

The economics of #FeesMustFall

**Economic challenges to accessing tertiary education
and providing tuition-free universities in South Africa**

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▲ How did we
arrive here?



How did we arrive here?

Tertiary education plays a central role in poverty alleviation, job creation, and reducing inequality. In the South African context, greater access to tertiary education is essential to overcome historic inequalities and prepare the economy for rapid advancements in the global marketplace, including the 4th industrial revolution. A 2011 study reviewing 40 developing countries over the period 1999 - 2007 found that education is the most significant contributor to poverty alleviation by increasing employability.¹ Indeed, Statistics South Africa (StatsSA) found that during 2006 - 2011, the unemployment rate amongst people with a tertiary education aged older than 25 was only 7%, compared to a figure of 20% for adults with only primary education.²

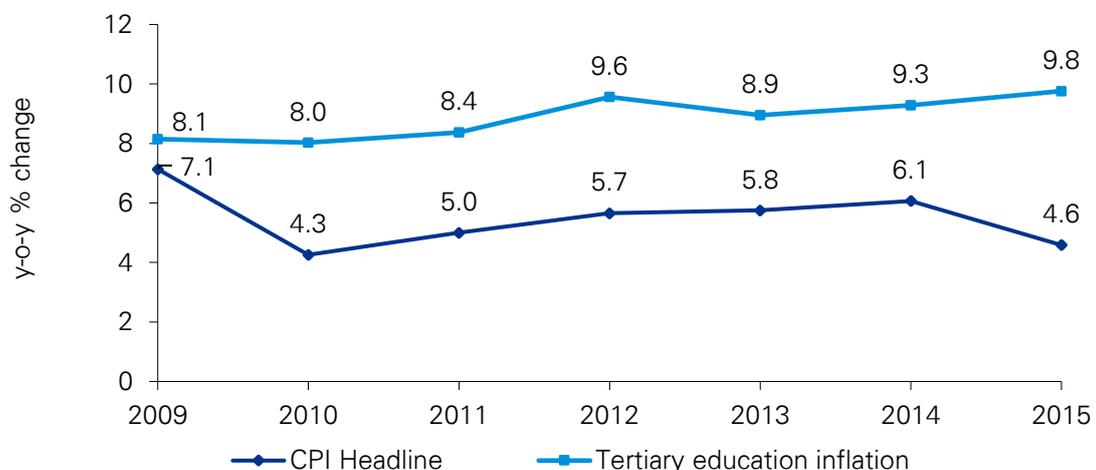
The National Development Plan (NDP) requires the higher education industry to produce graduates who have skills to meet the current and future needs of the economy. South African Minister of Higher Education, Blade Nzimande, announced on Monday, September 19 that universities and colleges are allowed to determine their own fee increases during 2017, but that these adjustments may not be higher than 8%. He also indicated that tertiary students from households earning less than R600 000 per annum will not be subject to increases in tuition fees next year.³ According to

Universities South Africa (USAf) CEO Ahmed Bawa, this threshold will cover more than 80% of tertiary students.⁴

Tertiary education is important for poverty alleviation, job creation, and reducing inequality.

Minister Nzimande specified that the South African government would finance the funding gap. An initial estimate by Mr Bawa indicated that this would cost around R2.5 billion, which would increase the value of the state's university subsidies in the 2017 calendar by roughly 8% in addition to an estimated 11.5% rise already set out for the period in the 2016/17 budget.⁵ The National Treasury said in a statement on Tuesday, September 20 that it "has been exploring different mechanisms of finding the money to pay for the subsidy" and that officials are "embarking on a prioritising drive" to address the shortfall. Minister of Finance Pravin Gordhan will announce the results of the process during his presentation of the Medium-Term Budget Policy Statement (MTBPS) on Wednesday, October 26.⁶

Figure 1: Tertiary education inflation compared to CPI headline



Source: KPMG calculations based on StatsSA data for consumer prices

Soon after Minister Nzimande's announcement on September 19, university and college campuses across South Africa experienced varying levels of protest action by students. According to the minister, protest action had by September 27 resulted in R600 million in damage to property - equal to almost a quarter of the R2.5 billion in additional funding that the National Treasury will need to find for next year.⁷

The #FeesMustFall campaign is aimed at convincing the government and tertiary institutions to eliminate tuition fees. The campaign is advocating for free tertiary education. The campaign is also rejecting that the government has allowed universities and colleges to increase their fees next year following a 0% increase in 2016.

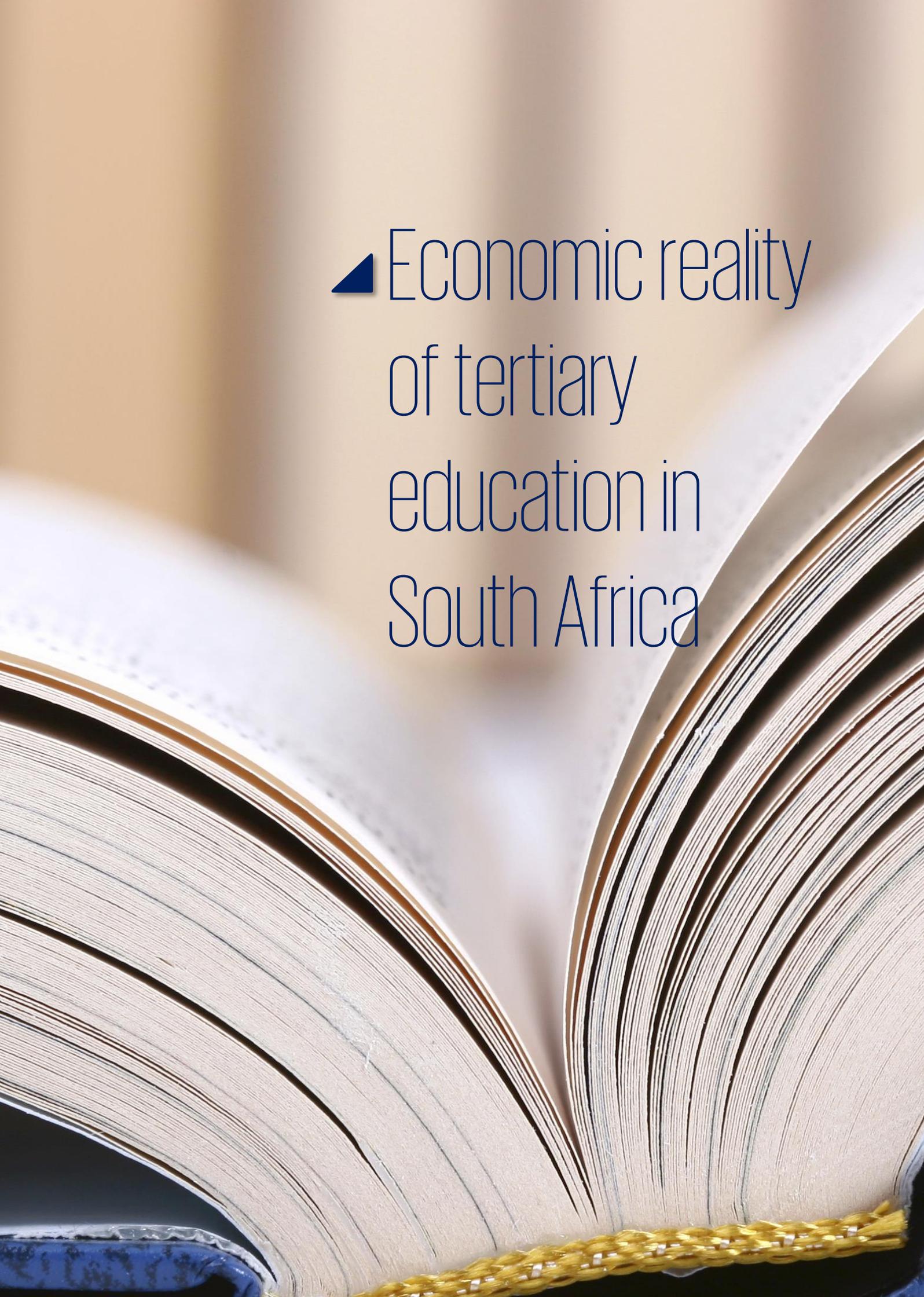
Tertiary education fees have over the past decade consistently increased at above-inflation rates. During 2009 - 2015, StatsSA headline consumer price index (CPI) increased by an average of 5.5% p.a., while tertiary education fees climbed by an average of nearly 9% p.a. From a different perspective, if household income were to keep pace with headline inflation, it would have increased by 45% since 2008, while the cost of tertiary education has increased by more than 80%.⁸ Students and their parents are feeling the pinch of this growing disparity and are now

increasingly demanding tuition-free tertiary education.

According to newly released research by the University of the Free State (UFS),⁹ the above-inflation increases in tertiary education costs are associated with 1) a deteriorating exchange rate significantly increasing the costs of imported textbooks, equipment and software, as well as 2) a decline in private income earned by universities. Private income - e.g. from consultancy projects and applied research - has declined from 33% of total income in 2007 to 27% in 2013, while income from government has remained relatively stable over the period. The shortfall in private income has therefore been recouped via student fees.

The government's contribution to university income was consistently near the 40% (of total income collected by tertiary institutions) level during the 2009 - 2013 period, according to UFS calculations based on the latest available data from the Centre for Higher Education Trust (CHET). Nominal state expenditure per student increased from R17 095 in 2009 to R21 266 in 2013. However, when considering the impact of inflation, real expenditure per student has remained relatively constant, and in 2013 was on a similar inflation-adjusted level to 2005.¹⁰





▲ Economic reality
of tertiary
education in
South Africa

Economic reality of tertiary education in South Africa

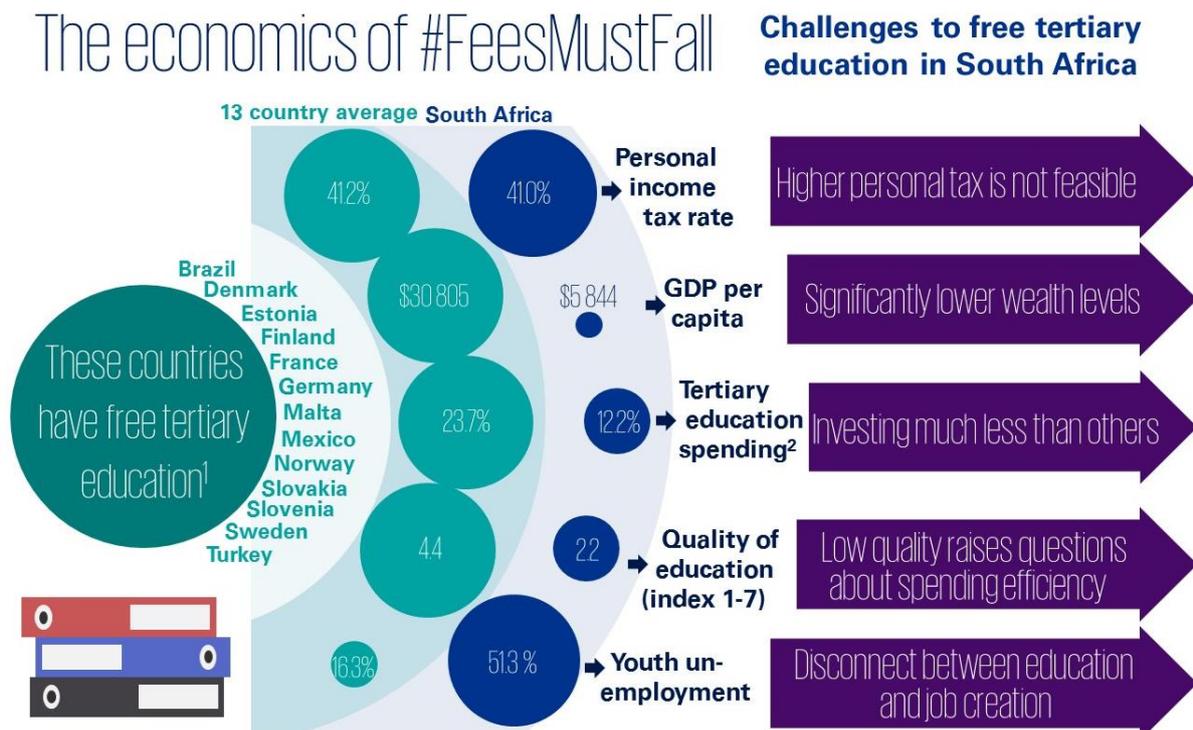
Considering various universities across South Africa and the bachelors' degrees offered by different faculties (e.g. BA, BCom, BSc, LLB, BEng), the average tuition fees for a first-year student is R40 000 during 2016. This figure excludes spending on accommodation, transport, textbooks, food, etc. The average South African household is expected to earn R145 000 in after-tax income this year, indicating that a tertiary student's tuition fees would account for 27.5% of that income. First-year tuition costs range from R30 000 and R60 000, resulting in a tuition-to-income ratio ranging from 20% to 40%.¹¹

The National Student Financial Aid Scheme (NSFAS) aims to provide sustainable financial aid for poor yet academically eligible students. As a result of increasingly expensive higher education, the burden on NSFAS has increased. Students from a household with an income of R160 000 or less are eligible to apply for a NSFAS loan. This type of loan has reasonable repayment rates, between 3% and 8% of a student's annual salary per year, once

he or she is employed. The interest charged is subsidised at 80% of the commercial bank interest rate. These low rates take a considerable burden from recipients. NSFAS also encourages academic performance as 40% of its loans can be converted to bursaries depending on your marks.

NSFAS, however, only applies to the poorest of households, thus creating a so-called 'missing middle' for many students who cannot afford higher education but are from families that earn above the R160 000 threshold. The announced 0% increase in 2017 for students from households earning below R600 000 helps this 'missing middle', though these students still require additional funding for accommodation and transport for example. NSFAS would be able to grant more loans to future applicants if the scheme manages to improve loan collection. By 2013, some 20% of all NSFAS loan recipients had not made any repayments. NSFAS recipients owed R15.6 billion in unpaid loans in 2013.¹²

Figure 2: Key challenges to providing free tertiary education in South Africa



¹ This list also includes countries that require an administrative fee contribution or that have considerably low tuition fees
² Percentage of total government spending on education

Of course, free tertiary education would not really be free, and significant funding would need to come from public sources. KPMG estimates that students contributed R21 billion to university budgets in 2015. From a theoretical perspective, money could be sourced from the general fiscus which, in turn, is collected from various taxes. Specific taxes could be implemented. For example, large corporations could be required to pay an additional education-related tax. Alternatively, young graduates could initially be taxed at a higher personal income tax rate to compensate the state.

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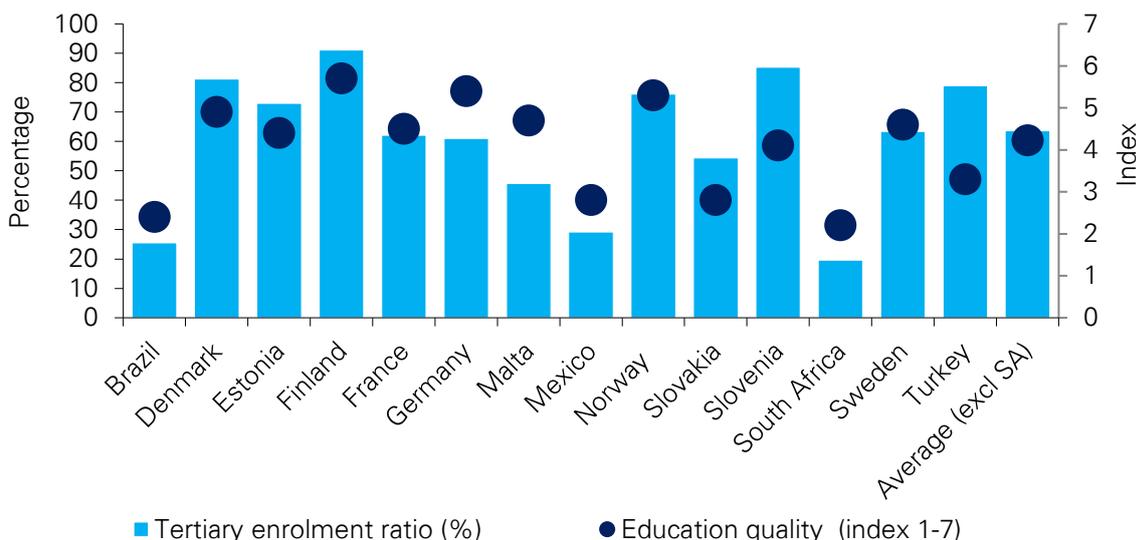
For South Africa, the country's economic context raises serious obstacles to financing free tertiary education. Table 1 in Appendix A details some fundamentals associated with 13 developed and emerging market economies that currently offer free or almost free tertiary education (bachelors' degrees).¹³ South

Africa's GDP per capita level in US dollar terms (\$5 844) – an indicator of the relative wealth of a country's citizens – is only a fifth of the group's average (\$30 805) and the lowest amongst the countries listed in this table.

At the same time, South Africa's top personal income tax rate (41%) is already on par with the group average (41.2%), suggesting that higher personal tax rates to fund free tertiary education might not be feasible. At the same time, South Africa is struggling with higher levels of inequality, poverty and unemployment than the other countries in the group. This reduces the priority of tuition-free tertiary education compared to e.g. primary education and healthcare.

Government expenditure on education as a percentage of total government expenditure (19.1%) is high in South Africa compared to the other countries (13.8%). A relatively high share (12.2%) of government money spent on education is channelled to tertiary education, though this services a relatively low number of students given that South Africa's tertiary enrolment rate (19.2%) is significantly below the group average (63.6%). This raises questions over the quality of the tertiary education system and the efficiency of expenditure.

Figure 3: Tertiary enrolment rate compared to quality of education





◀ Alternatives to
university education

Alternatives to university education

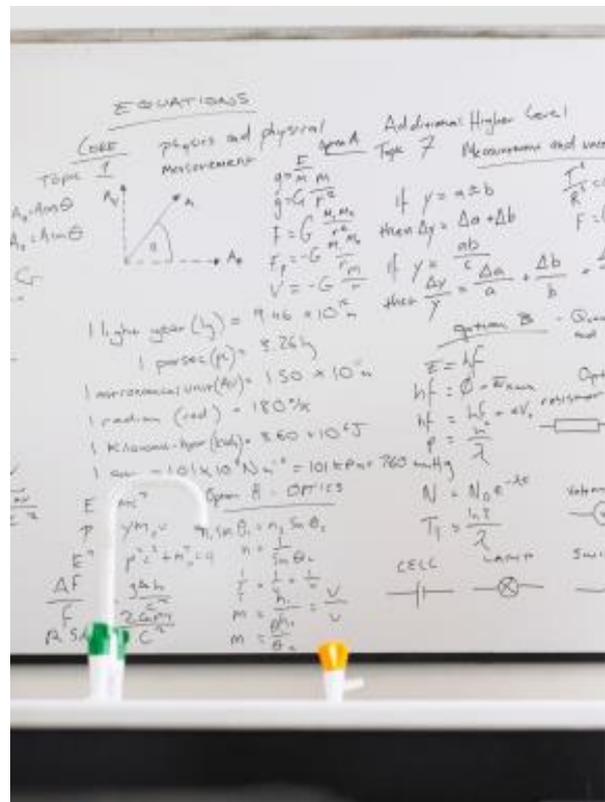
In the 2015/16 fiscal year, South Africa trained around 15 000 artisans.¹⁴ However, the country attracts thousands of similarly qualified workers from abroad as a result of the continued lack of artisan skills.¹⁵ This emphasises the opportunity of utilising artisan and vocational training initiatives as an alternative form of higher education. South Africa currently has 21 Sector Education and Training Authorities (SETAs), as well as 50 Technical and Vocational Education and Training (TVET) Colleges that play an important role in improving the vocation skills of the labour force. As part of “the decade of the artisan”, South Africa has set a training target of 30 000 artisans annually, to be reached by 2030.¹⁶

A complimentary aspect to formal tertiary education is to invest in on-the-job-training initiatives. South Africa ranks 19th globally – i.e. within the top 15% of countries - regarding the quality, availability and uptake of on-the-job training programmes.¹⁷ To place this into context, South Africa ranks higher than tuition-free countries such as Brazil, Malta, Mexico, Slovenia, Slovakia and Turkey in its on-the-job training ranking. South Africa’s strong ranking points to the private sector being directly involved in augmenting the training provided by the tertiary sector.

The options offered by modern technology present a further alternative to brick-and-mortar tertiary education. For example, free internet-based education is available from some prestigious institutions such as Harvard University and the Massachusetts Institute of Technology (MIT). Websites like Coursera and edX offer free online courses from a variety of top universities. Based on a different business model, the California-based University of the People (UoPeople) is a non-profit, tuition-free, online university accredited by the United States Department of Education, and currently has students from 180 countries studying business, health and computer sciences. Virtual classrooms and online training courses is a possible way to use technology to improve access to higher education. Furthermore, free public Wi-Fi hotspots for educational purposes could be developed to

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improve interactive learning, ideas sharing and could be used for innovative teaching. Modern technologies – audio, video or personal computer – make it possible for students with disabilities, parental responsibilities and full-time employment to attend tertiary institutions without being reliant on face-to-face teaching. This allows for asynchronous learning outside the time and space constraints of traditional brick-and-mortar teaching institutions.



Over the long term, South Africa would need to consider what has been called the 'Fourth Industrial Revolution'. Disruptive technologies such as cloud services, mobile internet and robotics will change the nature of and jobs and, both directly and indirectly, the skills that tertiary students will bring to the labour market.

A recent World Economic Forum (WEF) survey found that strategies amongst South African companies to address these challenges include reskilling current employees, offering apprenticeships, and collaborating with tertiary educational institutions.

The options offered by modern technology present a further alternative to brick-and-mortar tertiary education.



▲ Looking
ahead



Looking ahead

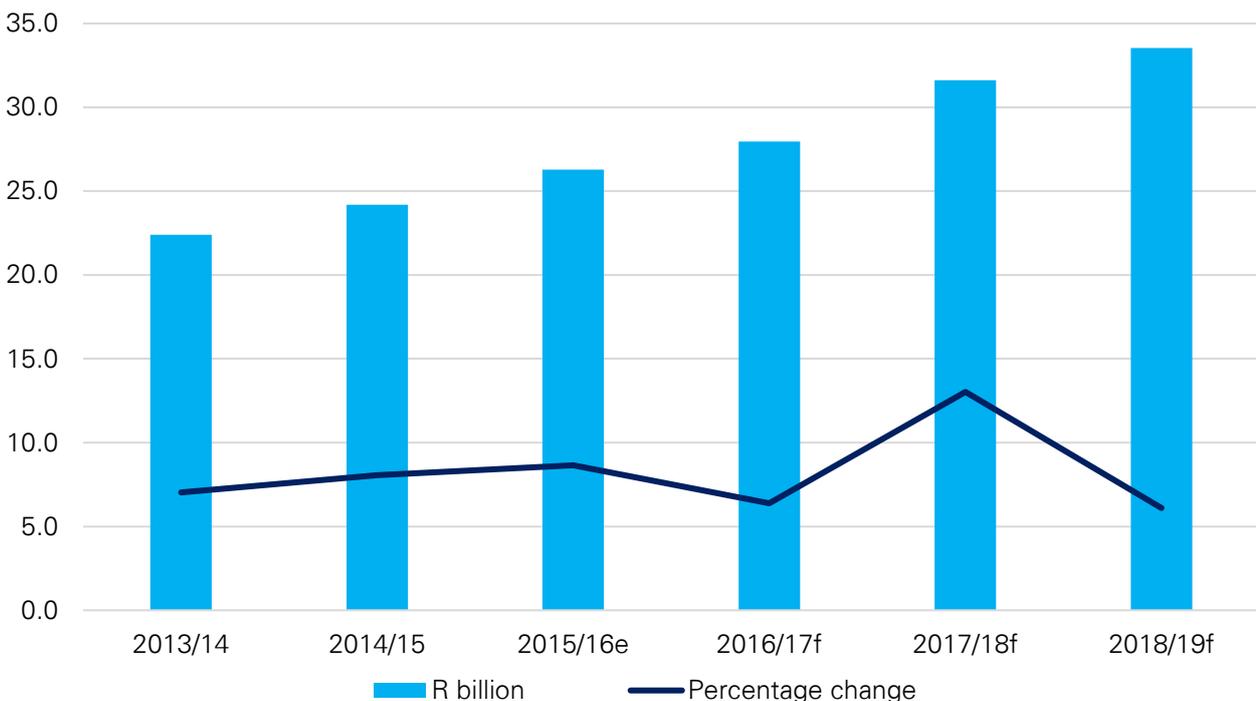
The government’s medium-term financial plans currently budget for a 6.4% increase in university subsidies during the 2016/17 fiscal year to R27.9 billion. A planned 13% (R3.6 billion) increase in subsidies during the 2017/18 fiscal year was pencilled in before Minister Nzimande committed the state to finding more money – around R2.5 billion is needed, according to USAf – to ensure that the majority of tertiary students do not have to pay for university fee increases in the 2017 calendar year.¹⁸

The MTBPS will be closely watched by South Africans, foreign investors and credit rating agencies. The government committed itself in the 2016/17 fiscal budget to fiscal discipline in order to narrow its budget deficit during a period of weak economic growth. A significantly increased tertiary education bill for 2017/18 would have to be funded by the central government – time is limited to create an overarching plan that includes all stakeholders, including private business – and the National Treasury is currently working on prioritising these funds. The impact on university subsidies in 2018/19 and beyond is quite uncertain.

For tertiary institutions, a key question is how to increase funding outside the sphere of state financing and tuition fees. Options include: incentivising private sector to share funding costs through; using technology to improve access; getting communities involved to reduce indirect costs like transport and accommodation; and creating better methods of household means-testing and improved loan collection in order to use available funding more effectively.

The private sector already contributes to study costs through bursaries, scholarships and donations. However, there is potential to incentivise greater private sector involvement. Potentially, education funding could be included in Broad-Based Black Economic Empowerment (BBBEE) requirements for companies. Encouraging private companies to invest in education for financially needy students will meaningfully increase the skills base of these students. Additionally, this incentive will aid the government in funding tertiary education.

Figure 4: 2016/17 fiscal budget: government subsidies to universities



◀ Appendix



Appendix A - Table 1: Fundamentals for the 13 countries that currently offer free or almost free tertiary education, compared to South Africa

Red indicates a lower relative ranking and **green** a higher relative ranking

Countries	Cost of higher education	Personal income tax rate (%)	GDP per capita (USD)	Gini coefficient (0-1)	Youth unemployment (%)	Total unemployment (%)	Govt education spending (% GDP)	Expenditure on education (% of total govt spending)	Expenditure on tertiary (% of govt spending on education)	Tertiary enrolment ratio (%)	Education quality (index 1-7)	On-the-job-training (rank /140)
Brazil	Admin fees, no tuition	27.5	8 702	0.52	13.4	6.8	5.9	15.6	16.4	25.5	2.4	84
Denmark	No tuition	56.4	52 214	0.27	12.6	6.6	8.5	15.0	27.9	81.2	4.9	15
Estonia	No tuition	20.0	17 833	0.29	15.0	7.7	4.8	12.1	21.8	72.9	4.4	28
Finland	No tuition	54.3	42 087	0.26	20.5	8.6	7.2	12.8	28.6	91.1	5.7	4
France	Considerably low tuition	49.0	37 268	0.30	23.2	9.9	5.5	9.7	22.3	62.1	4.5	23
Germany	Admin fees, no tuition	45.0	41 591	0.30	7.7	5	4.9	11.2	26.8	61.1	5.4	8
Malta	No tuition	35.0	22 207	0.27	11.8	5.9	6.8	15.3	22.2	45.7	4.7	34
Mexico	Admin fees, no tuition	35.0	9 070	0.45	9.6	4.9	5.1	19.0	18.1	29.2	2.8	62
Norway	No tuition	46.9	72 441	0.21	7.9	3.4	7.4	17.5	29.9	76.1	5.3	7
Slovakia	No tuition	25.0	16 282	-	29.7	13.3	3.9	9.8	24.0	54.4	2.8	63
Slovenia	Admin fees, no tuition	50.0	20 589	0.24	20.2	9.5	5.7	12.6	21.2	85.2	4.1	49
South Africa	#FeesMustFall	41.0	5 844	0.63	51.3	25.1	6.1	19.1	12.2	19.7	2.2	29
Sweden	No tuition	57.1	50 829	0.25	22.9	8	7.7	15.2	25.3	63.4	4.6	11
Turkey	Considerably low tuition	35.0	9 353	0.37	17.8	9.2	-	-	-	79.0	3.3	80
Average (excl SA)		41.2	30805	0.31	16.3	7.6	6.1	13.8	23.7	63.6	4.2	36

Sources: OECD, World Bank, BMI, WEF, KPMG research

References

- ¹ Pervez Zamurrad Janjua and Usman Ahmed Kamal. "The Role of Education and Income in Poverty Alleviation: A Cross-Country Analysis." *The Lahore Journal of Economics* 16 (1): 143-172
 - ² Statistics South Africa (StatsSA). "Poverty Trends in SA: examination of absolute poverty between 2006 and 2011."
 - ³ Minister of Higher Education Blade Nzimande. "Statement on Government's 2017 Fee Support to Students from Poor, Working and Middle Class Families." 19 September 2016. Available online at: <http://www.dhet.gov.za/SiteAssets/Latest%20News/September%202016/190916Minister%20Nzimande's%20Statement%20on%202017%20University%20Fees%20180916%20revised-2.pdf>
 - ⁴ News24. "#FeesMustFall: Who gets 0% in 2017?" 25 September 2016. Available online at: <http://www.news24.com/SouthAfrica/News/feesmustfall-who-gets-0-in-2017-20160925>
 - ⁵ KPMG calculations based on estimates of national expenditure on higher education published with the 2016/17 fiscal budget. Available online at: <http://www.treasury.gov.za/documents/national%20budget/2016/enebooklets/Vote%2015%20Higher%20Education%20and%20Training.pdf>
 - ⁶ National Treasury. "National Treasury Position on Fees Matter." 20 September 2016. Available online at: http://www.treasury.gov.za/comm_media/press/2016/2016092001%20Position%20on%20fees.pdf
 - ⁷ Siphso Mabena. "Nzimande says #FeesMustFall damage to property has reached R600m." 27 September 2016. Available online at: <http://www.rdm.co.za/politics/2016/09/27/nzimande-says-feesmustfall-damage-to-property-has-reached-r600m>
 - ⁸ KPMG calculations based on StatsSA data. CPI data available online at: <http://www.statssa.gov.za>
 - ⁹ Phillippe Burger. "Between the devil and the deep blue sea? The financing of higher education." 22 September 2016. Available online at: <http://www.econ3x3.org/article/between-devil-and-deep-blue-sea-financing-higher-education>
 - ¹⁰ KPMG calculations based on data from the Centre for Higher Education Trust (CHET). Data available online at: <http://chet.org.za/data/sahe-open-data>
 - ¹¹ KPMG calculations based on data from Business Monitor International (BMI) and Business Tech.
 - ¹² Colleen Goko. "Student loans crimped by defaults." 10 September 2013. Available online at: <http://www.bdlive.co.za/national/education/2013/09/10/student-loans-crimped-by-defaults>
 - ¹³ The non-exhaustive list is based on the Organisation for Economic Cooperation and Development (OECD) Education at a Glance 2016 report and KPMG research. OECD report available online at: <http://www.oecd.org/edu/education-at-a-glance-19991487.htm>
 - ¹⁴ The Conversation. To produce artisans for the future South Africa should study its past September 2016. Available online: <http://theconversation.com/to-produce-artisans-for-the-future-south-africa-should-study-its-past-64932>
 - ¹⁵ ATI (Artisan Training Institute). South Africa is lacking artisans according to research made by union Solidarity. Available online: <http://www.artisantraining.co.za/south-africa-is-lacking-artisans-according-to-research-made-by-union-solidarity/>
 - ¹⁶ South African government. Higher Education and training on training artisans. August 2015. Available online: <http://www.artisantraining.co.za/south-africa-is-lacking-artisans-according-to-research-made-by-union-solidarity/>
 - ¹⁷ World Economic Forum (WEF). Global Competitiveness Index (GCI) 2016- - 2017. Available online http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf
 - ¹⁸ KPMG calculations based on estimates of national expenditure on higher education published with the 2016/17 fiscal budget. Available online at: <http://www.treasury.gov.za/documents/national%20budget/2016/enebooklets/Vote%2015%20Higher%20Education%20and%20Training.pdf>
- Other:
- Business Monitor International (BMI)
 - Business Tech
 - Centre for Higher Education Trust (CHET)
 - Government of South Africa
 - Organisation for Economic Cooperation and Development (OECD)
 - National Student Financial Aid Scheme (NSFAS)
 - Statistics South Africa (StatsSA)
 - The Lahore Journal of Economics
 - University of the Free State
 - University of the People
 - World Economic Forum (WEF)
 - World Bank





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