million to the NAMB.

In terms of the White paper, it is envisaged that the NAMB will continue play a significant role in the building external assessment capacity for trade and occupational qualifications. The White paper has recommended that it be incorporated into the QCTO.[80]

A 4.7 Human Resource Development Council of South Africa (HRDCSA)

The Human Resource Development Council of South Africa (HRDCSA) is an advisory body under the leadership and stewardship of the office of the Deputy President of South Africa. It was established in 2010 and is managed by the Department of Higher Education and Training (DHET). This council is tasked with the responsibility of overseeing the Human Resource Development Strategy for South Africa for 2030.

The institution consists of a Technical Working Group (TWG), which provides the strategic and technical advice. They established Technical Task Teams (TTT), which provide expert advice to execute the mandate of the TWG in terms of the following areas:[81]

- Education, training and skills development
- Research, monitoring and surveillance of job/labour market trends
- Communications
- Any other areas as directed by the TWG

[77] (DHET, 2013, p. 65)
[78] (DHET, 2015)
[79] (PMG, 2015)
[80] (DHET, 2013, p. 74)
[81] (HRDC, 2015, p. 14)

The TTT in 2014/15 focused on the following areas: enabling entrepreneurship, artisan development, foundational learning, worker education, strengthening of TVET colleges and maritime sector skills

A secretariat is housed within the DHET and provides administrative, strategic and technical support to the Council and the governance structures.[82] No funding data is recorded in the HRDCSA annual report. The 2013 NSF Annual Report reveals that is has transferred R7 million in 2012/13[83]. The 2104[84] and 2015[85] NSF Annual Report no additional allocation was given as they had not spent previous allocations.

[82] (HRDC, 2015, p. 14)
[83] (NSF, 2013, p. 60)
[84] (NSF, 2014, p. 28)
[85] (NSF, 2015, p. 44)

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