



## UNIVERSITIES SOUTH AFRICA

### Universities Funding in South Africa; A Fact Sheet

#### 1. University education as a generator of both public and private goods

Universities South Africa (USAf) is of the view that universities produce public goods to the extent that university education generates new knowledge, produces research that leads to new commercial, technological, social, political and other innovations beneficial for national development. Inversely, university graduates who land better-paying jobs as a result of skills sets they bring to the labour market, reap private goods from university education. Therefore, if higher education produces both collective (public) goods (i.e. value to the country) and private goods (value to individuals), it is logical to expect that the funding required for higher education will derive partly from the public fiscus and partly from private investment in the form of student fees or some other mechanism that may be agreed upon over time.

USAf agrees with the principle of a cost-sharing model to cater for the cost of the public goods of higher education on the one hand, and that of the private goods on the other. The main funding sources of higher education therefore, are the fiscus-based state subsidy system and the private contribution (in the form of tuition fees and/or other sources of funding). As such **a fee-free higher education system is not supported by USAf unless there is clarity on how the full higher education budget will be constructed to maintain** current levels and quality of service delivery.

The tuition fee and/or other sources of funding should be at a level that allows students and their families to see sufficient value in the investment. In many countries families assess the value of a degree by comparing the cost thereof to employability of the graduate. USAf takes the view that the level of public investment in higher education must be internationally benchmarked and matched to the value of the public good. If this is not done effectively, the tuition fee portion would be so large as to systematically exclude students from poor and middle class families.

#### 2. The University sector is underfunded

##### 2.1. Government subsidies have been declining in real terms

Taking into account the importance of the large national, *public good* projects of the higher education system, universities have to be adequately funded. However, in reality, the opposite is true. Several studies have shown that in comparison with other societies, this underfunding is considerable. The primary sources of funding are the Department of Higher Education and Training (DHET) block grant based on the system of full-time student equivalents (FTEs) and student fees. For most universities,

state support on average accounts for more than two thirds of their unrestricted revenue. The student fee component in university budgets is typically in the region of 30-40%, an amount approaching R30 billion per annum if the cost of accommodation of students in residences is included. The historic increases in tuition fees beyond CPI are a direct result of the fact that the subsidy allocation to universities per full time equivalent student has been in decline and the fact that the higher education price index (HEPI) is approximately 2% higher than CPI.

USAf generates HEPI, a measure of the inflation rate for higher education, by taking into account the typical spending patterns of universities. For the period 2010/11 – 2012/13 this higher education price index was 1.7% above CPI, and the index for 2013/14 - 2015/6 is currently in development. The methodology used to determine HEPI is explained in the Executive Summary - Research and Development of HEPI for South Africa – herewith appended. Amongst the key drivers of HEPI are academic salary increases, utility costs (especially electricity), foreign exchange based expenses (book and scientific journal costs, computer hardware, software, research equipment, experimental consumables, etc.) and security and cleaning contracts. These have all grown at rates higher than CPI on an annual basis.

Table 1 below provides an analysis of the government funding for higher education through the block grant system, which is at the core of the funding levels for teaching (and research.)

**TABLE 1. SUBSIDY LEVELS OVER THE PERIOD 2012/2013 – 2014/2015.**

	2012/2013	2013/2014	2014/2015	2015/2016	Note	No.
<b>Treasury Allocation</b>	R20.9 bn	R22.4 bn	R24.2 bn	R26.2 bn	Excluding NSFAS	
<b>% Increase</b>	8.3%	7.2%	8.0%	8.2%	Above CPI	<b>(1)</b>
<b>Block Grants</b>	R17.4 bn	R17.4 bn	R19.6 bn	R20.9 bn		
<b>% Increase</b>	6.4%	5.8%	6.1%	6.6%	CPI-linked	<b>(2)</b>
<b>Teaching Input (TI)</b>	R11.7 bn	R12.1 bn	R12.7 bn	R13.1 bn		
<b>% Increase</b>	6.9%	4.2%	4.7%	3.1%	Below CPI	<b>(3)</b>
<b>TI Units</b>	1 071 822	1 119 033	1 169 143	1 222 348		<b>(4)</b>
<b>TI/Student Unit</b>	<b>R10 916</b>	<b>R10 813</b>	<b>R10 863</b>	<b>R10 717</b>		<b>(5)</b>
<b>% Increase</b>		-1.0%	0.5%	-1.3%	TI/student unit growth negative	<b>(6)</b>
<b>Teaching Output (TO)</b>	R2.5 bn	R2.7 bn	R3.0 bn	R3.2 bn		<b>(7)</b>
<b>TO Units</b>	134 272	141 344	149 138	159 578		<b>(8)</b>
<b>TO/Student Unit</b>	<b>R18 619</b>	<b>R19 102</b>	<b>R20 116</b>	<b>R20 053</b>		<b>(9)</b>
<b>% Increase</b>		2.6%	5.3%	-0.3%	TO/student unit growth < CPI.	<b>(10)</b>

### Table 2 tells us the following:

- a. The National Treasury's allocation to DHET for higher education between 2012/2013 and 2015/2016 is approximately 2 percentage points above CPI throughout the period. **(Row 1)**
- b. Three factors affect this allocation as it translates to subsidies to the sector. The first is the top slicing of this allocation for various kinds of earmarked grants, which has grown annually at about the 10% level. The block grant therefore, grows at the same rate as CPI. **(Row 2)**
- c. The total Teaching Input (TI) subsidy grows at a rate that is below CPI. **(Row 3)**
- d. The second factor is the annual increase in the number of students in the system. The student teaching input units grow at the rate of 4.5% per annum. **(Row 4)**
- e. The third factor is that the higher education inflation rate (HEPI) is approximately 1.7% higher than CPI.
- f. ***The result is a steady decline in the teaching input grant per student unit even before CPI/HEPI is taken into account. (Rows 5 and 6)***
- g. On an annual basis therefore, there is a rapid erosion of the value of the teaching input grant per student unit.
- h. The same occurs with the Teaching Output grant. (Rows 7 – 10)

It is of grave importance, therefore, that any move towards fee-free higher education takes into account the need to bolster the teaching and research block grants to universities. USAf has, from the HESA era, been lobbying both the executive and legislative arms of Government for adequate funding for universities, including increased funding for the National Student Financial Aid Scheme (NSFAS).

Also strengthening the funding debate is the fact that the South African higher education system is differentiated. This means that some institutions are recognised as having a primarily undergraduate teaching/learning mandate (traditional institutions), others would be regarded as being research intensive (research-intensive institutions) and yet others would be regarded as having mixed mandates (comprehensive institutions). It is important that each type of institution is properly and suitably funded to carry out its particular mission.

Stable funding systems for universities, in general, are critical for their long-term optimal operation.

## 2.2. The South African University System is poorly funded compared to other systems

As always championed by USAf (*see HESA presentation to relevant Parliamentary Committees in 2014 – herewith attached, for an example*), the funding level of the South African higher education system has to be benchmarked against funding levels of other successful higher education systems. Taken from a Centre for Higher Education Transformation (CHET) presentation, the bar chart below shows government investment in higher education as a ratio of GDP for several countries. For 2012, the ratio for South Africa was 0.71. This was less than half that of Cuba, China, Finland, Iceland, Malaysia and Ghana and also significantly less than Senegal, Chile, Brazil and India. If we take the 2014/2015 government spend on higher education to be R24.2 billion (as per DHET's report titled *Statistics on Post-School Education and Training in South Africa: 2014*) and the nominal GDP for 2014 as R3.8 trillion (Stats SA) then the South Africa ratio for 2014/2015 is about 0.64, a real decline between 2012 and 2014. Taking into account the importance of the large national, public good projects of higher education, the system has to be funded at an appropriate level.



Compiled by Charles Sheppard  
Source: OECD (2016), Public spending on education (indicator). doi: 10.1787/f99b45d0-en (Accessed on 12 May 2016)

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### 3. Universities' sustainability depends on tuition fees

Clearly, universities expend their budgets on fixed and recurring costs that are closely-linked to the institutions' delivery on their core mandate. For them to continue along this path, all three income streams (i.e. government subsidy, tuition fees and third-stream income as derived from corporate and commercial activities, investments and donations) need to keep flowing. If tuition fees dried up – as would be the case if a fee-free higher education policy were to be adopted prematurely, the country would suffer severe consequences, examples of which are shared underneath.

- 3.1. **Unavoidable budget cuts could lead to retrenchments:** Institutions seeking to survive in this difficult climate are already identifying areas where they can shave off costs. This could lead to a need to also reduce staff budgets, with undesired consequences.
- 3.2. **The quality of higher education would be compromised:** Even if academic positions are not touched by the decisions above, uncertainty in the sector could lead to the sector haemorrhaging staff as top talent emigrates to more stable environments.
- 3.3. **Research could become compromised and academics demoralised** also as a result of the foregoing, heightening emigration.
- 3.4. **Universities could curtail their study offerings:** In the course of adapting to the current environment, institutions might be forced to reduce programme offerings – regardless of the relevance thereof to national development.
- 3.5. **Skills shortage for the public and private sector:** this would be an inevitable consequence of the eventuality stated above.
- 3.6. **Inevitable retrenchments would reduce access:** More students would drop out as a consequence of parents losing jobs, including students who are in the system by virtue of parental employment benefit.

- 3.7. **The wealthy would send their children to private institutions** locally and overseas, leaving the poor to receive sub-standard education.
- 3.8. **Possible distortion of the social justice agenda of the higher education project:** A fee-free regime would result in the subsidisation of the wealthy. Students fully able to afford higher education would be released from contributing to the functioning of the system.
- 3.9. **Distortion of size and shape of institutions:** Student fees for postgraduate studies cover a smaller proportion of costs compared to those for undergraduate studies. This is also true for part-time studies. A fee-free system could result in a distortion of the size and shape of universities.
- 3.10. **National Development Plan (NDP) aspirations to a more knowledge-intensive, transformed economy and a wider system of innovation by 2030, would become a mockery** as academic offerings, student access and academics' demographics declined.
- 3.11. **Ultimately, the higher education sector would collapse** as the higher education project became untenable.

#### 4. Sustainability challenges for universities

The #FeesMustFall campaign, commendable as it might have been for the gains it brought about for the student community in 2015/16, dealt a severe blow to what was already an ailing university sector. Notwithstanding that the DHET contributed up to 80% of the universities' revenue shortfall arising from the fee-increase freeze for 2016, the moratorium created a series of challenges that cast serious doubt on whether the sector will ever recover. The consequences of this policy decision are only summarised below.

- Whereas universities traditionally derive at least 5% of their revenue from third stream income, and expend this on other purposes such as strategic initiatives, niche areas, seed funding or special interventions, **some institutions had to dip into this revenue stream to offset the shortfalls resulting from the fee-increase freeze.** This means the funds normally invested in strategic initiatives had to be diverted to fund normal operations.
- **Universities' debt collection capability has seriously been compromised** as some parents' hopes for free education heightened. To date, many pay fees sluggishly if at all while awaiting a free-education policy announcement.
- **The fee-freeze also applied to students' residences;** a major concern as residences do not traditionally receive any state subsidy. They are run on a model by which they need to be self-sustaining. Many institutions recently built residences using loan funding where repayments were projected on future residence fee increases.
- **The demand to insource previously contracted ancillary workers,** notably security, cleaning, gardening services, catering and transport etc., has also caused its share of strain on universities. Preliminary findings of a study carried out by USAf indicate that the cost of insourcing rests between R400 million and R2 billion for the sector, per annum. Whereas six institutions have already signed agreements with workers towards a more permanent employment arrangement, others are exploring alternative ways to deal with the insourcing demand as permanent appointment of these workers is neither affordable nor sustainable and would place institutions in serious risk within months of implementation. While USAf is in the process of finalising the research on insourcing, and related decision-making, it is most likely that the balance of institutions will not be insourcing. Decisions in that regard could lead to renewed protests and unrest.

## 5. Universities' value to national development

The National Development Plan 2030 acknowledges that South Africa is presenting with critical shortages of good-quality doctors, engineers, information technology professionals, forensic specialists, detectives, planners, accountants, prosecutors, curriculum advisors (p.45), etc. Recognising universities as the nerve-centre of the country's national development (p.40), the Plan further suggests that to solve both technical and managerial skills shortages, government has to take a long-term view on skills development, and explore career pathing, mentoring and closer partnerships with universities and schools of management (p.45). The NDP admits that inadequate human capacity will constrain knowledge production and innovation. Universities therefore need to become nerve centres at the cutting edge of technology.

However, without corresponding levels of funding, the university sector in South Africa is likely to be pushed further from realising these national ideals.

In addition to knowledge production and human capacity development, universities contribute to nations' economic development directly by creating employment, themselves, and also indirectly by generating employment for other sectors through their own operations and the services they consume in the process. According to a study published two years ago (Pouris and Inglesi-Lotz 2014), in 2009, the university sector recorded 112 797 people in its employ. Of these, 41 428 were permanent and 71 369 temporary. These stats were up from 101 186 during 2004 and 108 697 in 2007. It must also be noted that during the recession of 2008–2009 the rest of the economy in South Africa lost 870 000 jobs.

When taking into account direct and indirect employment, employee numbers in the university sector rose to 228 978 in 2009, a reality far outstripping the job-creation capability of the utilities sector (98 000) and slightly lower than that of the mining and quarrying sectors at 296 000 jobs.

Pouris and Inglesi-Lotz (2014)\* demonstrate universities' contribution to the economy aptly below:

- 1.1. **Direct economic value:** universities employ professional and also produce graduates who then offer services in other sectors.
- 1.2. **Indirect value:** universities buy goods and consume services of other sectors – thus stimulating economic activity in these industries and others from whom the direct suppliers also source goods and additional services.
- 1.3. **Induced economic value:** the salaries and wages paid to university staff are spent on consumer goods and services in other sectors, thus generating a ripple effect to a much wider economy.

According to Statistics SA (cited in Pouris & Inglesi-Lotz, 2014) universities total economic impact as a percentage of the GDP (in 2009 prices) amounted to 2.1% in that year. StatsSA also established in 2009, that cash receipts generated from universities' operations in that year cumulatively amounted to R36 892 million.

The table overleaf, which summarises the impact of universities to the economy, is illuminating.

**Table 2: the impact of 23 universities on South Africa's economy in 2009**

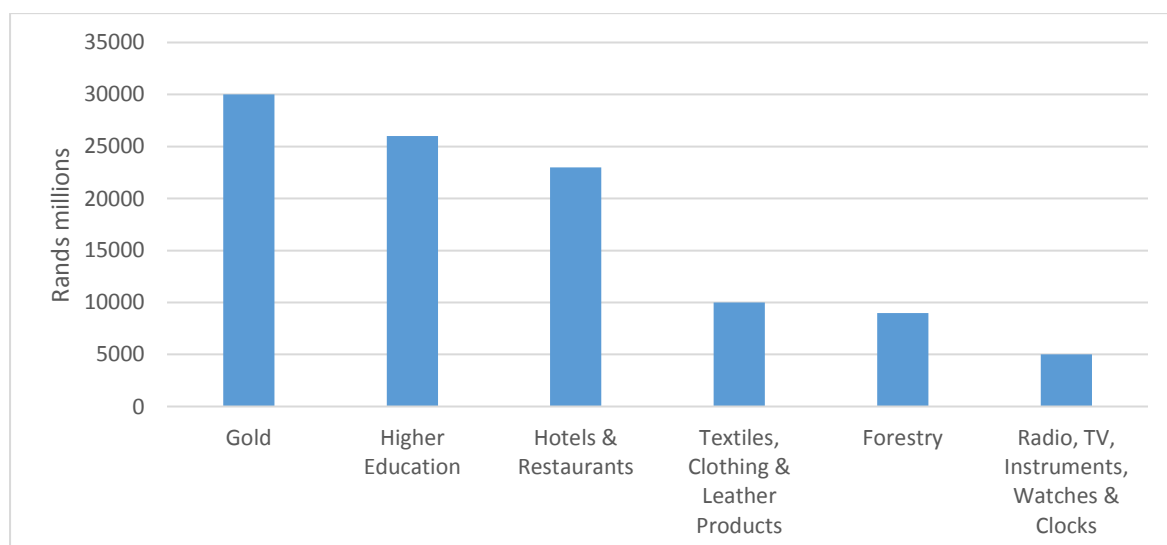
	<b>Universities (Rand billions)</b>
<b>OUTPUT</b>	
Direct Output	R36 892
Secondary output	R50 910
Total output generated (direct & secondary)	R87 803
<b>GDP</b>	
Direct GDP	R23 350
Secondary GDP	R25 455
Total GDP generated (direct & secondary)	R50 805

*Source: (Stats SA, cited in Pouris and Inglesi-Lotz, 2014)*

In addition to the direct economic benefits discussed earlier, the university sector created significant economic activity when foreign (as well as national students studying away from home) consumed goods and services in the periphery of their hosting universities.

The sector's value-add to the national economy becomes clearer, especially when viewed against other sectors, as depicted in the bar chart below.

**Value-added selected sectors for South Africa in 2009 values**



*Source: (Stats SA, cited in Pouris and Inglesi-Lotz, 2014)*

Universities' value-add to the national economy, when examined per employee - and compared with other industries' value-add per employee, outperformed the agricultural and construction sectors, respectively. Evidence is provided in the table below.

**Table 3: Value Added per employee**

Industry	Value added (Rand millions)	Employees	Value added/employee
Agriculture	R63 888	624 000	R102 384
Construction	R87 116	415 000	R209 918
Electricity, gas and water	R60 280	56 000	R1 076 428
Manufacturing	R330 310	1 185 000	R278 742
Transport, storage and communication	R199 065	359 000	R554 498
Universities	R25 350	113 000	R224 336

Notwithstanding the impressive contribution of universities to the national economy, South Africa to date remains one of the lowest spenders on higher education as a percentage of GDP among OECD countries, as indicated by CHET in 2012 (refer to **point 2.2.** above).

## 6. The status quo prevails into 2017

For the foreseeable future, **free higher education is not feasible in South Africa**. Universities remain dependent on state support, which continues to decline. The rate of state support increase below CPI places more pressure on student fees and third stream income. It is also a fact that South African institutions are all competing within the same pool of funding/donors, and, as a result, the sector as a whole is not accessing new funding within the South African context. The personnel costs at many institutions exceed the value of state support, resulting in added pressure on other revenue streams.

This has all happened within the context of a weakening Rand where institutions are hard-hit in the areas of imported research equipment, electronic and other library resources as well as ICT equipment and software licences, etc. There are also instances where institutions suffer heavy revenue losses to electricity, water and municipal rates and taxes that have increased far above official CPI rates. As it is, the CPI-based state subsidy increases have led to a decreasing reserve margin between income and expenditure at institutions.

Whilst all public HEIs are autonomous and aspire to reduce the extent of their dependency on state support by diversifying their income bases, universities are far from achieving this ideal. Stated differently, **universities are in no position to replace the state subsidy income stream**.

In the meantime, current indications are that tuition fee increases for 2017 will be capped at the CPI level of 6.3%. This keeps tuition fees as universities' integral income stream for the foreseeable future. The CPI-based inevitable policy increase requires universities to devise creative means to make up budget shortfalls for 2017 and beyond. **Students who are in the position to pay fees must therefore continue to do so for the foreseeable future.**



Meanwhile, universities, empathetic with the plight of students for free education for the needy and academically deserving members of society, have made a proposal to Government, on revenue collection mechanisms that could lead to a fee-free regime. These are detailed in USAf's submission to the Council on Higher Education, a statutory body that advises the Minister of Higher Education and Training on higher education policy and would have advised the incumbent towards the 2017 tuition fee increase as a policy decision. Similar advice has been channelled to the Presidential Commission instituted in 2015 to investigate options for university funding in future.

**NB:** USAf's submissions, which inform the bulk of content herein, will be posted on the USAf website once the relevant entities have responded and the details can be made public. Apart from the information obtained from the National Development Plan 2030, content in Section 5 was drawn from the article cited below:

Pouris A, Inglesi-Lotz R. The contribution of higher education institutions to the South African economy. *South African Journal of Science*. 2014;110 (3/4), Art. #a0059, pp. 1-5. <http://dx.doi.org/10.1590/sajs.2014/a0059>

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