Does the future add up?
Perspectives and points of view from PwC
We look forward to hosting representatives from across the education sector at PwC’s 2016 Higher Education Conference. This year, the challenges are significantly more visible and the need for new strategies and insights is even more pressing. We’re at a critical juncture in education.

Adequate funding of the education sector, and higher education specifically, is crucial on our journey to the 2030 university and is a critical pillar in the future success of South Africa. To many of us involved in the sector 2015 was a tipping-point and the culmination of tensions, mismatched expectations and frustrations across the board.

In the current climate, it is incumbent on all of us to work together to chart a new path and find new common ground that can allow our higher education institutions to flourish.

The purpose of this document is to facilitate that common ground, provide an independent perspective and act as a clarion call for leadership. We share our thoughts across:

• Cutting through the upheaval of 2015;
• Responsibilities and obligations;
• Alternative models for the future; and
• A roadmap for action

We want this document to stimulate discussion and engagement. We want every institution to be sustainable and successful, and while each would see themselves as unique, we trust the models and roadmap strike more than a chord.

Yours faithfully,

Ernest Carelse
Higher Education Leader: PwC South Africa
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>At a glance</td>
<td>2</td>
</tr>
<tr>
<td>A year of turmoil</td>
<td>4</td>
</tr>
<tr>
<td>Financial tribulations</td>
<td>5</td>
</tr>
<tr>
<td>Higher education has come far, but has some hard targets to reach</td>
<td>6</td>
</tr>
<tr>
<td>Demands are difficult and growing</td>
<td>7</td>
</tr>
<tr>
<td>A cohesive plan requires... cohesion</td>
<td>8</td>
</tr>
<tr>
<td>Models of the future</td>
<td>9</td>
</tr>
<tr>
<td>Options and actions</td>
<td>11</td>
</tr>
<tr>
<td>Expenditure efficiency</td>
<td>14</td>
</tr>
<tr>
<td>New revenue streams</td>
<td>17</td>
</tr>
<tr>
<td>Building the best future</td>
<td>20</td>
</tr>
<tr>
<td>Appendices</td>
<td>23</td>
</tr>
</tbody>
</table>
Universities have an obligation, both to society and to their stakeholders to be sustainable. We believe time is fast running out for many higher education institutions to make critical decisions, rationalise investments and implement the austerity measures necessary to ensure long-term sustainability.

Higher education is facing unprecedented challenges

If 2015 is considered a turning point in terms of surfacing unaddressed tensions, we believe 2016 should be the year cohesive strategies and plans are put on the table at institutions.

Student numbers will only continue to grow as the demands of an aspirant population need to be met, while the government’s ability to fund these students is increasingly limited. University debts are escalating and the financial position of some will soon become unsustainable.

Action requires will, and will requires insight and understanding

We have provided certain models of the future which represent simplifications of what we see in the sector. We believe that every institution needs to take strong action now to review costs, increase operating effectiveness and, to the extent possible, increase third-stream revenues.

Time is running out and we do not believe additional funding will be secured through the existing channels or financial frameworks.

Not for profit doesn’t mean ‘for loss’. And commercial orientation doesn’t mean commercialisation. Both distinctions are critical to grasp.

Every institution needs to get clever about costs and expenditure

Cost reduction and efficiency should be on the agenda of every institutional forum, be it student, academic or administrative. Central functions can and should be streamlined, and potentially shared across institutions. The moves towards shared purchasing, captive insurance, and related expenditures are a solid start, but much more can and must be done.

Develop a renewed focus on third-stream revenue

Third-stream revenue reflects all the efforts of the institution to raise additional funding and revenues. We believe certain institutions have become relatively adept at raising funds from:

- Alumni;
- Philanthropic causes and individuals; and
- Research.

Others have not, and we question whether there is a clear view as to which local and even overseas institutions are successful and which of their strategies can be used by others.

We cannot wait for the game-changers, which may emerge

While arguments can be made for the effectiveness of the Skills Education Training Authorities (SETAs) and if significant financial reallocation is an option, we also see public/private partnerships unlocking funding for specific sectors. This could be based on government granting access to sought-after state resources on condition of private sector investments in higher education.

The quid-pro-quo would require increased institutional transparency and efficiency, but we believe it’s more than a theoretical option.
Section one
A year of turmoil

Considering the substantial progress that has been made since 1994, and the aspirations for the sector - not least in terms of increased enrolments and participation rates - the current turmoil could not have come at a worse time.

Declining state contributions

In October 2013, the Department of Higher Education and Training (DHET) released the ‘Report of the Ministerial Committee for the Review of Funding of Universities’. Mr Cyril Ramaphosa, the chairperson of the committee noted in his introduction that “between 2000 and 2010 state funding per full-time equivalent (FTE) enrolled student fell by 1.1% annually, in real terms”.

During the same period, tuition fees per FTE student increased by 2.5% annually in real terms. In the executive summary of the report, the committee states that “it supports the principle of cost-sharing that is predicated on the fact that higher education has both public and private benefits. Costs should be shared between the government, through subsidy payments, and private beneficiaries, through the payment of student fees.” The committee also stated that universities should have the autonomy to determine fee levels.

Fees must fall campaign and zero percent increase

Various universities announced double-digit increases to their 2016 student fees in October 2015. Student protests erupted at several university campuses under the banner of the “Fees Must Fall” Campaign. Matters came to a head at the University of the Witwatersrand (Wits) on 16 October with students demanding that the 2016 increase proposal and upfront payments be suspended, that discounts be considered for financially distressed students, that austerity measures be implemented and that outsourced services be insourced. The hashtag #FMF became the clarion call of the class of 2015.

On 19th October, students at several other universities across the country joined the campaign by listing similar demands. This resulted in campus activities, especially scheduled exams being suspended at almost all South African universities. After meetings between the President, the Minister of Higher Education and Training, the vice-chancellors and student leaders, President Zuma announced on 23 October that there would be a zero percent increase in student fees for 2016.

Fig. 1 Income sources of public higher education institutions

South African higher education institutions are not alone in facing austerity measures – this has been a pattern across the globe over the last decade – frequently far more severe than we are facing. But in South Africa, these come at a time when higher education institutions also face the challenges of increased enrolments, fee complexities, transformation, growing student expectations of support services, insourcing and a compromised national economy.

Dr Max Price - Vice-Chancellor, University of Cape Town (March 2016, Explaining the austerity measures programme which is to run to 2018)

The state’s contribution to the funding of public higher educations, declined significantly over the last 12 years from 49% to 40% of total revenue. The burden of financing education has been shifted onto the student population.

Financial tribulations

The financial cost of the 2015 disruptions and protests are significant and add to the already stretched financial budgets of institutions. The extension of the protests to address the perceived inequalities of outsourcing further exacerbates financial burdens.

Insourcing

Student protesters included a demand for insourcing among their demands when the fee protests started on the Wits campus in October 2015. University management pointed out that this will have cost implications.

On 29 October 2015, the University of Cape Town became the first university to conclude an agreement with NEHAWU (National Education, Health and Allied Workers Union) to insource several outsourced services once existing contracts expire. This agreement covers many services1 and comes at some significant cost2 to the institution. Several other universities announced similar arrangements in November and December 2015.

Un-budgeted expenditure

As a result of the student protest actions during 2015, several universities increased their security spending during the 2016 registration process. A number of universities confirmed that their additional monthly security costs from October 2015 onwards amounted to R2m.

As a result of the student protest actions of 2015, damages (mainly to property) of R456m are now being reported by the Department of Higher Education and Training, with four universities accounting for more than 90% of the damage.

...Let me state from the outset that Rhodes University is a going concern. It is not about to close down. The financial storm currently experienced by Rhodes University is experienced by all public universities in South Africa.

Dr Sizwe Mabizela, Vice-Chancellor Rhodes University (July 2016)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Reported Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-West University</td>
<td>R151m</td>
</tr>
<tr>
<td>University of Johannesburg</td>
<td>R100m</td>
</tr>
<tr>
<td>University of KwaZulu Natal</td>
<td>R82m</td>
</tr>
<tr>
<td>University of the Western Cape</td>
<td>R46m</td>
</tr>
<tr>
<td>Tshwane University of Technology</td>
<td>R39m</td>
</tr>
<tr>
<td>Vaal University of Technology</td>
<td>R7m</td>
</tr>
<tr>
<td>University of the Free State</td>
<td>R5.2m</td>
</tr>
<tr>
<td>University of the Witwatersrand</td>
<td>R4.9m</td>
</tr>
<tr>
<td>University of Zululand</td>
<td>R4.5m</td>
</tr>
<tr>
<td>University of Limpopo</td>
<td>R4m</td>
</tr>
</tbody>
</table>

Note: Table is not exhaustive. Excludes damages reported below R4m threshold.

Source: Department of Higher Education statement: 8 June 2016 (Media 24)

---

1 Including cleaning, residence catering, grounds and gardening services, campus protection services and student and staff transport services.

2 Once-off capital expenditure of R40m from reserves, and annual operational cost of R68m.
Higher education has come far, but has some hard targets to reach

Progress post 1994

The higher education landscape has changed significantly over the last 22 years. South Africa has doubled and transformed its student population. The National Student Financial Aid Scheme (NSFAS) has grown and so has the number of beneficiaries of financial aid.

South Africa has a quality education sector, with various global ranking tables rating us favourably. Almost half of the public universities in South Africa are ranked among the top 30 in Africa. This is a solid foundation from which to aspire to the educational goals set out in the National Development Plan.

Aspirations for 2030

The National Development Plan (NDP) says in the introduction to Chapter 9 that “Education, training and innovation are central to South Africa’s long-term development. They are core elements in eliminating poverty and reducing inequality, and the foundations of an equal society.”

The NDP also states:

Universities are key to developing a nation. They play three main functions in society:

- Firstly, they educate and train people with high level skills for the employment needs of the public and private sectors.
- Secondly, universities are the dominant producer of new knowledge, and they critique information and find new local and global applications of existing knowledge.
- Thirdly, higher education provides opportunities for social mobility and simultaneously strengthens equity, social justice and democracy.

The NDP also calls on universities to produce more than 100 doctoral graduates per million citizens per year by 2030, compared to the 28 PhD graduates per million per year. This will require us to increase PhD graduate numbers from 1 420 in 2010 to 5 000 in 2030.
**Demands are difficult and growing**

While clear aspirations have been set, questions remain about affordability. Many higher education institutions are having to carry a broader burden, and students have robustly argued that higher education is no longer affordable for the masses. Against this backdrop, the current economic climate continues to be a source of concern, as recently captured in the focus on the ratings agencies’ assessments.

**Institutional affordability**
- In our view the service obligations on universities have extended substantially, not just in terms of academic tuition, but also in covering accommodation and catering, health and bridging services.
- Our sense is that subsidised, rather than commercial rates are charged for these ancillary - but important services - which is an extra draw on already limited resources.
- Considering the additional efforts in terms of wider student support, mentoring and development assistance being put in to increase the higher education pass rates, the nature of demands on institutional budgets are only increasing.
- Further tightening of entry requirements (to limit demand) goes against the principles of public access and transformation.
- Even the opportunity to leverage technology in teaching to lower the average cost will involve significant expenditure that will be difficult to afford.

**Student affordability**
- The improved matric pass rates and associated higher education aspirations are driving significantly increased student numbers.
- Students face high and increasing tuition costs, with much of the annual payments being front-loaded, albeit in different ways.
- The NSFAS earning threshold results in a significant proportion of the potential student population not qualifying for financial assistance.
- Student financial obligations do not stop in the academic domain, with living and studying costs being incurred beyond those subsidised by the institutions.
- The considerations of accumulating student debt are also part of the debate on affordability, and certainly influence the decisions of students who drop out.

Prospective students face large and potentially unaffordable costs and fees.

**Country-level affordability**
- The current economic situation in South Africa is well understood. While we have consistently invested approximately 0.7% of GDP in tertiary education, we have many other priorities as a country.³
- Our key economic indicators are turning negative and we are clearly entering a period of significant uncertainty, having just survived the latest rating agency reviews.
- GDP growth for South Africa for 2016 is projected to be 0% and our youth unemployment is currently at 37.2%⁴.
- South Africa’s Gini-coefficient is 0.653⁵, which means we still have significant inequalities in our society, which complicates many of the dynamics that are impacting the sector.
- We recognise and appreciate the new impetus and political will to do what is right for the country and economy, but there is no magic wand, for the country, economy or sector.
A cohesive plan requires... cohesion

The challenges facing higher education institutions is clear: There is a large funding gap developing, time is running out and tensions are escalating. The responsibilities of the different leadership elements are clear and we believe reasonably well understood. It is now about how the elements need to come together to develop a cohesive response.

Establishing a common frame of reference

Students, parents, employees, regulators, government, funders and society at large are all important stakeholders in universities. Certain stakeholders emphasise transformation of the academic staff complement, others emphasise affordability of higher education and others emphasise onerous regulatory requirements.

Although various stakeholders might put different issues on top of their agendas, they all agree that the sustainability of universities in the long and the short term should be high on any university agenda. We can only achieve the goals of the NDP if all stakeholders are moving in the same direction.

Making this happen requires the various structures of universities to work together towards a common goal. In other words, Council, Senate, the Institutional Forum, the Students Representative Council and the Vice-chancellor's team must complement each other in the pursuit of creating a sustainable institution.

Role of stakeholders

<table>
<thead>
<tr>
<th>Council</th>
<th>Senate</th>
<th>Institutional forum</th>
<th>Student representative council</th>
<th>Vice-chancellor &amp; team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest decision-making body in a university.</td>
<td>The majority of the members of the senate are academic employees of the university.</td>
<td>Composition includes management, the council, the senate, employees, students and others.</td>
<td>The SRC consists of students.</td>
<td>In terms of section 30 of the HEA, the day-to-day management vests with the vice-chancellor and his/her team.</td>
</tr>
<tr>
<td>Maximum 30 members with at least 60% of members not employed by or students of the institution.</td>
<td>The senate is accountable to the Council for the academic and research functions of the university in terms of section 28 of the HEA.</td>
<td>Responsible to advise Council on issues affecting the university.</td>
<td>The SRC functions in terms of a constitution approved by the university Council.</td>
<td>The vice-chancellor is accountable to Council for his/her decisions and conduct.</td>
</tr>
<tr>
<td>Clear role established by the Higher Education Act (HEA) of 1997.</td>
<td></td>
<td>Mandated by section 31 of the HEA.</td>
<td>The SRC participates in decision-making structures of the university, representing the student’s perspective.</td>
<td></td>
</tr>
<tr>
<td>Responsible for governance.</td>
<td>Accountable for academic functions.</td>
<td>Must advise.</td>
<td>Must be consulted.</td>
<td>Responsible for execution.</td>
</tr>
</tbody>
</table>

Translating these responsibilities into the current context

| Ask tough questions about the financial sustainability of the institutions. | Recognise and reflect on the impending cash crunch. | Build awareness of, and support for initiatives launched. | Moving debates from the theoretical to the practical. | Articulate the scale of the challenge and solicit input into cohesive plans to address. |
| Request a full assessment of current status and forecasts. | Support management and council. | Contribute ideas about how to manage costs and increase revenue. | | |

---

6Council responsibilities are addressed in Section 27 and Chapter 4 of the Higher Education Act, which establishes the role as governing the university, determining language policy (in consultation with the senate) and providing for a suitable structure to advise on the policy for student support services (after consultation with the student representative council).  

7The institutional forum must advise Council on issues affecting the university, including: implementation of the Higher Education Act, race and gender equity policies, selection of candidates for senior management positions, codes of conduct, mediation and dispute resolution procedures and the fostering of an institutional culture promoting tolerance and respect for fundamental human rights.
Models of the future

A fundamental part of coming together is building a common understanding of the future, or at least eliminating assumptions that may cause institutional drag (unwillingness to change). In our engagements across the sector we hear many different visions of the future articulated and have distilled the essence of them into three models.

Arguing the future

In our engagements across the higher education sector, we hear many different potential views of the future articulated. For modelling purposes, we have summarised the essence of three of them, which we believe underpin many perspectives.

These perspectives are important to understand and address because knowing what to change, and what to change to, and even how to change, means nothing without the acceptance of the need to change.

Three models of the future

<table>
<thead>
<tr>
<th>Faith in the public purse</th>
<th>External agent</th>
<th>Continuing compression</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Public funding</td>
<td>0 Private funding</td>
<td>0 Tuition fees</td>
</tr>
</tbody>
</table>

Expansion of public funding

- In this model, the Department of Higher Education is given significantly increased funding, which flows through to each institution.
- The increase addresses both current and accumulated funding shortfalls.
- The implication of this model is that the R46bn (expenditure) which funded 950k students in 2010 has grown commensurately.
- There is no need to substantially increase tuition fees beyond a minimal inflation-linked adjustment.
- Institutions are able to continue to grow student numbers and associated infrastructure capabilities (such as housing) so that substantial progress is made towards the NDP goals.

External funding rescue

- Whether through academic breakthrough, private individual or company funding.
- In order to achieve scale and sustainability, some increases in tuition fees above academic and education sector cost inflation is achieved.
- Significant and sustainable investment (grants and conditional or targeted funding) are received and returns delivered.
- Fundraising targets set by each institution are achieved and initiatives accelerated. In this model, the publicly-disclosed figures’ of 2016 are easily surpassed and growth sustained.
- These may be supplemented by significant private sector investment into higher education institutions through market-friendly incentives.

No new resources

- In this model, no large-scale additional new public sector funding or private sector finance is secured.
- Institutions continue to be mandated to grow student numbers, and do so, and the extent of support beyond the provision of academic matters also continues to grow.
- In this model, many institutions are forced to re-integrate previously out-sourced operations, with commensurate increases in obligations and costs.
- The drain on cash flows continues at no lower pace, and for certain institutions, active cash management (delaying payments) becomes the norm.

---

9 External fundraising targets disclosed include: University of the Western Cape R15m, University of the Free State R100m, University of Johannesburg R60m, Wits SRC target R10m
Looking at what’s likely

It is clear to us that continued compression at an institutional level will continue. Compression requires strong leadership and a significant degree of collaboration among the various institutional stakeholders. Only with this common understanding of the urgent need can institutions take the steps necessary to improve expenditure efficiency.

Potential scenarios

Faith in the public purse

Public funding is critical, but...

- The level of education sector funding has remained relatively consistent over the last 20 years, with the education sector being one of the largest recipients of funds. 
- Arguments that the tax base continues to grow do not translate into substantial increases in funds available.
- Within the educational sector, competing priorities exist, and significant investments are required at a basic education level.
- South Africa’s spending on education is at a reasonable level, and no matter how much pressure is put on the government, there is very little room to increase funding.

Our view: Highly improbable

External agent

Can we attract enough others?

- In our view, the overall economic position is not allowing businesses to make the profit levels required to provide significant funding to education without additional incentive.
- The argument isn’t based on breakthroughs not happening, but on the appetite and ability of corporate SA, or international businesses to make such large bets.
- In the South African context, external funding in the tens of millions of rands is rare, and public/private partnerships that provide funding into the single millions is celebrated.

Examples:
- Jannie Mouton’s R50m grant to the University of Stellenbosch in 2016 is the largest ever by an individual donor to the university.
- In 2014 Wits received R100m from an anonymous donor.

Our view: Possible, but not likely

Continuing compression

An unpleasant reality may unfold...

- We worry that stakeholder resistance to structural changes prevents the tough decisions that are required from being made.
- If the position of the well experienced leaders is not supported, and leaders find themselves unable to drive meaningful change, we expect that more than some institutions will lose the experienced senior people that are actually required to weather the financial storms.
- We expect that continued unrest and calls for unaffordable actions - in terms of fees or funding, and the success of 2015 protest actions will increasingly constrain the ability of institutions to address the increasing budget deficits.

Our view: Highly likely

This means decisive leadership and actions across three dimensions is required.

---


Options and actions

Action and leadership are required to drive expenditure efficiency, a renewed focus on revenue and the adoption of commercial orientation. Many institutions are making some progress across different elements, but we are concerned that time is running out. We set out below a representation of how we see progress across the three domains, and likelihood of commercial investment platforms becoming a short-term life raft for the sector.

Expenditure efficiency
Expenditure efficiency is not simply about leveraging the benefits of a structured supply chain function with proper vendor management, upfront pricing and appropriate metrics.
Institutions need to take a fundamental look at where costs are incurred and what options exist to eliminate, simplify and standardise what is done, how and potentially sharing costs between organisations.

Renewed focus on revenue
Some institutions do well in raising funds from alumni, attracting overseas students and even placing some courses online. They understand where they are on a continuum of potential against realised revenue and have clear strategies and plans in place. Every institution should know where it stands, and how it can increase both what it achieves and its future potential.

Commercial thinking
Institutions are not-for-profit, but are not for loss either. Commercial thinking is simply adopting a business mindset and supporting a cost and revenue sensitive culture throughout the organisation.
Institutions need to take stock of their assets and identify ways to increase returns (sweating assets) and make sure they receive all the revenue to which they are entitled. This isn’t about commercialisation, it is about efficiency and effective use of increasingly scarce resources.

Support the sector game-changers
If the state is - as we believe - unable to shift significant new funds into higher education, what options do exist for central government to tap into private-sector funds, not through surcharges or levies, but by granting access to state resources in exchange for substantial investments into the sector.
We see this as a very difficult, but potentially very important model. Examples include, access to new spectrum for the mobile operators (a resource desperately sought) or even perhaps transformation credentials.
Section two
Expenditure Efficiency

Framing expenditure efficiency

Ever since the 2008 financial crisis and especially after Pravin Gordhan became Minister of Finance, the words ‘spending efficiently’ entered the South African business lexicon. In 2016, Pravin Gordhan stated in his budget speech: “We must live with the money we have, not the money we think we might have”.

Value for money, better accountability and discipline and elimination of waste were identified by Government as areas to focus on to spend more efficiently.

So why aren’t cost-cutting attempts delivering effective and lasting results?

Understanding cost components

South Africa’s total spend on higher education in 2014 was R55.6 billion. Figure 2 indicates the spending breakdown across the main categories:

**Fig. 2  Percentage of total education spend per category, 2014**

![Percentage breakdown of education spend](http://businesstech.co.za/news/government/103073)

A look at this spending allocation indicates that any significant cost saving must come from one of two areas: staff costs and supply chain efficiencies. An initial reaction might be to cut jobs and increase reach/student ratios. This, however, might have a detrimental impact on quality, efficiency and student through-put rates.

**Thinking about costs differently**

Initiatives to cut costs are often poorly designed and badly implemented, with management not recognising and addressing the real underlying challenges.

Cost cutting interventions also tend to be short term in nature, with management focussing on the most visible costs and not addressing the true nature and structure of costs.

During extended periods of growth/maturity/mergers, operational complexity builds up and becomes difficult to unpack and simplify.

In addition, organisational politics, vested interests and individual behaviours can impede objectivity and effective decision-making, while a lack of skills and experience of having done this before limits meaningful progress with cost-saving initiatives.
Cost optimisation approaches

The practical experiences of our assignments have led us to identify four ways in which costs can be reduced:

**Doing without**
- This approach eliminates expenses that an organisation can do without, such as business class travel, reducing staff, etc.

**Doing better**
- This approach looks at efficiencies by reducing waste and improving productivity through better processes. Poorly designed processes and structures absorb time, energy and money.
- Organisational needs evolve and processes often fail to change because ‘that’s the way it’s always been done here’. Activities that do not add value should be eliminated and inefficient processes revised.

**Doing with less**
- This approach increases productivity using fewer resources and often involves automating processes.
- Once organisations have completed the elimination and simplification process, many move to standardise processes and activities, often developing service centres that focus on specific outcomes.

**Doing differently**
- This approach calls for new ways of doing things and requires out-of-the-box thinking.

*Most organisations focus on the first two areas. Longer lasting and more effective gains will be derived from “doing with less” and “doing things differently”.*
Doing things differently

Conventional cost cutting exercises will only realise marginal savings, which over time will creep back. It is for this reason that we believe a radical non-conventional approach must be followed to reduce costs by doing things differently. The recommendations that follow all have an impact on reducing costs, but far more importantly, also improve the returns on the money spent in the form of student through-put.

Centralise shared services

Support functions are duplicated at each university. Efficiencies of scale could be achieved by centralising the support functions of universities that are in close proximity to each other. Examples of functions that could be shared without removing the differentiators from each university include finance, human resources, information technology, and the administration of student admissions and NSFAS bursaries.

Centralise procurement

Economies of scale and the benefits of large volume purchasing through the centralisation of procurement functions of all universities would allow for the negotiation of better prices, larger discounts, committed suppliers and less waste.

A procurement and logistics office with central storage facilities and delivery processes that focus on process efficiency and timeous delivery would significantly reduce costs. More importantly, paying different prices for the same commodity or service at different universities would no longer exist and suppliers would be forced to be more competitive.

Rationalise degree courses offered

An analysis should be undertaken at each university of degree courses that do not make a positive financial contribution due to a small number of registered students. Universities with low student numbers and therefore non-contributing courses, could direct students to universities with higher student numbers where it is financially viable to continue offering the course. Cooperation between universities is essential to make this happen.

Focus on courses more relevant to industry

Unemployment rates among graduate students have increase from 7.7% in 2008 to 11.5% in 2015. We suggest that an analysis of unemployed graduates is performed to understand if there is a predominance of certain courses among these graduates. If so, student registrations for these courses should be limited. At the same time, the results of skills shortages surveys in South Africa should be linked to the promotion of employable courses.

Strategic partnerships: Universities and TVET colleges

Learners who have passed matric and received a university pass, generally aspire to study at a university (which is more expensive) and view Technical Vocational Education and Training (TVET) colleges as institutions of last resort. Strategic partnerships between universities and TVET colleges could assist colleges to improve the quality and relevance of their offerings, create a link with university courses and raise the profile of colleges in the eyes of students and the labour market. Closer articulation between TVET courses and university degrees is necessary.
## New revenue streams

### Establish a baseline
In the current landscape, universities are constantly fielding questions about their affordability and impact in providing quality education in South Africa.

With most universities being under extreme pressure to provide cost-sensitive educational services and mostly running on cash reserves, there is a drive to seek funding opportunities.

These opportunities present themselves in accessing alternative revenue streams made available to the universities and answer pessimists’ questions about the affordability of quality education in South Africa. They also help to dispel doubts about the sustainability of South African universities.

Due to increasing costs and pressure to reduce tuition fees, we believe that it is essential for universities to consider options to use their assets and resources more efficiently and generate more revenue from their asset bases.

### Assess the ‘as is’, develop the ‘to be’ and strategies to get there
In order to assess the universities’ revenue generating opportunities, it is important to consider the current revenue streams and introduce new innovative revenue streams.

### Develop appropriate strategies

<table>
<thead>
<tr>
<th>Status</th>
<th>Area</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alumni</td>
<td>• Naming rights</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Specific campaigns</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Social media leverage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Graduation commitments</td>
</tr>
<tr>
<td></td>
<td>Online</td>
<td>• MOOCs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Via other institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Supplement not undermine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Charging mechanisms</td>
</tr>
<tr>
<td></td>
<td>Short courses</td>
<td>• Partner with industry to develop short courses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Partner with employers to access new students</td>
</tr>
<tr>
<td></td>
<td>International students</td>
<td>• Structured marketing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Deliberate strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Build pipelines/channels</td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td>• Promotion of capabilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow-on engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Define long term positions</td>
</tr>
<tr>
<td></td>
<td>Assets</td>
<td>• Accommodation (holidays)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Extending hours of use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sports facilities/events</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Company business schools</td>
</tr>
</tbody>
</table>
**Tuition fees**

A major revenue stream for universities is tuition fees. However, universities are facing a perception that their fees are too high and they are having to consider the affordability of fees.

South Africa is plagued by high inflation raising costs. Students too are negatively impacted by annual increases in tuition fees and many are questioning whether they can afford the next year of studying.

The Fees Must Fall Campaign demonstrated that universities will need to curtail increasing domestic student tuition fees to meet the increasing running cost demand. It has become imperative therefore that universities leverage other revenue-generating opportunities. We recommend that the universities further investigate such opportunities and where they may be applicable to the individual institution. These opportunities are discussed below:

**Online courses**

The introduction of online courses provides an opportunity to generate more revenue and reduce strain on universities’ physical resources. These courses could be made available to members of the public who wish to increase their skills and knowledge.

There are existing models for online courses in South Africa, such as Get Smarter. Students no longer need to be physically present in a lecture venue to attend a lecture. However, we acknowledge that this option is not feasible for all courses, especially those with practical components, such as laboratory work.

**Short courses**

Many universities are known for their degree courses, but there may be benefit in focusing on establishing short courses for various industries. Similar to online courses, these would be available to members of the general public.

Such courses may place the universities in direct competition with other training institutions. Universities should identify gaps in the market and leverage these opportunities by creating a greater interest in such courses. The marketing of such courses by a prestige institution will make them more attractive to the general public.

Another option is partnering with other corporate companies and introducing customised corporate training programmes, such as update training in specific disciplines.

**International students**

Although many South African students are sensitive to the affordability of higher education, international students are not necessarily swayed by the cost factor. Many universities have a separate tuition fee structure for international students, which is predominantly quoted in foreign currency and allows the universities to generate a higher margin.

Consideration should be given as to how to increase the presence of international students at South African universities. It is important that South African universities are attractive to international students seeking quality education. Universities need to enhance their international image, such as by creating a footprint in Africa by presenting world-class research.
Accommodation

There is an ongoing need for affordable accommodation on campuses. The Department of Higher Education and Training has subsidised some accommodation at universities. Where accommodation is not subsidised, universities’ cash flows are put under greater strain, as there is a challenge to keep costs as low as possible while not receiving any funding to achieve this objective.

Marketing residences during university holidays for tourists, sports tours and other events will create additional revenue as the buildings will be occupied for the full year and not just during the academic semesters.

Research

Another avenue for universities to create revenue-generating opportunities is in the form of providing research services. Basic and applied research undertaken by institutions is mostly funded by the National Research Fund, the Department of Higher Education and Training or internally-funded by the universities themselves. Another type of research is commonly referred to as contract research, which is mainly funded by different third parties, such as business.

Contract research in most instances is lucrative and the institutions involved in such research projects receive significant funding. However, the sustainability and competition aspects of contract research needs to be assessed as well as the intellectual property rights in order to consider the true value of contract research.

Universities are not known for asserting intellectual property rights to their research and we recommend that they focus on doing so and earning royalties accordingly.

Where contract research is performed, the intellectual property rights move mostly to the party that sponsored the research. Universities should consider sharing the rights to the intellectual property with these parties in order to also benefit financially from the research.

Donations

Universities should focus on the manner in which they attract alumni in order maximise their donations. Naming rights can be considered as an attraction to involve alumni.

Fundraising can also be considered to start earning more revenue for the universities, as well as investigating ways of earning more grants.

Efficient use of assets

Universities have large asset bases that are not always being used to their full capacity. Evaluating different types of assets and utilising them more efficiently will increase their return on investment.

Institutions should consider the research assets they have on their balance sheet and determine whether those purchased for a specific project cannot be used on other projects or whether there are opportunities to rent them out to other universities. By identifying possible opportunities to use these research assets, additional revenue may be generated.

Other assets, like buildings and residences, should be evaluated for further use. When these assets are not being used, costs are being incurred with no income being generated. Identifying possibilities to rent these premises out can increase the revenue-generating ability of the assets.

Sports centres can be used to their full capacity by renting them out to schools or other institutions. Events such as international competitions can be held at the universities’ facilities to generate revenue.
Building the best future

Higher education is in a new era with increased accountability around outcomes, particularly the view that a university prepares graduates for a job. This new era requires a new playbook for leadership.

Be honest and build awareness
Managing any organisation through difficult times places additional demands on management. Organisations that move quickly to adapt to changed conditions are most likely to mitigate the effects of the financial challenges they face. The fundamental building block of a successful strategy, or set of strategies, is the understanding that there is a serious issue.

This understanding must be shared across the organisation, as different stakeholders may well have differing views on the scope and scale of the issue, as well as how the institution should be addressing it.

Develop realistic and detailed plans
Although detailed planning can be perceived as a painful and time-consuming process, plans must have sufficient granularity and have been well thought through, reviewed and challenged, if they are to be successful.

Plans that are built on bottom-up planning rather than top-down allocation of budget cuts are more likely to be realistic and can be properly modelled into financial and resource projections.

These projections should then be embedded into the institutions’ operating budgets, with clear responsibilities and measurements.

Demonstrate strong leadership
A critical success factor for any organisation or institution seeking to tackle a financial disconnect of this magnitude is the role of the senior management team, and, in particular, the vice-chancellor.

A shift to bring in a clearer ‘commercial orientation’ requires alignment across the institution and resolution of the revenue/cost disconnect cannot be the sole responsibility of the finance head, or team.

Strong leaders engage across organisations and functional lines, building commitment and securing action. They also bring in help when needed, which could include local business heads or specialists.

Execute cleverly, with central support
Driving the programmes required can be done through the usual operating structures and processes of a university, but taking a lesson from the private sector, we suggest that the establishment of a formal programme management office (PMO), reporting to the vice-chancellor, can be a significant support.

The PMO can provide vital implementation and measurement structures, enhancing the capability of the institution to deliver the proposed plans and realise their benefits.

Universities can be great generators of ideas. PMOs help to move ideas into reality.

Engage widely and holistically
Expenditure efficiency programmes are about being clever and more productive, not simply cutting costs. Revenue programmes need to be focused and action orientated, with anticipated business benefits quantified, with individuals responsible.

Shifting the operational decision-making of an institution onto a stronger commercial footing will require buy-in from key stakeholder communities, such as the academic community, unions and student population.

A clear communication strategy articulating the need for and benefits of the shift, is essential to success.

Align financial controls and disciplines
Greater financial discipline is a fundamental component of commercial orientation. This is not only about budgets and reporting, but also about revising approval levels, reassessing delegation of authority and increasing the focus on cash.

Cash management is the Achilles heel of many organisations, particularly where a culture of financial management might be seen as less important than delivery in other performance areas.

A successful commercially-orientated institution will have strong cash management and cash forecasting capacity.
Higher education institutions don’t fail in the same way companies do, with business rescue and potential liquidation, or like individuals, with court orders and bankruptcy declarations. But they do fail. And are merged or directly managed, with all the associated pain and disruption.

Enhance employee effectiveness

Effectiveness of personnel can and many argue should be de-linked from the achievement of the cost imperative.¹²

If efficiency can be considered as ‘doing things right’, effectiveness can be viewed as ‘doing the right things’.

We believe it is implausible to argue that institutions can be effective without effective employees. In a resource-constrained environment, maximising the effectiveness of human resource capabilities requires a scientific and structured approach.

There are a number of approaches that exist and the leadership of the institution needs to find, adapt and adopt the one that fits and works best for them.

Common models include:

- **The goal attainment approach** - premised on clearly-defined, time-based and measurable goals.
- **The system resource approach** - where the focus is on securing the necessary resources.
- **The internal process approach** - based on internal, largely people processes (culture, communication and affirmation/recognition) that underpin fulfilment of performance obligations.
- **The multi-constituency approach** - where an institution meets the needs of different stakeholders. When the institution performs well in the eyes of the shareholders, there is a perceived effectiveness.

Take tangible financial steps now

<table>
<thead>
<tr>
<th>Balance sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthen the balance sheet</td>
</tr>
<tr>
<td>20% of public universities made losses in 2012.¹³ Universities should set a target for their level of cumulative reserves and annually budget for a surplus to support this. For example, institutions should set themselves a target of achieving an annual surplus of 2% of total revenue.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actively manage cash reserves</td>
</tr>
<tr>
<td>Liquidity ratios in the sector deteriorated with half of public universities’ liquidity ratios falling below 2.¹³ Cash-flow trends should be analysed and pro-active action is required to let inflows happen earlier and outflows later. Tuition fee inflows happens at predictable times. If a university receives its final student fee in November, while the majority of universities receive full payment by June, such an institution is disadvantaged from a cash-flow perspective. Similarly, if creditors are paid immediately, they are at a disadvantage to those following a 60-day payment cycle.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chase debtors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t leave cash on the table</td>
</tr>
<tr>
<td>Debtors provisions ranged from 22% to 97% at individual universities in 2012.¹³ Debt collection is a critical function ensuring budgeted revenue is actually received by the university. This function should be staffed appropriately and supported, if necessary with outside legal counsel.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plan scenarios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do proper scenario planning</td>
</tr>
<tr>
<td>Universities should project different future scenarios with zero-percent tuition fee increases, reduced state funding and a drop in third-stream revenue and develop contingency plans in case these scenarios materialise.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Be partner ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be ready to partner</td>
</tr>
<tr>
<td>Private-sector capital requires a return on investment in order to be accessed. Universities therefore need to articulate the business case to entice private-sector investment.</td>
</tr>
</tbody>
</table>

¹²Noordzij, L. 2013 “What is employee effectiveness”, www.effeectory.com

PwC contacts

National
Ernest Carelse
Cape Town
+27 (0) 21 529 2038
ernest.carelse@za.pwc.com

Expenditure efficiency
Suleman Jhavary
Durban
+27 (0) 31 271 2015
suleman.jhavary@za.pwc.com

Tax & revenue support
Charles de Wet
Cape Town
+27 (0) 21 529 2377
charles.de.wet@za.pwc.com

People effectiveness support
Dr Gary Paul
Johannesburg
+27 (0) 11 287 0884
gary.paul@za.pwc.com

Eastern Cape
Andrea Puggia
Port Elizabeth
+27 (0) 41 391 4402
andrea.puggia@za.pwc.com

Ash Rathan
Port Elizabeth
+27 (0) 41 391 4430
ash.rathan@za.pwc.com

Jacqui Mauer
East London
+27 (0) 43 707 9804
jacqui.mauer@za.pwc.com

Gauteng
Nezira Ayob
Pretoria
+27 (0) 12 429 0551
nezira.ayob@za.pwc.com

Dino Desai
Johannesburg
+27 (0) 11 797 4554
dino.desai@za.pwc.com

Roshan Ramdhany
Johannesburg
+27 (0) 11 797 4144
roshan.ramdhany@za.pwc.com

Sizwe Masondo
Johannesburg
+27 (0) 11 797 5393
sizwe.masondo@za.pwc.com

Pule Mothibe
Johannesburg
+27 (0) 11 287 0665
pule.mothibe@za.pwc.com

KwaZulu-Natal
Harish Ramsumer
Durban
+27 (0) 31 271 2017
harish.ramsumer@za.pwc.com

Ebrahim Mulla
Durban
+27 (0) 31 271 2181
ebrahim.mulla@za.pwc.com

Philani Maphanga
Durban
+27 (0) 31 271 2252
philani.maphanga@za.pwc.com

Mpumalanga
Andries Oosthuizen
Nelspruit
+27 (0) 13 754 3502
andries.oosthuizen@za.pwc.com

Northern Cape
Kevan Moodley
Kimberley
+27 (0) 53 807 9202
kevan.moodley@za.pwc.com

North-West Province
Andrew Dale
Mafikeng
+27 (0) 18 386 4774
a.dale@za.pwc.com

Western Cape
Duncan Adriaans
Stellenbosch
+27 (0) 21 815 3099
duncan.adriaans@za.pwc.com

Sincere thanks are extended to Adrian Dunsby for his contribution to this publication.