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Abbreviations and **ACRONYMS**

CHE	Council on Higher Education
DHS	Demographic and Health Survey
DoE	Department of Education
FCS	Full Cost of Study
FET	Further Education and Training
FTE	Full-time Equivalent
GDP	Gross Domestic Product
GDR	Global Distribution Rate
GED	Global Education Digest
GEPF	Government Employees Pension Fund
GER	Gross Enrolment Rate
GGR	Gross Graduation Ratio
GNP	Gross National Product
GPR	Gross Participation Rate
HE	Higher Education
HEI	Higher Education Institution
HEIs	Higher Education Institutions
HEMIS	Higher Education Management Information System
HESA	Higher Education South Africa
IDT	Independent Development Trust
ISCED	International Standard Classification of Education
IOL	Institute of Open Learning
NANSO	Namibia National Students Organization
NCHE	National Council for Higher Education
NER	Net Participation Ratio
NQF	National Qualifications Framework
NSFAF	Namibia Student Financial Assistance Fund
NSFAS	National Student Financial Aid Scheme
OECD	Organization for Economic Co-operation and Development
PoN	Polytechnic of Namibia
PPPs	Purchasing Power Parities
SA	South Africa
SAPSE	South Africa Post Secondary Education
SU	Stellenbosch University
TEFSA	Tertiary Education Fund in South Africa
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UNAM	University of Namibia
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNISA	University of South Africa
UNW	University of North-West
UP	University of Pretoria
USA	United States of America
USD	United States Dollar
WFTEES	Weighted Full-Time Equivalent Enrolled Student

Session ONE

Opening and Welcoming remarks by Ms. Benitha Nakaambo, Chairperson of the Capacity Building Committee (NCHE)

Director Of Ceremonies

Ladies and gentlemen, good evening. It is a great honour to welcome you all to this public lecture organized by the Capacity Building Committee under the auspices of the NCHE. As dedicated advocacy of capacity building for lecturers through the staff development programme at institutions of higher learning and students through access to and funding of higher education institutions (HEIs), it should not be a surprise that our focus for this lecture is on the pertinent issues that are at the pinnacle of the educational system in Namibia.

We have wondered for many years how the accessibility of funds to students has been organized; how it is sustained; whether there are mechanisms in place that enable the system to continue re-investing into those who have no access to funding; and how we encapsulate ourselves from this revelation?

It is for these reasons and perhaps more, that the Capacity Building Committee had decided to examine and help bring to the fore issues that are so pertinent to many of us. And it is for the exact reasons and more, ladies and gentlemen, that we have invited Dr. Gert Steyn, the Director of Institutional Research at the Stellenbosch University (SU) to share with us a lecture on student access to and funding of higher education.

Dr. Steyn, it is an honour to have you in our midst and we hope that you will be able to enlighten and also provide us with successful strategies that work in your home country.

We thank you for having accepted our invitation; and it is our sincere wish that this will be the beginning of a good working relation with the Committee and the Council as a whole.



Ms. Benitha Nakaambo

Session TWO

Public lecture objectives by Ms. Etambuyu Mbuye, Director of Higher Education (NCHE)

The following objectives of the public lecture were highlighted:

- To bring higher education to the public domain by discussing and debating issues pertaining to higher education such as distance education, the National Qualifications Framework (NQF), quality of higher education, relevance and responsiveness of the system, funding of the system, access and coordination of higher education, etc;
- To create a forum where historic discussions take place on the future direction of higher education in Namibia;
- To help refine documents the Council is developing, such as the 'Strategic Plan' and 'Policy for Higher Education' in which issues of access and funding, among others, are discussed - thus inputs are very valuable;
- To tap from experiences and expertise of a variety of personalities, professors and experts in higher education and other fields, e.g. politics, science, economics, and so forth;
- To make the NCHE visible and relevant to the public as many people do not know what the functions of the Council are and what the Council is doing in the arena of higher education; and
- To particularly target people who are interested in higher education and to provide them with a unique opportunity to get a glimpse of what is happening in Namibia's higher education sub-sector and elsewhere in the world.



Ms. Etambuyu Mbuye

Ms. Mbuye noted that there are significant benefits public lectures will bring into the domain of higher education. She further pointed out that public lectures will help nurture the soul of higher education in Namibia.

Introduction of the guest speaker by Dr. Lischen Haoses-Gorases, member of the Capacity Building Committee (NCHE)

Ladies and gentlemen, dear all, I am honoured tonight and it is a great privilege for me to introduce our guest speaker. Dr. Gert Steyn started his academic career as a junior lecturer in 1970 in the Department of Statistics at the University of Pretoria (UP) and was promoted to a lecturer in 1971, a senior lecturer in 1974 and to a professor in 1981 in the same department.

He was appointed in the civil service with effect from 1 October 1985 in the position of director in the Department of National Education and was promoted to the position of chief director from 1 December 1988 in the same department. On 1 July 1994, he was transferred to the newly established National Department of Education. On 1 February 1997, Dr. Steyn was appointed as institutional researcher in the Bureau for Institutional Research and Planning at the UP. He was appointed as director of Management Information at the SU with effect from 1 September 1999. His current position is Director of Institutional Research. As an official in the civil service, Dr. Steyn was closely involved in the development and administration of

information systems and funding mechanisms for schools, higher education, councils for sciences and for the performing arts, museums, libraries and other cultural institutions. In his capacity as institutional researcher at the UP, and now at the SU, Dr. Steyn was and still is involved in the compilation of strategic planning documents, ad hoc institutional research projects, as well as in the provision of management information.

Dr. Steyn participated in many important national investigations on education and related matters in South Africa. Currently, he is the leader of a task team appointed by Higher Education South Africa (HESA) to determine the conditions and backlogs in infrastructure at universities in South Africa. In 2009, he was also part of a consortium of consultants who, on the request of the NCHE, proposed a funding framework for public higher education institutions in Namibia. Dr. Steyn is the author or co-author of many policy and information reports of the former Department of National Education and the present Department of Education (DoE) in South Africa. He is also the author or co-author of sixteen (16) research articles in approved research journals, four (4) text books for students and many technical reports in the fields of statistics, education and applied sciences. Welcome Dr. Steyn.



Dr. Lischen Haoses-Gorases

Session **THREE**

“Access to and funding of Higher Education - A General overview” by Dr. Gert Steyn: Institutional Researcher, Stellenbosch University, South Africa

PRESENTATION

Good evening ladies and gentlemen. Thank you, especially for the kind welcoming from Ms. Nakaambo, Ms. Mbuye and Dr. Haoses-Gorases. Thank you all for attending this lecture. I am honoured by your presence. Thank you to the Capacity Building Committee of the NCHE for the kind invitation to address you tonight. It was really a great pleasure and fun for me to prepare this lecture. And you all received the paper when you entered this room. That paper actually contains a lot of useful information. And I cannot cover all that in an hour, so I am just going to point out the highlights and once you read through it, we can discuss some of the other matters during the slot for questions. I am sure this information may be of use to you.

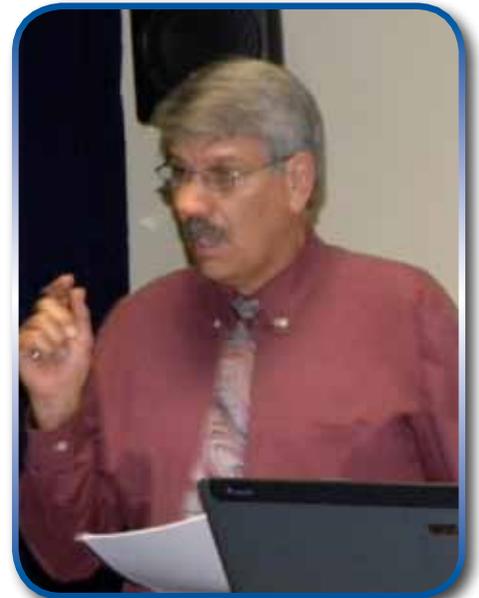
I have not concentrated on the proposed Namibian Formula, but actually prepared a general overview on access and funding measures. However, if you need clarification on some of the matters, I am quite prepared to provide answers to your questions during the plenary session. In my paper, I attempted as far as possible, to compare Namibia to South Africa as well as to other countries, but it was not easy to get access to all the relevant information.

I will start with a World Bank Report titled: “The financing and management of higher education: A status report on worldwide reforms” (Johnson, 1998). In this Report, Johnson had identified 5 major themes in higher education management. These five themes were actually the most important discussion powers in higher education at the time, over a decade ago, and they are:

- Expansion and diversification - both regarding higher education enrolment and institutional types;
- Fiscal pressure - declining per student expenditure, low-paid teaching staff, lack of academic equipment and deteriorating infrastructure;
- Exploiting the markets for non-governmental revenue;
- The demand for greater accountability of institutions and staff to students, the public and employers; and
- The demand for greater quality and efficiency - more rigour, more relevance and more learning.

My presentation, tonight, will be centred around the first three themes as they are the crux of the matter under discussion. The last two themes are also very important, but they are not relevant to the topic.

Twelve years later, these three themes are even more relevant to the financing and management of higher education. The sustainable funding of education, but more specifically higher or tertiary education, is one of the major problems faced by most governments of the world. The growing demand for higher education far exceeds the ability or



Dr. Gert Steyn, guest speaker

willingness of governments to provide the necessary public resources to adequately meet this demand. In order to protect their academic standards and at the same time still attract academics of high standing, higher education institutions usually as a first step resolve the problem of insufficient government funding by raising tuition fees. A second strategy used by institutions, which is more difficult but a longer-term and more sustainable solution, is the securing of so-called third stream income to a greater extent.

The raising of tuition fees for higher education has the negative consequence that many able prospective students are excluded from higher education. This is also counter-productive in many countries such as South Africa and Namibia, where the broadening of access to higher education for students from previously disadvantaged communities, is a governmental priority. In countries where tuition fees are increasing annually at a rate well above inflation levels, governments are usually compelled to introduce national student bursaries and loan schemes, or enhancing schemes already in place, to facilitate the necessary access to higher education and to further ensure that sufficient graduates are emerging from higher education institutions to satisfy their countries' needs.

In the light of the above, the paper would focus on the following issues:

- *International trends in student participation in (or access to) higher education:* Different ways to measure participation will be discussed, as well as related topics such as gender disparities among participating students, student mobility and graduates' fields of study. How do student participation rates in higher education in Namibia and South Africa compare with the rates of other countries?
- *International trends in the public funding of higher education:* Different ways to measure the public funding of higher education will be discussed and demonstrated using higher education funding in South Africa as a case study. How does the public funding of higher education in Namibia and South Africa compare with the public funding of higher education in other countries?
- *The composition of the income of higher education institutions.* Firstly, the trends in the different contributions of the first (state allocation), second (tuition fees) and third streams of income of higher education institutions will be discussed, and secondly, some of the international trends in the size of tuition fees will be addressed. The National Student Financial Aid Scheme of South Africa (NSFAS), a relatively well functioning scheme, will be unpacked to demonstrate some of the pitfalls in the financial support of students. Lastly, the quest for so-called third stream income by higher education institutions worldwide will be briefly explored.

Two very influential annual publications dealing with education globally were used extensively in this paper for the purpose of international comparisons. They are worthwhile reading and using:

- *Global Education Digest 2001*, UNESCO Institute of Statistics, Montreal; and
- *Education at a Glance*, Organisation for Economic Co-operation and Development (OECD), France.

1. INTERNATIONAL TRENDS IN STUDENT PARTICIPATION IN HIGHER EDUCATION

1.1 Headcount enrolment

Participation in higher education has increased worldwide over the last few decades, both measured in absolute numbers or in terms of relative numbers such as participation rates.

Figures 1 and 2 (UNESCO Institute for Statistics (UIS), 2009) show the trends in absolute higher education enrolments since 1970. In Figure 1, it is shown that the global number of students in higher education had increased from 29 million in 1970 to 153 million in 2007, an average annual increase of 4.6%. To put this increase in context, the world population increased from

3.687 billion in 1970 to 6.620 billion in 2007, an average annual increase of 1.6%. Since 2000, the absolute increase in higher education enrolment has been 51.7 million. Sub-Saharan Africa's average annual growth rate was the highest over the 37-year period depicted in Figure 1, namely 8.6%. During the period from 2000-2007 this rate was 10.0%.

FIGURE 1: HIGHER EDUCATION ENROLMENT WORLDWIDE 1970-2007

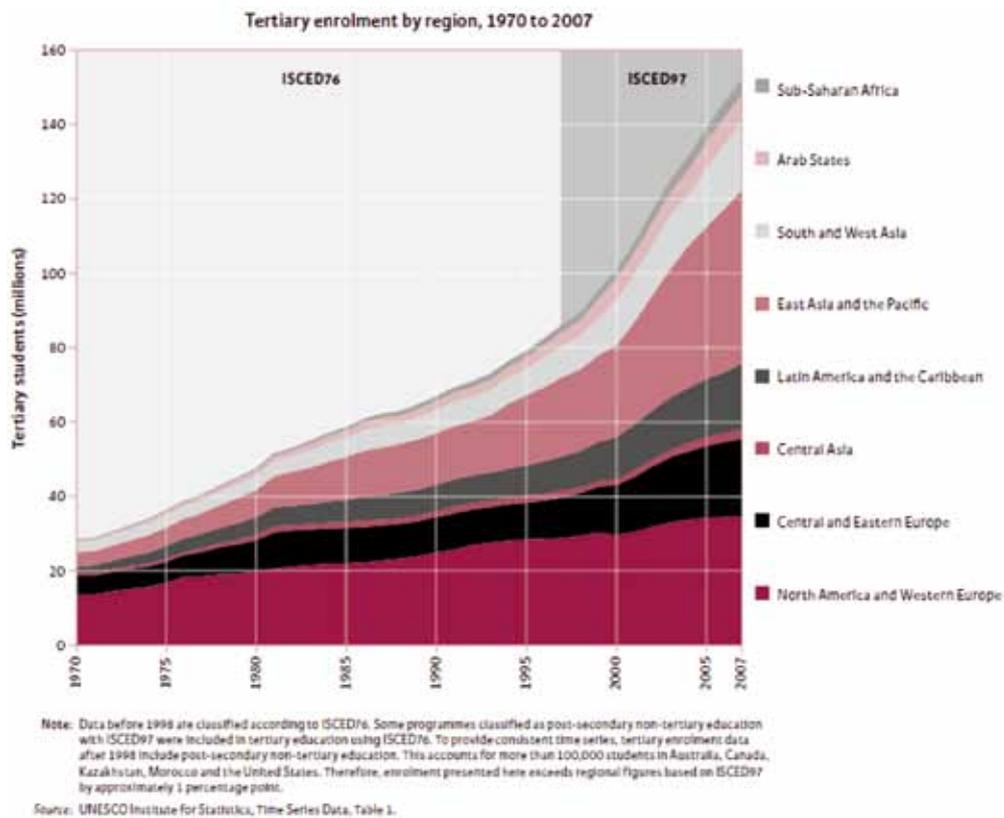
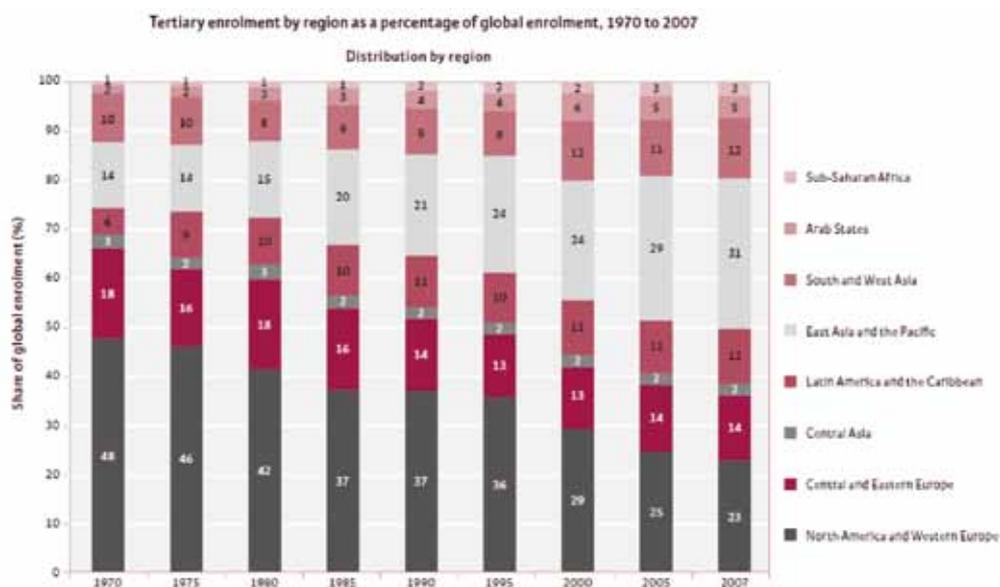
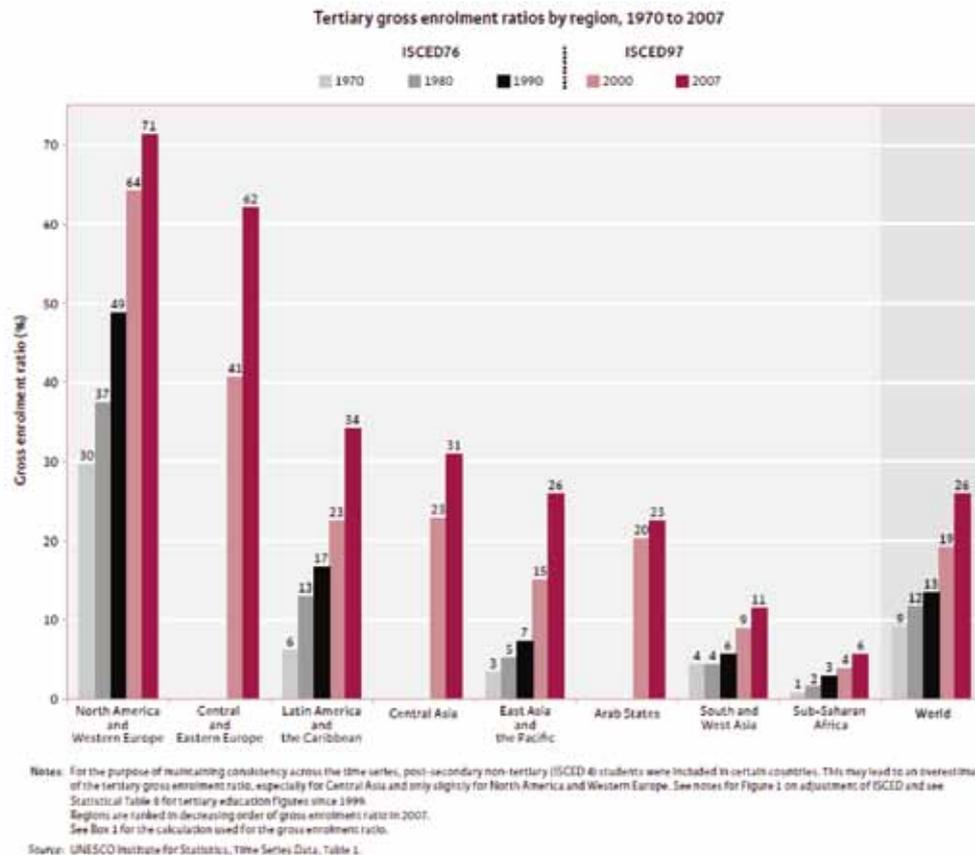


FIGURE 2: CHANGES IN GLOBAL DISTRIBUTION OF HIGHER EDUCATION STUDENTS FROM 1970-2007



Source: UNESCO Institute of Statistics, 2009, Time series data Table 1

FIGURE 3: GROSS ENROLMENT RATE (GER) FROM 1970-2007 ACCORDING TO WORLD REGION AND YEAR



The student numbers in this region therefore doubled every 9 years since 1970. The slowest rate of change was for North America and Western Europe, with an average annual growth rate of 1.3%. Figure 2, however, helps to place the high increase in higher education enrolments in Sub-Saharan Africa in the right context. This figure indicates the growth in shares (%) each world region had of the total higher education enrolment since 1970. While the North American and Western Europe region's share decreased from 48% in 1970 to only 23% in 2007, the share of East Asia and the Pacific more than doubled. Although Sub-Saharan Africa's share trebled from 1% to 3%, it is still very small.

Most countries have a policy of broadening the access to higher education. An increase in absolute enrolments in higher education does not necessarily indicate an increased participation of the "higher education age group", e.g. 20-24-year-olds, in higher education. Many measures are available to calculate rates for student participation in higher education. The two best known rates are the gross participation rate (GER) and the net participation rate (NER) defined as follows in terms of a logical 5-year age interval:

$$\text{GER} = \frac{\text{Total number of enrolments in higher education}}{\text{Population size in (logical) 5-year age intervals}} \times 100\%$$

$$\text{NER} = \frac{\text{Total number of enrolments in higher education in (logical) 5-year age interval}}{\text{Population size in (logical) 5-year age intervals}} \times 100\%$$

Although the utilisation of a 5-year age interval in calculating GER and NER is fairly common, other age interval lengths (say 7 years, e. g. the interval 18-24 years) are also sometimes used. In the calculation of GER and NER the UIS defines the logical 5-year age interval as the 5-year age group following the secondary school-leaving age. Figure 3 shows the increase in the GER for higher education according to world region and year for the period 1970-2007. The world's GER values for the different years are also given in Figure 3.

It is clear from Figure 3 that the absolute growth in higher education participation in the world from an estimated 29 million in 1970 to 153 million in 2007 was associated with a somewhat smaller increase in the GER in the world, namely from 9% to 26%. Although North America and Western Europe's share and Central and Eastern Europe's share in absolute higher education participation have decreased significantly, their GERs are still increasing from year to year and could reach 80% in a few years time.

Table 1 shows the GERs for 1999 and 2007 for the Sub-Saharan African countries which have submitted information for both years. In countries where many students only enrol in higher education some years after completing secondary education (usually as a result of financial constraints), the outcomes of the GER and the NER are widely different. This is illustrated by Table 2, which shows both the GER and NER for South Africa for the years 2001 and 2007. The GERs for the respective years are 14.72 and 15.60, while the NERs for the two respective years are 5.53 and 7.04. The table also indicates the GER values and NER values according to race and gender. Note that although there was an increase in both the GER and NER for the African and Coloured population groups from 2001 to 2007, the participation rates of the two groups were in 2007 respectively still only about 21% and 23% of the rate of the White population group.

Additional and more sophisticated indicators to measure the participation rate of specific groups of students, e.g. first-time entering students or undergraduate students can be calculated. Unfortunately, these rates are not calculated annually by the different countries of the world and therefore only limited comparable information is available. See in this regard Kaiser and O'Heron (2005) and Steyn (2009).

TABLE 1: GROSS ENROLMENT RATES (GER) ACCORDING TO GENDER AND GROSS GRADUATION RATES¹ (GGR) FOR SUB-SAHARAN COUNTRIES FOR 1999 AND 2007

Country	Enrolments in 2007 (thousands)	GER-1999			GER-2007			GGR-007 Total
		Male	Female	Total	Male	Female	Total	
Botswana	11	3	3	3	5	5	5	
Burundi	16	1	1	1	3	1	2	
Central African Republic	4.5	3	1	2	2		1	
Chad	10	1		1	2		1	
Cote d'Ivoire	157	9	3	6	11	5	8	
Ethiopia	210	1		1	4	1	3	
Ghana	140	4	1	3	8	4	6	2
Kenya	140	4	2	3	4	3	3	
Lesotho	8.5	2	3	2	3	4	4	
Madagascar	58	2	2	2	3	3	3	1
Mauritius	14	7	6	7	13	15	14	9
Namibia	13	6	7	7	7	6	6	3
Nigeria	1392	7	5	6	12	8	10	
South Africa	741	13	15	14	14	17	15	5
Swaziland	5.7	5	4	5	4	4	4	
Tanzania	55	1		1	2	1	1	

¹See Section 2.2

Source: UNESCO Institute of Statistics, 2009, Statistical Table 8

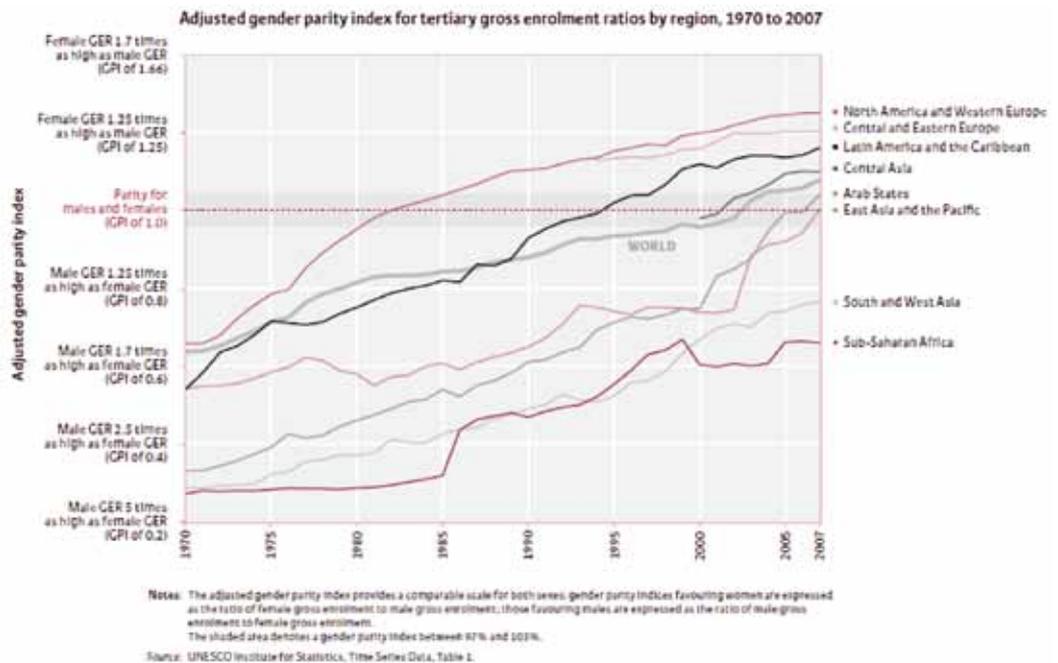
TABLE 2: GROSS AND NET PARTICIPATION RATES FOR HIGHER EDUCATION IN SOUTH AFRICA USING THE AGE INTERVAL 18-22 YEARS ACCORDING TO RACE, GENDER AND YEAR.

Year	Race/ Gender	Headcount enrolments in HE	Headcount enrolments in HE in age group 18-22	Population size in age group 18-22	Gross participation rate (%)	Net participation rate (5)	% Increase in GER 2001 to 2007	% Increase in NER 2001 to 2007
2001	African	408262	124995	3682002	11.09	3.39		
	Coloured	35686	14164	385337	9.26	3.68		
	Indian	44152	21229	107071	41.24	19.83		
	White	177267	89483	346768	51.12	25.80		
	Total	665367	249871	4521178	14.72	5.53		
	Male	307302	114258	2172316	14.15	5.26		
2007	African	478146	194312	4050438	11.80	4.80	6.46	41.32
	Coloured	49211	23120	386969	12.72	5.97	37.32	62.54
	Indian	52748	26115	113443	46.50	23.02	12.76	15.11
	White	180985	99991	327129	55.33	30.57	8.23	18.45
	Total	761090	343538	4877979	15.60	7.04	6.02	27.43
	Male	338555	152605	2418372	14.00	6.31	-1.04	19.97
Female	422535	190933	2459505	17.18	7.76	12.69	34.45	

Data source: 2001 enrolments: Department of Education (2001). Education Statistics in South Africa at a Glance in 2001; 2001 population numbers according to age: Statistics SA
2007 enrolments: Department of Education (2007). HEMS data base; 2007 population numbers according to age: Statistics SA

Figure 4 shows the adjusted parity index, defined in terms of the GER (see vertical axis points) according to year and region. The world index is also shown. Parity in higher education participation for men and women was reached in the year 2003. In North America and Western Europe it had already been reached in the early 1980s, while in Sub-Saharan Africa the GER for males was 50% larger than the GER for females in 2007. In 2007 South and West Asia were the only other world regions where the male GER still exceeded the female GER.

FIGURE 4: ADJUSTED PARITY INDEX FOR HIGHER EDUCATION PARTICIPATION FOR 1970-2007 ACCORDING TO WORLD REGION AND YEAR



1.2 Graduate outputs

The gross graduation ratio (GGR) measures the relative higher education output in terms of first-time graduates. The definition has a similar form as the GER, namely

$$\text{GGR} = \frac{\text{Total number of first-time qualifications awarded in higher education} \times 100\%}{\text{Population size in typical graduation age}}$$

According to UIS (2009), the GGR values for 2007 are unfortunately rather incomplete (only about 50% of all countries submitted information on GGR). Table 1 shows the available GGR values for Sub-Saharan African countries. They are all significant lower values than the corresponding GER values indicating the high drop-out rate for undergraduate students. This phenomenon is by no means limited to Sub-Saharan Africa. The UNESCO data show that the respective GER and GGR values for 2007 for the United Kingdom were 59% and 39%, for France 56% and 36%, and for the United States of America 82% and 35%.

1.3. Educational attainment in higher education

According to Steyn (2009), measures of educational attainment of the adult population are very important and provide information on the educational level or educational status of a country. Comparing the percentages of the total population of a country attaining specific levels of education (usually primary, secondary or higher) is a well-established procedure. These percentages are published annually by the OECD as part of its battery of indicators. Clearly, this type of indicator is not comparable with the higher education participation indicators based only on higher education enrolments (inputs). An increase in higher education attainment over a specific time period for a country, however, indicates an increase in successful higher education participation (output). In South Africa, and probably in most other countries, educational attainment can only be calculated from census data by analysing the highest educational qualification obtained by each population member. The quality of the attainment figures therefore depends on the accuracy of the census results. These are suspect in many countries.

Table 3 (OECD (2004, 2008)) shows higher education attainment for OECD countries as well as for some partner countries. The only comparable data for South Africa are based on data collected in Census 1996 and Census 2001. These data, as opposed to the OECD data, reflect post-secondary educational attainment rather than higher education attainment. The 2001 percentages for South Africa are based on population ages of 20 years and older, while the 1996 percentages had apparently no age restriction. Table 3 shows that in South Africa higher education attainment increased by 66% from 1999 to 2001. The 2001 percentage in South Africa was still only about 28% of the OECD average for 2002. Based on the increase in the attainment percentage in South Africa from 1996 to 2001, the higher education attainment for South Africa could have been more than 10% in 2006. An attainment figure of 8.9% for South Africa is reported by UIS (2009) (see UIS Statistical Table 16) for "the latest year available" (unknown). Apparently this figure is a projected value, since the next census in South Africa is only in 2011.

The above-mentioned Statistical Table 16 of the UIS (2009) only reports higher education attainment percentages for "the latest year available" for 6 other Sub-Saharan Africa countries, namely:

Malawi – 0.5%

Mauritius – 2.6%

Seychelles – 7.4%

Uganda – 4.8%
 Tanzania - 0.9%
 Zimbabwe – 1.5%

Clearly, reliable information on educational attainment on the various levels for countries in Sub-Saharan Africa is a rare commodity.

TABLE 3: EDUCATIONAL ATTAINMENT²⁾ OF HIGHER EDUCATION QUALIFICATIONS (%) OF ADULT POPULATION (AGES 25-64 YEARS) FOR OECD COUNTRIES, AS WELL AS SOME PARTNER COUNTRIES IN 2002 AND 2006 ACCORDING TO COUNTRY. THE MOST RECENT ATTAINMENT VALUES FOR SOUTH AFRICA ARE ALSO GIVEN.

OECD Country	2002	2006
Australia	31	33
Austria	14	17
Belgium	28	33
Canada	43	47
Denmark	28	36
Finland	33	35
France	24	27
Germany	23	24
Iceland	26	30
Ireland	26	30
Italy	10	13
Japan	36	41
Korea	26	31
Mexico	5	15
Netherlands	25	31
New Zealand	30	33
Norway	31	33
Poland	12	18
Slovak Rep	11	14
Spain	24	29
Sweden	33	31
Switzerland	25	30
Turkey	9	10
United Kingdom	27	30
United States	38	39
OECD average	22	27

Partner Country	2002	2006
Brazilia	42	8
Chile		13
Estonia		33
Israel		46
Russian Federation		53
Slovenia		21

South Africa ¹⁾	1996	2001
African	1.75	3.7
Coloured	2.67	3.65
Indian	6.52	11.89
White	16.03	22.57
Total	3.64	6.06

1) Population (age 20 and older) with post-secondary qualifications. Based on 1998 and 2001 census data.
 2) Tertiary qualifications (ISCED levels 5A&5B, as well as advanced research qualifications)

Figure 5 (UIS (2009)), however, combines age cohort information with higher education attainment percentages for 10 countries. The note under the table shows that this figure originated from recent Demographic and Health Surveys (DHS) in these 10 countries. Increasing participation in higher education in a country creates the expectation that the higher education attainment of certain age groups should be negatively correlated with median age of the groups. Clearly that is the case for Pakistan, India, Indonesia, Uganda, as well as to some extent for Benin and Niger. The lower attainment rates for the younger aged population groups for Zimbabwe, Congo DR and Liberia could be the result of internal conflict in these countries. The graph for Namibia, a very stable country, is somewhat of a surprise. One possible explanation could be that a significant number of relatively young Namibians with higher education qualifications had emigrated to other countries.

FIGURE 5: HIGHER EDUCATION ATTAINMENT ACCORDING TO ADULT AGE GROUP BASED ON DHS SURVEYS DURING THE YEARS 2005-2006

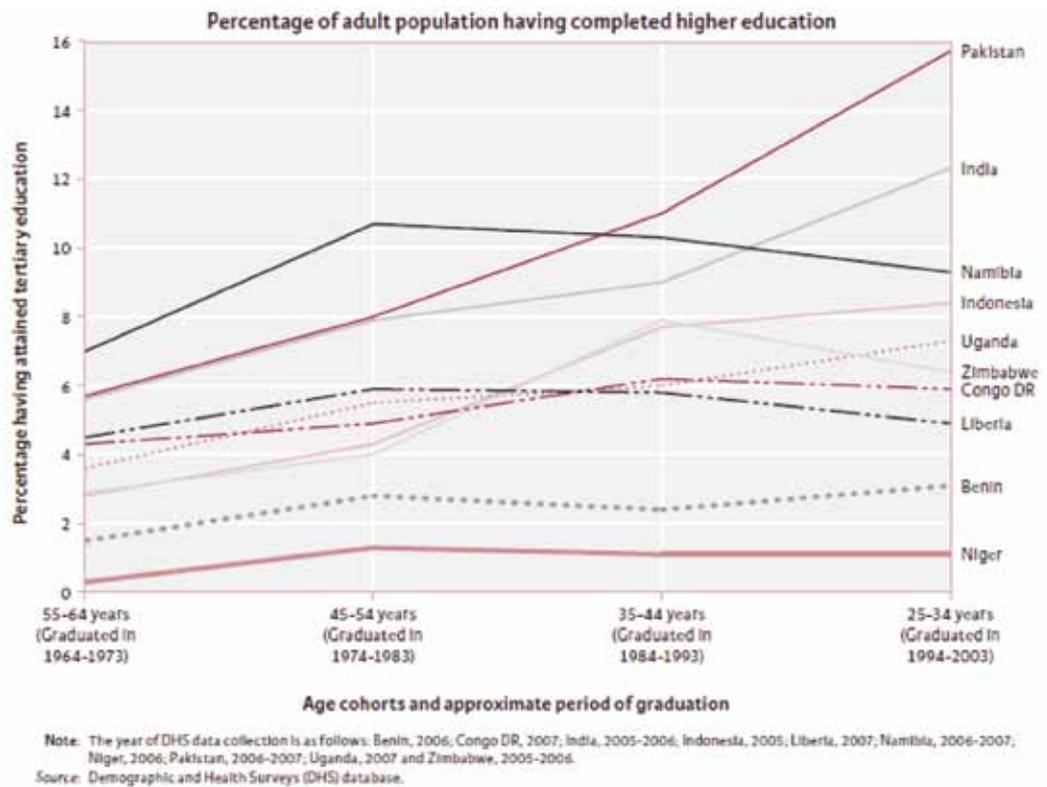
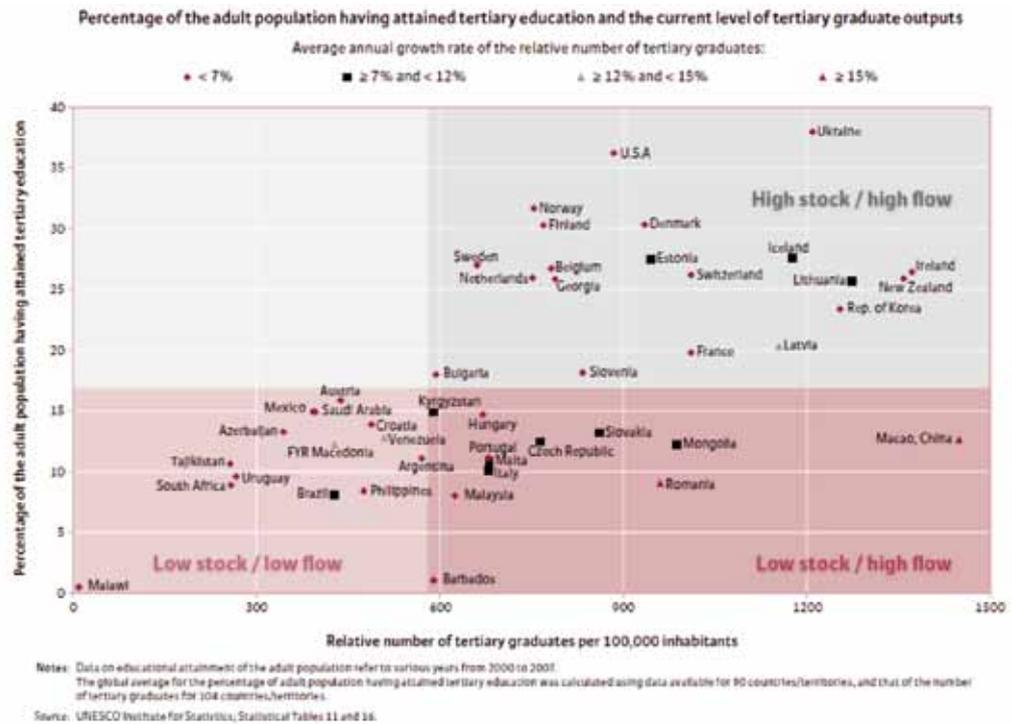


Figure 6 (UIS (2009)) clearly shows a positive correlation between the relative number of graduates per 100 000 of the inhabitants and higher education attainment. A third dimension, namely the average annual change in the growth rate of the relative number of higher education graduates, is also super-imposed on the figure. Three groups of countries are identified in this very informative graphical representation, namely the so-called Low stock/low flow countries, Low stock/high flow countries and the High stock/high flow countries. The average annual growth rate in the relative number of higher education graduates will determine the future movement of countries between these three groups. The position of South Africa could be regarded as rather typical of Sub-Saharan Africa, namely the average annual growth rate in the relative number of graduates is not sufficiently high for a significant movement in an eastern or north-eastern direction in the figure in the shorter term.

FIGURE 6: RELATIONSHIP BETWEEN HIGHER EDUCATION ATTAINMENT IN 2007, THE NUMBER OF HE GRADUATES PER 100 000 INHABITANTS IN 2007, AS WELL AS THE AVERAGE ANNUAL CHANGE IN THE GROWTH RATE OF RELATIVE GRADUATES ACCORDING TO COUNTRY



1.4 Field of Study of higher education graduates

Table 4 was compiled by the author from the sparsely populated Statistical Table 11 of UIS (2009). The classification into 6 continents was constructed from the 8 regions used by UNESCO (see e.g. Figure 3) to obtain a more even spread in the number of countries. Table 4 shows the distribution of graduates in 2007 according to 5 main study fields. The classification of study fields used in Table 4 represents a merging of some of the 8 study fields used by UIS in Statistical Table 11. The graduate distributions of South Africa and Namibia, being of special interest, are shown separately in Table 4. No information on the study field of graduates of Namibian students was reported in UIS (2009). The 2007 distribution for Namibia appearing in Table 4 was taken from Sheppard et al (2009).

TABLE 4: DISTRIBUTION OF GRADUATES (%) IN 2007 ACCORDING TO FIELDS OF STUDY AND CONTINENT

Continent	Number of countries	Total graduates in reporting countries (thousands)	Percentage of graduates					
			Education	Humanities	Social Sciences, Business and Law	Sciences, Agriculture, Engineering & Manufacturing	Medical & Health Services	Other
Africa	11	395	11	13	44	24	6	2
North America	11	3266	12	11	38	18	13	8
South America	7	1310	21	4	38	17	13	7
Asia (inc. Arab States)	25	3323	11	15	27	30	9	8
Europe	34	6649	10	9	39	27	11	4
Oceania ¹⁾								
All countries	78	14943	12	10	36	25	11	6
South Africa		125	23	5	43	20	8	1
Namibia ²⁾		3.8	27	50		17	6	

1) No information for Australia and New Zealand for 2007

2) Sheppard et al (2009)

Sources: UIS (2009), HEMIS 2007, Sheppard et al. (2009)

The South African and Namibian distributions are rather similar, but differ markedly from the African as well as world (all countries) profiles, especially as far as graduates in education are concerned.

1.5 Global student mobility

The UIS (2009) study (see Figure 7 and Table 5) on student mobility are based on student information of inbound students of 153 host countries. Figure 7 shows that:

- In 2007 the world average outbound mobility ratio (percentage of students studying outside their country) was 1.8% (1.9% in 1999);
- The outbound mobility ratio for North America was in both 1999 and 2007 the lowest (about 0.5% in 2007) of all regions, while the Sub-Saharan African region's ratio was the highest in both years (almost 6% in 2007), but is still increasing from year to year;
- Western Europe's ratio is decreasing significantly.

FIGURE 7: OUTBOUND STUDENT MOBILITY FOR WORLD REGIONS IN 1999 AND 2007

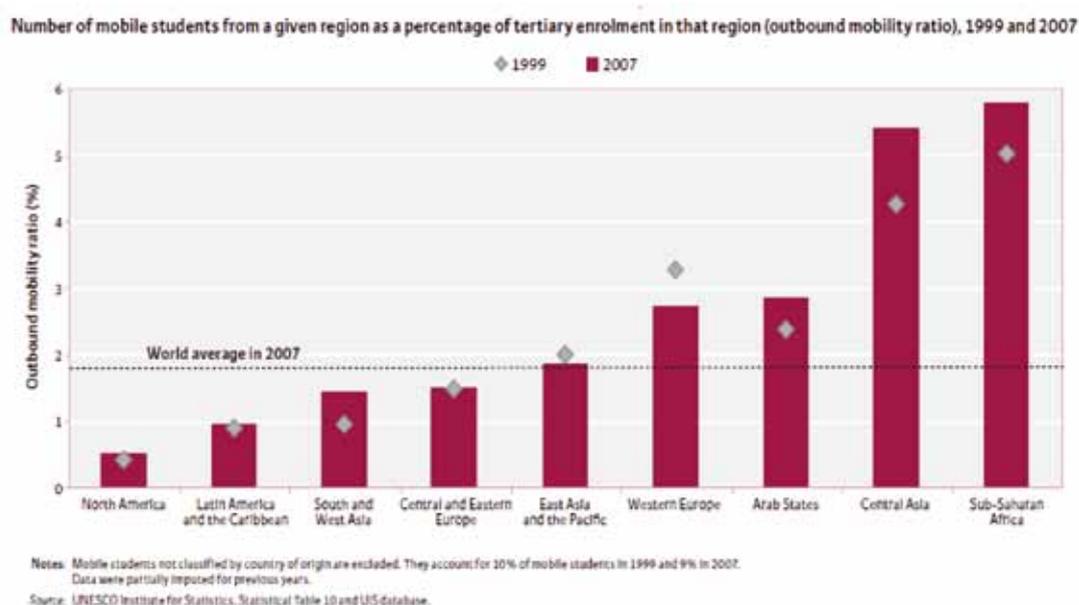


TABLE 5: DESTINATION OF MOBILE STUDENTS IN 2007 ACCORDING TO YEAR AND WORLD REGION

Percentage of mobile students by region of destination and origin in 2007 and the change in percentage points relative to 1999

Origin \ Host	Arab States	Central and Eastern Europe	Central Asia	East Asia and the Pacific	Latin America and the Caribbean	North America	Western Europe	South and West Asia	Sub-Saharan Africa	Total
Arab States	15.9 (+3.7)	5.6 (-2.8)	0.4 (-0.1)	4.7 (+3.5)	0.1 (0)	15.4 (-1.3)	56.9 (-3.1)	1.0 (+0.1)	0.0 (0)	100
Central and Eastern Europe	0.2 (-0.1)	27.7 (+2.9)	3.1 (+0.7)	1.2 (+0.1)	0.0 (0)	12.3 (-2.9)	55.4 (-0.7)	0.0 (0)	0.0 (0)	100
Central Asia	0.3 (+0.1)	44.2 (-16.2)	34.7 (+6.2)	3.2 (+2.4)	0.0 (0)	4.9 (+1.3)	12.5 (+6.4)	0.1 (-0.2)	0.0 (0)	100
East Asia and the Pacific	0.2 (-0.3)	1.3 (-0.4)	0.4 (+0.3)	41.8 (+6.0)	0.2 (+0.1)	33.0 (-10.0)	22.9 (+4.8)	0.2 (-0.1)	0.0 (0)	100
Latin America and the Caribbean	0.1 (0)	0.3 (0)	0.0 (0)	2.5 (+0.9)	22.9 (+12.2)	43.2 (-11.7)	30.9 (-1.4)	0.0 (0)	0.0 (0)	100
North America	0.4 (+0.1)	2.3 (+0.5)	0.1 (0)	15.4 (+6.4)	1.7 (-0.9)	39.1 (-0.6)	40.5 (-5.6)	0.5 (+0.1)	0.0 (0)	100
Western Europe	0.6 (+0.4)	3.9 (-0.4)	0.0 (0)	3.7 (+1.0)	0.2 (+0.1)	14.4 (+0.1)	77.2 (-1.0)	0.0 (0)	0.0 (0)	100
South and West Asia	0.8 (-0.4)	3.2 (-2.3)	1.8 (-0.1)	21.1 (+11.5)	0.0 (0)	45.7 (-5.2)	24.1 (-2.0)	1.3 (-1.4)	0.0 (-0.1)	100
Sub-Saharan Africa	1.0 (-0.5)	0.9 (-0.2)	0.0 (0)	4.1 (+2.4)	0.9 (-0.7)	17.4 (-2.0)	49.8 (-2.3)	0.8 (-1.2)	22.9 (+4.5)	100
WORLD	2.9 (+0.4)	7.1 (+0.1)	1.9 (+0.5)	18.4 (+5.0)	1.9 (+0.7)	23.7 (-3.2)	41.2 (-2.3)	0.4 (+0.1)	2.6 (0)	100

Notes: See the note to Figure 14 for the coverage of data.
Mobile students from a given region are expressed as a percentage of total mobile students from that region.
Data in parentheses refer to the change in percentage points since 1999.
Source: UNESCO Institute for Statistics, Statistical Table 9, 10 and UIS database.

Table 5 shows the mobile students by region of destination. The destinations of Sub-Saharan Africa mobile students are mainly Western Europe (49.8%), other Sub-Saharan African countries (22.9%) and North America 17.4%).

The UIS study further found that South Africa hosted 2.2% of all reported mobile students in 2007, making the country the eighth largest host country after USA (21.4%), UK (12.6%), France (8.8%), Australia (7.6%), Germany (7.4%), Japan (4.5%) and Canada (2.5%). South Africa's higher education institutions host many students from other African countries, especially neighbouring countries. Table 6 shows that the number of students from neighbouring countries studying in South Africa is increasing both in absolute terms, but also as a percentage of the total higher education enrolments in South Africa. Table 7 shows some detail of the Namibian higher education enrolments in South Africa. The average annual increase in Namibian students at higher education institutions in South Africa during the period 2001 to 2008 was 5.5%. The Namibian enrolments in South Africa in 2008 equal about 40% of the current public higher education enrolments in Namibia. The three most popular destinations for the 7 813 Namibian students studying in South Africa in 2008 were UNISA (41%), UNW (25%) and SU (8%).

TABLE 6: ENROLMENTS OF STUDENTS FROM NEIGHBORING COUNTRIES IN THE SOUTH AFRICAN HIGHER EDUCATION SYSTEM ACCORDING TO COUNTRY AND YEAR

Country	2001	2008
Botswana	4562	5194
Lesotho	1700	4098
Mozambique	437	892
Namibia	5357	7813
Swaziland	1206	3276
Zimbabwe	7097	17766
Total	20359	39039
% of HE students in SA	3.1	4.9

Source : HEMIS 2001 and 2008

TABLE 7: ENROLMENTS OF NAMIBIAN STUDENTS IN THE SOUTH AFRICAN HIGHER EDUCATION SYSTEM ACCORDING TO RACE, GENDER, STUDY LEVEL AND YEAR

Year		Race					Gender		Study level		Total
		Afr	Col	Ind	White	Unknown	Male	Fem	PG	Other	
2001	Number	3077	328	17	678	1257	2403	2954	1415	3942	5357
	%	57.4	6.1	0.3	12.7	23.5	44.9	55.1	26.4	73.6	100.0
2008	Number	3349	661	222	3560	21	3205	4608	1625	6188	7813
	%	42.9	8.5	2.8	45.6	0.3	41.0	59.0	20.8	79.2	100.0

Source : HEMIS 2001 and 2008

2. INTERNATIONAL TRENDS IN THE FUNDING OF PUBLIC HIGHER EDUCATION

2.1 Indicators to evaluate the extent of public allocations to higher education in a country

Higher education is jointly funded by the public sector (state funding) and the private sector. The state funding usually occurs by means of allocations from the Education or Higher Education Ministry to higher education institutions. The major part of an institutional allocation is not-earmarked block grants. The earmarked allocations usually include subsidies to financially disadvantaged students

or good-performing postgraduate students by means of bursaries, scholarships and loans. The private sector's funding of higher education is by means of tuition fees paid by households and the third income stream, consisting mostly of philanthropic funding, entrepreneurial funding and earmarked research funding. In calculating indicators measuring the extent of the funding of a country's higher education system, there are certain pitfalls in adopting a comprehensive approach of pooling the public and private funding of higher education. A significant part of the state-funded bursaries and loans to students in a particular year flows back to higher education institutions through "private" funding by means of student tuition fees. Furthermore, part of earmarked project research funding, generally considered as part of the third stream income of higher education institutions, which is not usually considered as an "educational responsibility" of the Minister of Education, originates from state departments (other than education departments) or state-funded agencies. Therefore, pooling public and private funding of higher education in the calculation of indicators of higher education funding could frequently lead either to double counting or to indicators not comparable between countries. The state (public) funding of higher education is therefore usually used as the driver in calculating funding indicators. This makes good sense, because it shows the country's official commitment to the higher education's cause. If the state's commitment is waning from year to year, perhaps as a result of more pressing or new priorities, higher education institutions come increasingly under fiscal pressure and have no alternative other than trying to secure more "private funding" in the form of tuition fees and third stream income.

The following indicators are internationally recognised as informative when the state funding of higher education in different countries is compared in a particular year or when the trend in the state funding of higher education over a specific time period is studied in a specific country.

- Indicator 1:* State allocation per higher education-enrolled student in country's currency or converted to USD by means of purchasing power parities (PPPs).
- Indicator 2:* State allocation per higher education-enrolled student as ratio of state allocation per primary education learner.
- Indicator 3:* State allocation per higher education-enrolled student as percentage of the gross domestic product (GDP) per capita.
- Indicator 4:* State allocation to higher education as percentage of GDP.

Note that if Indicator 1 is calculated in consecutive years over a period of time, it should be expressed in real terms, i.e. in the currency of a specific year. Furthermore, the definition of an enrolled student in Indicators 1-4 should preferably be standardised, if meaningful comparisons of state funding on higher education in different countries need to be made. Head-count enrolments should be avoided in calculations. The use of full-time equivalent (FTE) enrolled students, calculated by taking a student's study load into account, should preferably be used. Since distance tuition is also not as intensive from a teaching point of view, and not as expensive as contact tuition from a funding point of view, a weighting factor is needed to convert a distance FTE enrolled student to a contact FTE enrolled student. A disadvantage of using FTE enrolment numbers is that FTE numbers can only be calculated in the year following the specific academic year under consideration. In cases where FTE enrolled students are used in year n for determining funding allocations to higher education institutions for year n+1, it means that the FTE enrolled students in year n-1 provide the most up-to-date enrolment information. This lag in FTE enrolled student information of up to 2 years is a major disadvantage in the calculation of Indicators 1-3. It is a matter of concern that the two internationally renowned "flag ship" publications providing the above indicators, namely the Global Education Digest of the UIS and Education at a Glance of the OECD, do not give clear guidance on the matter of the measuring of enrolled students to be used in the calculation of Indicators 1-3. Many higher education institutions in most countries enrol distance-tuition students and/or part-time students. For the monitoring by

individual countries of state funding priorities regarding education as a whole, or higher education in particular, the following three indicators are also sometimes used:

- Indicator 5:* State allocation on higher education as a percentage of the total state budget;
Indicator 6: State allocation on higher education as a percentage of the total education budget;
Indicator 7: State allocation on education as a percentage of the total state budget.

Note the obvious relationship between Indicators 5, 6 and 7. If these indicators are calculated as ratios (not percentages), Indicator 5 is the product of Indicators 6 and 7.

2.2 Illustration of the use of the indicators defined in Section 3.1: The case of South Africa 1995-2010

Table 8 shows the calculations of Indicators 1 and 3 as defined above for South Africa for the time period 1995 to 2008. Note that a weighted FTE enrolled student (WFTEES) is used as enrolment unit in the two indicators. In this calculation of WFTEES contact FTEs are weighted by a weight of 1 and distance FTEs by a weight of 0.5. These are the weights used in the current calculation of the block grant formula allocations to higher education institutions in South Africa. Figure 8 shows a graphical representation of the two indicators.

Table 8 and Figure 8 indicate peaks for both Indices 1 and 3 during the period 1999-2001. This was the direct result of a sudden decrease in WFTEES during this period as a consequence of many Higher Education Institutions deciding to exclude students with large amounts of outstanding tuition fees. Since the state allocations for 1999, for example, were based (according to the so-called SAPSE subsidy formula used during that year) on student enrolments in 1996 and 1997, the real per capita expenditure suddenly increased significantly in 1999. The same holds for the years 2000 and 2001. It is evident, however, that a systematic decrease in relative funding as measured by both indicators occurred during the years 1999 to 2004. The years 2005 to 2008 show an increase in Indicator 1, but relatively constant values for Indicator 3. The increase in the state allocation per WFTEES during 2005-2008 therefore matched the increase in the GDP per capita.

TABLE 8: STATE ALLOCATIONS AND TWO RELATIVE MEASURES OF STATE ALLOCATIONS TO HIGHER EDUCATION IN SOUTH AFRICA FOR THE PERIOD 1995-2008 ACCORDING TO YEAR

Year ²⁾	State allocation to HE (Rm)	Weighted FTE students ¹⁾	State all. per WFTEES (R'000)	Ind 1: Real state all. per WFTEES (R'000)	GDP per capita (R'000)	Ind 3: State all per WFTEES as % of GDP per cap.
1995	4073	347207	10.8	14.871	13.92	77.3
1996	5207	357500	13.3	17.056	15.368	86.2
1997	5431	371986	13.1	15.495	16.699	78.3
1998	6000	371633	14.4	15.951	17.703	81.3
1999	6545	354978	20.2	21.325	19.001	106.5
2000	6978	347909	21.4	21.365	21.104	101.2
2001	7522	368690	21.3	20.146	22.899	93.0
2002	7924	389871	21.2	18.346	25.831	82.0
2003	8635	420459	21.4	17.492	27.631	77.3
2004	9182	440496	20.8	16.837	30.297	68.8
2005	10036	439854	22.8	17.826	33.176	68.8
2006	10930	434138	25.2	18.788	36.844	68.3
2007	12457	447701	27.8	18.495	41.544	67.0
2008	15065	460799	32.7	20.433	46.506	70.3

1) Contact FTE students weighted by 1 and distance FTE students weighted by 0.5

2) For 2003-2008 funds for institutional restructuring were excluded

Sources : Department of Education (2007), Ministry of Higher Education and Training (2009), National Treasury (2003-2010)

FIGURE 8: GRAPHICAL REPRESENTATION OF INDICATORS 1 AND 3 FOR SOUTH AFRICA 1995-2008

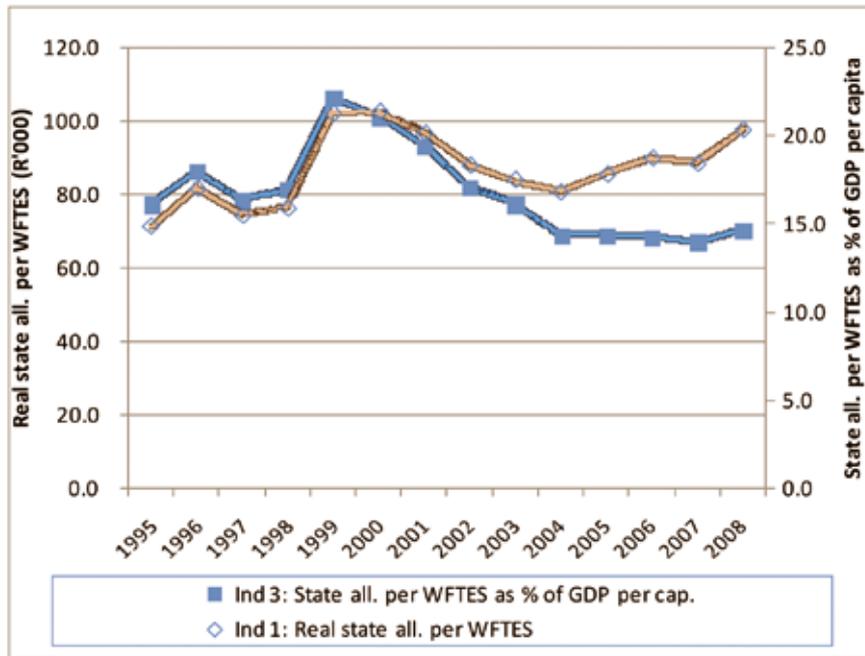


Table 9 shows the calculations of Indicators 4-7 as defined in Section 3.1 for the time period 1995 to 2010. The trends in the four indicators are shown in Figure 9. The following becomes evident from Table 9 and Figure 9:

- i. During the period 1996 to 2007, education's portion of the state budget (Indicator 7) decreased from about 24.0% to 18.3%. This is rather surprising and alarming, since the clients (pupils and students) in education had increased by about 5% during that period. Some stability and a slight increase in education's portion is, however, evident since 2007.
- ii. From 1999 to 2007, higher education's portion of the education budget (Indicator 6), as well as higher education's portion of the total state budget (Indicator 5) has decreased somewhat, but both indicators have stabilised since then.
- iii. The state allocation to higher education as percentage of the GDP (Indicator 4) decreased significantly from 0.82 in 1996 to 0.62 in 2006 and 2007. This indicator has increased significantly since 2007 and the provisional percentage for 2010 is 0.74. Note, however, that the economic recession since 2008, which caused a decrease in the real GNP, also contributed towards this increase.

It is clear that the state funding of higher education in South Africa decreased from about 1996 until 2007. Since then the situation has improved. Unfortunately the "additional" funding of higher education in South Africa since especially 2008 was all earmarked allocations (mostly for improving higher education infrastructure). Many higher education institutions have not benefited from these allocations. It is of some interest to mention that where the earmarked allocations to higher education institutions in South Africa represented only 13% of the total state allocations to higher education in 2004, this percentage has increased significantly to 22% in 2010.

2.3. Illustration of the use of the higher education state funding indicators: International comparisons

Using the individual countries indicator values, appearing in Statistical Tables 13 and 14 of UIS (2009), average values for world regions for Indicators 1, 2, 3, 4 and 7 were calculated by the

author for 2007. These indicator values are shown in Table 10. The regional averages, as well as the world averages, shown in Table 10 for the five indicators, are non-weighted values because it is difficult to decide on weights in respect of each indicator. These averages should therefore only be seen as indicative. Furthermore, it is clear that some regions' averages are based on only 2 or 3 countries. The most important conclusion drawn from Table 10 is that there are very significant differences between the regional averages in especially Indicators 1, 2, 3 and 4.

TABLE 9: STATE ALLOCATIONS TO HIGHER EDUCATION AND FOUR RELATIVE MEASURES OF STATE ALLOCATIONS (IND 4-7) TO EDUCATION AS A WHOLE, AND HIGHER EDUCATION IN PARTICULAR, IN SOUTH AFRICA FOR THE PERIOD 1995-2010 ACCORDING TO YEAR

Year ¹⁾	State allocation to HE (Rm) ²⁾	Totals tate budget (Rm) ²⁾³⁾	Total Education budget (Rm) ²⁾	GDP Rm ²⁾	Ind 5: State all. to HE as % of state budg.	Ind 6: State all. to HE as % of educ. budg.	Ind 4: State all. to HE as % of GDP	Ind 7: Education budg. as % of state budget
1995	4073	151385	33773	564164	2.69	12.06	0.72	22.31
1996	5207	175490	42068	635183	2.97	12.38	0.82	23.97
1997	5431	189948	44061	699822	2.86	12.33	0.78	23.20
1998	6000	201416	44880	757084	2.98	13.37	0.79	22.28
1999	6545	214750	46642	837240	3.05	14.03	0.78	21.72
2000	6978	233934	51052	951682	2.98	13.67	0.73	21.82
2001	7522	262905	55064	1048755	2.86	13.66	0.72	20.94
2002	7924	291524	61526	1198344	2.72	12.88	0.66	21.10
2003	8635	328709	69800	1288952	2.63	12.37	0.67	21.23
2004	9182	368541	75900	1415273	2.49	12.10	0.65	20.59
2005	10036	416760	83306	1571082	2.41	12.05	0.64	19.99
2006	10930	473789	95520	1767422	2.31	11.44	0.62	20.16
2007	12457	576760	105746	2017102	2.16	11.78	0.62	18.33
2008	15065	666800	127300	2283823	2.26	11.83	0.66	19.09
2009	17142	777725	148867	2423323	2.20	11.51	0.71	19.14
2010	19532	829606	165074	2641422	2.35	11.83	0.74	19.90

1) For 2003-2008 funds for institutional restructuring were excluded

2) Values for 2009 and 2010 provisional

3) Excluding debt service

Sources : Department of Education (2007), Ministry of Higher Education and Training (2009), National Treasury (2003-2010)

FIGURE 9: GRAPHICAL REPRESENTATION OF INDICATORS 4-7 FOR SOUTH AFRICA 1995-2010

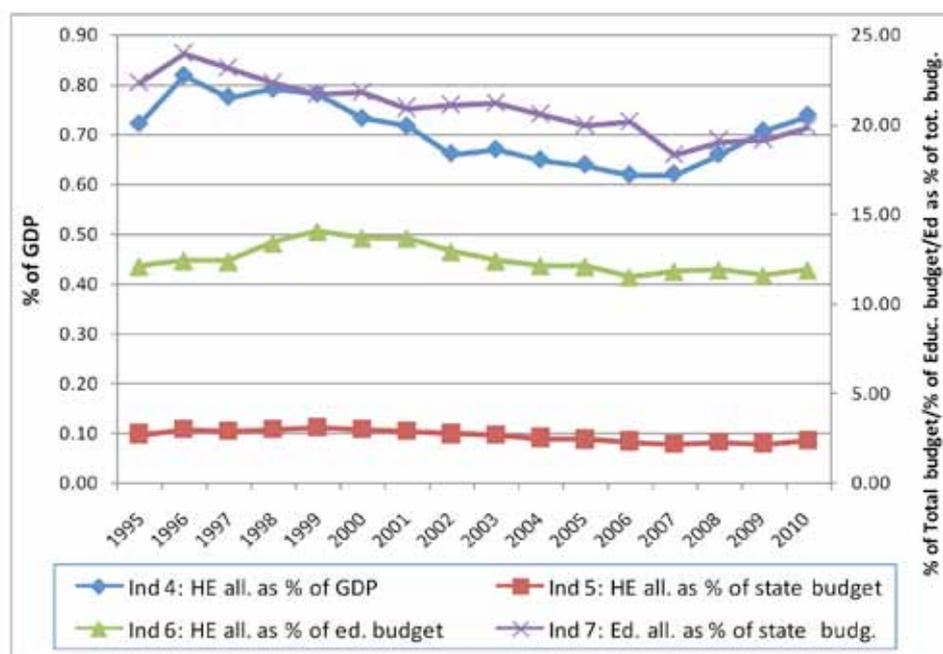


Table 11 shows the five indicators for the individual Sub-Saharan African countries which reported the indicators to the UIS in respect of 2007, as well as for twelve other influential (in the author's view) countries chosen to be relatively representative of the other seven regions. As expected, the fluctuations among the values of a specific indicator are even larger than the fluctuations among the regional averages. Comparing the indicator values of countries within Sub-Saharan Africa, e.g. Namibia with South Africa, or Namibia with other Sub-Saharan African countries, is important and interesting. While Indicators 1, 2 and 3 are all significantly higher for Namibia than for South Africa in 2007, the two countries' Indicator 4 values were the same. The fact that such a large contingent of Namibians are studying at higher education institutions outside Namibia could perhaps be the underlying reason for these differences.

Indicator 4 is perhaps the single most important indicator of State funding of higher education in a country. Based on Statistical Table 11 of UIS (2004) Steyn and de Villiers (2006) calculated that for 84 countries in 2001 the state expenditure as a percentage of GDP was on average 0.81. If this value is compared to the world average of Indicator 4 based on 101 countries in 2007, shown to be 0.84 in Table 10, it seems that there is some evidence that in global terms relative state funding of higher education did not deteriorate but probably increased somewhat between 2001 and 2007.

What has been the effect of the world-wide recession on the public funding of higher education since 2008? No comparable post-2007 global information in the form of the indicator values shown in Tables 10 and 11 is currently available. A special report of the University World News of March 2010 entitled Universities and the global crisis states: "Because higher education has emerged in most nation-states as a key and widely recognized driver of economic development and socio-economic mobility – many governments are protecting their higher education sectors from large cuts this fiscal year". The special report includes 17 country reports on higher education funding during the economic crisis. Some of these reports indicate major cuts of state subsidies, while others indicate no immediate plans to cut higher education subsidies. A correspondent from the USA writes that the "Great Recession seems poised to wreak lasting damage on one of the most successful models of higher education in the world". He continues: "The federal government's and state governments' cuts forced for example, the University of California Board of Regents to increase tuition fees in both 2009/10 and 2010/11 by 15%. The undergraduate tuition fee for the academic year starting in the autumn of this year will be \$10 302". The correspondent from the UK also indicates across the board cuts for all England's higher education institutions in the coming academic year.

TABLE 10: HIGHER EDUCATION FUNDING INDICATORS FOR 2007 ACCORDING TO WORLD REGION

World region	No. of ¹⁾ countries	Indicator 3	Indicator 1	Indicator 4 ²⁾	Indicator 2	Indicator 7
		State all. per HE stud as % GDP per cap	State all. per HE stud (\$PPP)	State all. To HE as % of GDP	State all. per stud Ratio (HE/Prim)	State all. on educ. as % of state budget
Arab States	5	41.5	8990	0.85	3.29	16.8
Central & Eastern Europe	11	25.1	3312	1.07	1.13	14.2
Central Asia	2	11.6	380	0.25	1.66	15.4
East Asia & Pacific	8	28.4	6217	0.61	1.93	16.5
Latin America & Caribbean	9	27.0	2190	0.83	2.14	14.0
North America & Western Europe	15	33.3	11577	1.05	1.64	12.0
South & West Asia	3	41.8	1468	0.70	3.53	17.7
Sub-Saharan Africa	14	165.5	2444	0.70	12.88	17.0
World average ¹⁾	67	56.3	6051	0.84	4.65	14.8

1) The world average is based on the indicator values of the individual countries.

2) These numbers only apply to indicators 1, 2, 3 and 7. 101 countries were used in the calculating the regional percentages in respect of Indicator 4.

Source: UNESCO 2009, Statistical Tables 13 and 14

Figure 10, which was compiled by the OECD (2009), shows the changes in real expenditure (public and private expenditure pooled) per student from 2000 to 2006 for 26 OECD countries according to educational level. Clearly total real expenditure has increased in all countries if primary, secondary and post-secondary (non-tertiary) education is considered. In some countries these increases were above 50%. As far as higher education is concerned only six countries' real expenditure per student had decreased. These increases in higher education, however, were not as substantial as was the case on the lower levels of education.

TABLE 11: HIGHER EDUCATION FUNDING INDICATORS FOR SUB-SAHARAN COUNTRIES, AS WELL AS SELECTED INFLUENTIAL COUNTRIES FOR 2007

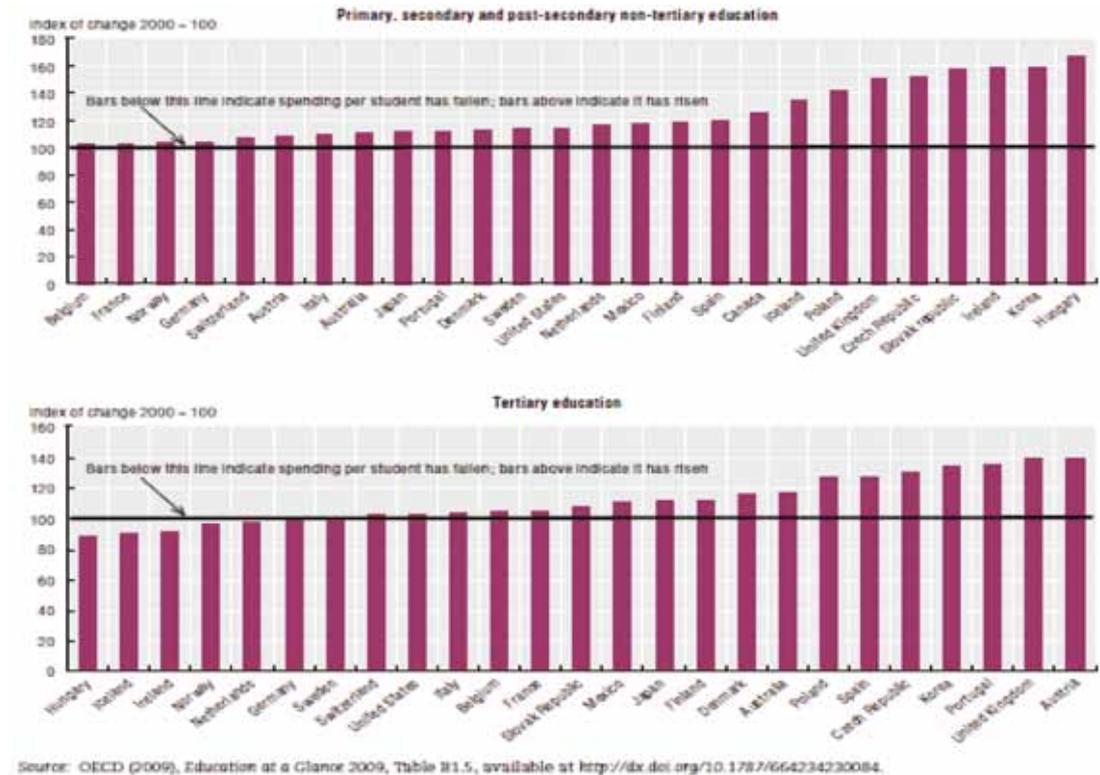
Country	<i>Indicator 3</i>	<i>Indicator 1</i>	<i>Indicator 4²⁾</i>	<i>Indicator 2</i>	<i>Indicator 7</i>
	State all. per HE stud as % GDP per cap	State all. per HE stud (\$PPP)	State all. To HE as % of GDP	State all. per stud Ratio (HE/Prim)	State all. on educ. as % of State budg.
World average	56.3	6051	0.84	4.65	14.8
<u>Sub-Saharan Countries</u>					
Angola	78.3	3472	0.2	21.2	
Benin	165.3	2082	0.5 (0.4)	12.3	18.0
Burundi	363.1	1160	0.8 (0.8)	18.2	17.7
Cameroon	126.3	2684	0.4	16.6	17.0
Cape Verde	24.7	752	0.2	1.6	16.4
Chad	348.2	5111	0.4	49.0	10.1
Madagaskar	145.2	1357	0.3	15.3	16.4
Mauritius	29.8	2969	0.6	2.9	12.7
Namibia ¹⁾	141.3	6409	0.6 (0.6)	6.6	
Senegal	218.6	3481	1.1	12.2	26.3
South Africa	63.9	3786	0.6 (0.66)	4.4	19.5
Togo	162.5	1314	0.5 (0.3)	16.6	15.8
<u>Other influential countries</u>					
United States of America	25.4	10616	1.0	1.1	14.8
United Kingdom	32.3	10060	0.9	1.7	12.5
Spain	23.6	6896	0.9 (0.9)	1.2	11.1
France	33.8	10741	1.1 (0.9)	2.0	10.6
Sweden	40.4	13759	1.4 (1.4)	1.6	12.6
Hungary	23.8	4324	0.9 (1.0)	0.9	10.4
Tunisia	55.9	3601	1.7 (1.5)	2.7	20.5
Australia	24.8	7709	0.9 (0.8)	1.4	
Japan	19.1	5779	0.5	0.9	9.5
Brazil	35.1	2977	0.8 (0.7)	2.3	16.2
Mexico	40	4867	0.9 (1.0)	2.6	
India	57.8	1162	0.6 (0.7)	6.5	

1) Values for indicators 1 and 4 refer to 2005

2) Indicator values in brackets represent corresponding values for 2002

Source: UNESCO Institute for Statistics 2005, 2009, Statistical Tables 13 and 14

FIGURE 10: REAL EXPENDITURE (PUBLIC AND PRIVATE POOLED) PER STUDENT IN 2006 AS PERCENTAGE OF REAL EXPENDITURE PER STUDENT IN 2000 FOR 26 OECD COUNTRIES ACCORDING TO LEVEL OF EDUCATION



3. THE IMPACT OF CHANGING FUNDING SOURCES ON HIGHER EDUCATION INSTITUTIONS

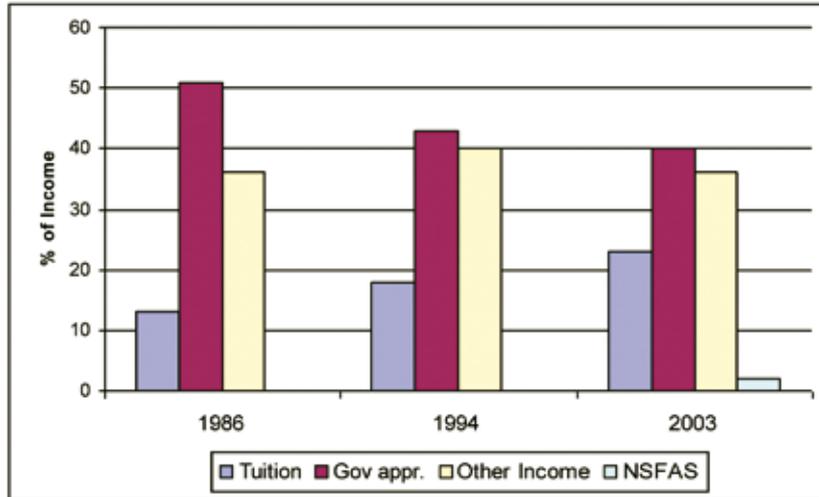
3.1 The composition of income of higher education institutions

It was indicated in Section 1 that most higher education institutions are under fiscal pressure and are therefore exploiting third income stream opportunities. Since this is easier said than done, the first resort of higher education institutions when faced by budget deficits is to raise the tuition fees. It is therefore obvious that the composition of income (in terms of the different income streams) of most higher education institutions had been changing over the last one or two decades. Information on the composition of the income of the higher education sector in different countries, and therefore also the changes in the composition of the income, is not readily available.

Steyn and de Villiers (2006) did a comprehensive study of the trends in the composition of the different sources of income of higher education institutions in South Africa for the period 1986 to 2003. This study was done for the Council on Higher Education (CHE) in South Africa and focused on the impact of changing funding sources on higher education institutions. At the request of the CHE different groups of higher education institutions were studied for the period 1986 to 2003. Figures 11 and 12 show, respectively for the so-called historically advantaged and historically disadvantaged universities, that government's contribution (first stream income) to the total institutional income decreased significantly for both groups of universities. The contribution of the second stream income, namely tuition fees, however, increased markedly over the study period. For both groups of universities no clear trend was evident as far as the third stream income was

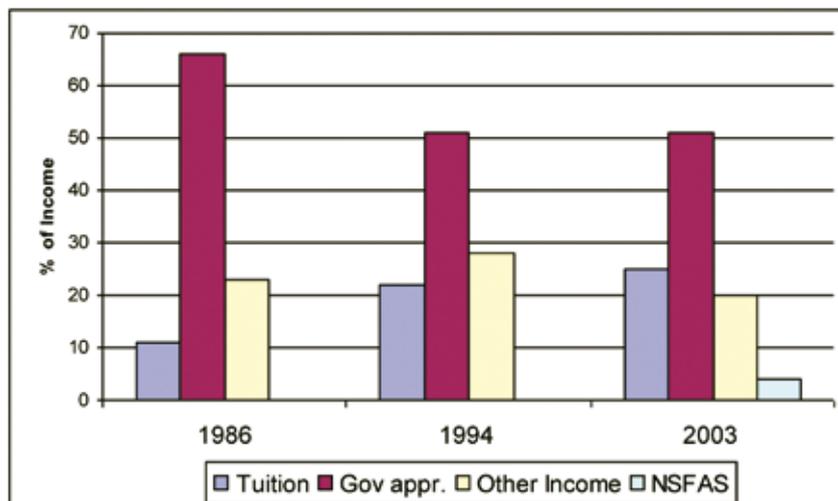
concerned. Note that state allocations towards the National Student Financial Aid Scheme (NSFAS), also shown in the two figures, was still relatively small in 2003 and did not significantly influence the trends in the other income streams.

FIGURE 11: COMPOSITION OF INCOME OF HISTORICALLY ADVANTAGED SOUTH AFRICAN UNIVERSITIES ACCORDING TO SOURCE OF INCOME AND YEAR



It is important to note that the government’s appropriation, by means of block grants and earmarked allocations, were significantly larger percentage-wise in all three reported years for the historically disadvantaged higher education institutions than for the advantaged higher education institutions. The main reason for this is obvious. The historically advantaged higher education institutions secured more third stream income, mainly in the form of research contracts, profits on investments, donations and gifts (see Section 4.4) than the historically disadvantaged higher education institutions. For both groups the contribution of tuition fees increased from about 11% of total income of the higher education institutions in 1986 to 24% in 2003. Similar trends, especially for the increase of the tuition fees’ contribution, were found by Steyn and de Villiers (2006) for the same period for respectively the historically advantaged technikons and the historically disadvantaged technikons. Note that technikons are now known as universities of technology in South Africa.

FIGURE 12: COMPOSITION OF INCOME OF HISTORICALLY DISADVANTAGED SOUTH AFRICAN UNIVERSITIES ACCORDING TO SOURCE OF INCOME AND YEAR



A similar analysis was done by Higher Education South Africa (HESA) (2008) as part of a study of tuition fees of higher education institutions in South Africa for the years 2000-2004. Figure 13 shows the results and confirms the trends for 1996-2003 as depicted in Figures 11 and 12. An update for 2007 of the proportions of the three streams of income jointly for 23 higher education institutions in South Africa is:

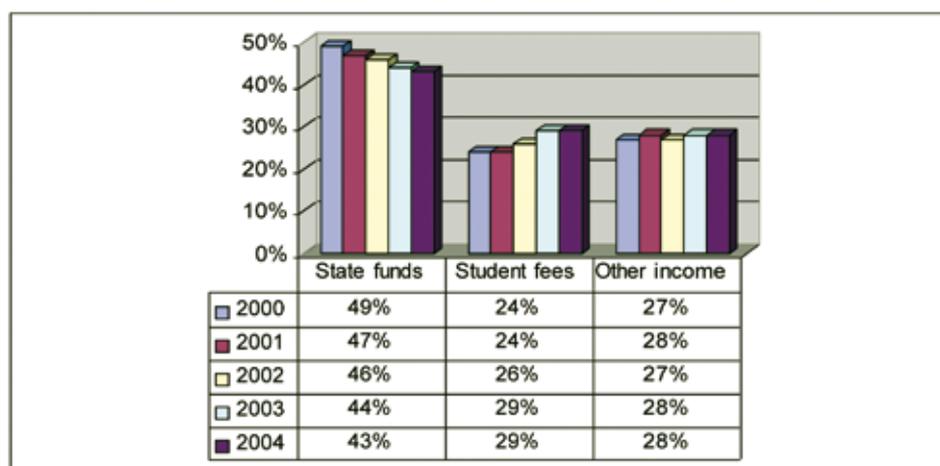
TABLE 12: PROPORTIONS OF THE THREE STREAMS OF INCOME JOINTLY FOR 23 HEIs IN SOUTH AFRICA

Source of income	Proportion in 2007
State allocation	43%
Tuition fees	24%
Other income	33%

Source: Department of Education (2007a, 2007b)

These proportions are based on the financial statements of the 23 higher education institutions provided by the Department of Education (2007a, 2007b). Note that, in calculating the proportions, NSFAS allocations were excluded from the state allocations to higher education institutions to avoid duplication of income.

FIGURE 13: PROPORTIONS OF INCOME OF PUBLIC HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA FROM MAIN SOURCES ACCORDING TO YEAR

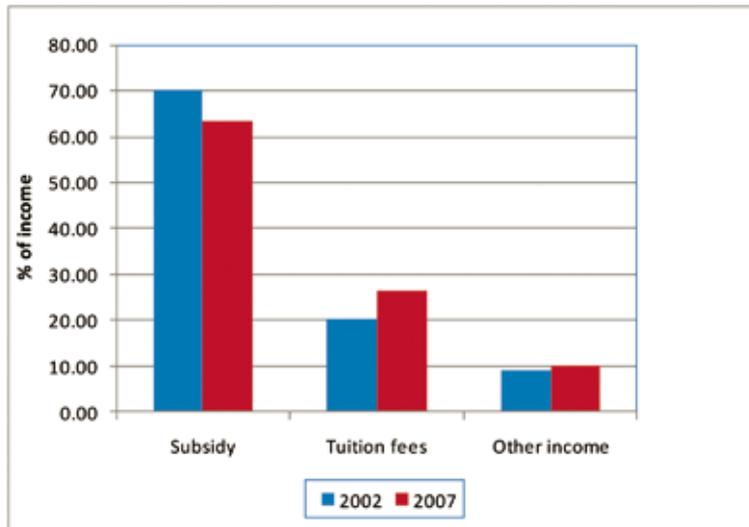


Source: HESA (2008) based on HEMIS data provided by Department of Education (2007)

The proportions of the three sources of income in 2007, when compared with the information for 2004 appearing in Figure 13, show a significantly lower tuition fees contribution and a significant increased third income stream contribution. It is not clear, however, whether NSFAS allocations were also excluded from state allocations when the proportions in Figure 13 were calculated in the HESA study. If not, the proportions in 2007 are not directly comparable with the proportions during the years 2000 to 2004.

According to a study of third stream income of higher education institutions in South Africa, conducted in 2009 by the Centre for Higher Education Research, Teaching and Learning at Rhodes University, the (non-weighted) average third stream income of the 23 universities in South Africa increased by 5 percentage points from 2004 to 2007. This is in line with the result above, which indicates that the university sector in South Africa as a whole had increased its third stream income from 28% in 2004 to 33% in 2007. The Rhodes University study shows, however, that some universities' third stream income is still extremely low. According to this study, one institution had a third stream income contributing only 5% to total institutional income in 2007.

FIGURE 14: COMPOSITION OF INCOME OF UNIVERSITY OF NAMIBIA AND POLYTECHNIC OF NAMIBIA CONSIDERED JOINTLY IN 2002 AND 2007 ACCORDING TO SOURCE OF INCOME



Sources: Sheppard et al (2009)

What is the situation in Namibia as far as the composition of income at higher education institutions is concerned? Figure 14 shows the outcome of an analysis of the contributions of the three streams of income to total income when the information on income of the University of Namibia and the Polytechnic of Namibia are pooled for the years 2002 and 2007 (See Sheppard et al (2009)). Clearly there was a decrease of the state subsidy contribution during this period, while the tuition fee contribution rose from about 20% to 26% during the same period. We will refer back to this result in Section 4.2.

3.2 How much do higher education students pay in terms of tuition fees?

Since personal employment income is significantly enhanced by higher education, it is a well established fact in most countries that higher education cannot be funded solely by government with tax payers' money for the public benefits derived from higher education by the public. Individual students should also contribute to the cost of higher education in a significant way. Figure 15 shows that this concept of "paying for higher education" was not globally accepted, at least in 2006, since eight of the OECD countries which reported their average fees per student in that year did not show tuition fees income. Figure 15 further shows large fluctuations in the average tuition fees per student in the countries where higher education tuition fees were collected annually in 2006. Annual fees up to 5000 USD were paid. In South Africa the average tuition fee income per WFTEES for the higher education sector was R14 186 (about 2 026 USD) in 2006. This average income increased in 2007 to R14 791 and in 2008 to R16 647, which represented respectively a 2.6% real decrease and a 0.9% real increase in tuition fee income per WFTEES for 2007 and 2008. The decrease in real tuition fee income for 2007 was probably the result of some warning signals given by the South African Minister of Education during 2006 that government is prepared to cap tuition fees at higher education institutions by legislation, if institutions continue with the practice of annually raising tuition fees in real terms.

The average tuition fee income per FTE student in Namibia (UNAM and PoN jointly) was N\$6 555 (about 936 USD) in 2006. This average income increased significantly in 2007 to N\$7 833, a real increase of about 12%. This partly explains the increase in the contribution of second stream income in Namibia as depicted in Figure 14.

FIGURE 15: AVERAGE TUITION FEES (USD) OF FULL-TIME STUDENTS IN PUBLIC HIGHER INSTITUTIONS FOR 21 OECD COUNTRIES IN 2006



Source: OECD (2009), Education at a Glance 2009, Table B5.1a, available at <http://dx.doi.org.10.1787.664366467748>

3.3 Student financial aid

While higher education tuition fees are collected in most countries, it is very important to ensure that as far as possible no secondary-school leaver with the ability and enthusiasm for higher education study should be excluded from higher education for financial reasons. There should therefore be an efficient financial aid scheme for prospective higher education students to prevent financially disadvantaged students from being excluded. Although governments usually have the responsibility to initiate an aid scheme, such schemes are better run by statutory agencies functioning independently from central state departments. Most governments annually contribute directly to financial aid schemes, or in an indirect way by means of earmarked allocations to higher education institutions for the specific purpose of student aid. The aid schemes usually consist of bursaries, grants and scholarships to individual students, usually studying on the postgraduate level, or repayable or partly repayable loans to undergraduate students. Tax-related benefits for families of students in higher education are another way of providing financial aid.

OECD countries spent 19% of the total public allocation to higher education in 2006 to support students financially (see OECD (2009)). In the same year 7.3% of the state allocation to higher education in South Africa was earmarked funding to the respective higher education institutions in South Africa to be used for the allocation of loans within the framework of the National Student Financial Aid Scheme (NSFAS). This state allocation has increased annually since then and is 10.3% of the total state allocation in 2010.

Globally, student financial aid schemes face many thorny issues. Some of these are:

- i. What should be the role of the state in the scheme?
- ii. Who should qualify for a bursary or loan?
- iii. If a means test is conducted to determine the financial capacity of a student's family or the size of the loan for which a student qualifies, how should the test be constructed and conducted?

- iv. What is the best way to recover loans, e.g. income-contingent repayments (mandatory or optional payments), mortgage-type repayments, or payments by means of tax deductions?
- v. What should be the rules for the conversion of loans or part of loans into bursaries in the case of well-performing students?
- vi. What interest should be charged on outstanding loans?

For further reading on the general aspects of grants and loans to higher education students, see Salmi and Hauptman (2006) and Woodhall (2007). An evaluation of the National Financial Aid Fund (NSFAF), introduced in 1996 in Namibia, as well as some proposals for the improvement of this scheme, is discussed in Sheppard et al (2009).

It is important and informative to discuss as a case study the NSFAS of South Africa in more detail. According to Woodhall (2007), South Africa's NSFAS, with an income-contingent recovery system, has gained the country recognition as one of the few developing countries with a successful student financial aid scheme. This scheme has a long history. It started in 1990 as one of the projects of the Independent Development Trust (IDT), but was officially transformed in 1993 to the Tertiary Education Fund of South Africa (TEFSA). TEFSA was registered as a not-for-profit company in terms of Section 21 of the SA Companies Act. The NSFAS was established in 1999 by law according to the NSFAS Act (Act 56 of 1999). The NSFAS incorporated TEFSA and some smaller loan schemes. In 2007 the NSFAS also took on the responsibility of managing the loans and bursaries of the Further Education and Training (FET) sector of South Africa. In 2009, 10 years after it was established, it became clear that, although the NSFAS was apparently functioning relatively well, it did not completely fulfil the expectations of needy students. The Minister of Higher Education and Training of South Africa therefore appointed a Ministerial Committee in June 2009 to review the NSFAS. Many of the "thorny issues" referred to above formed part of the terms of reference of the Ministerial Committee. The Committee completed their report early in 2010 and the Minister of Higher Education and Training distributed the report to stakeholders for comment in March 2010. Some of the important findings of the Committee are listed below:

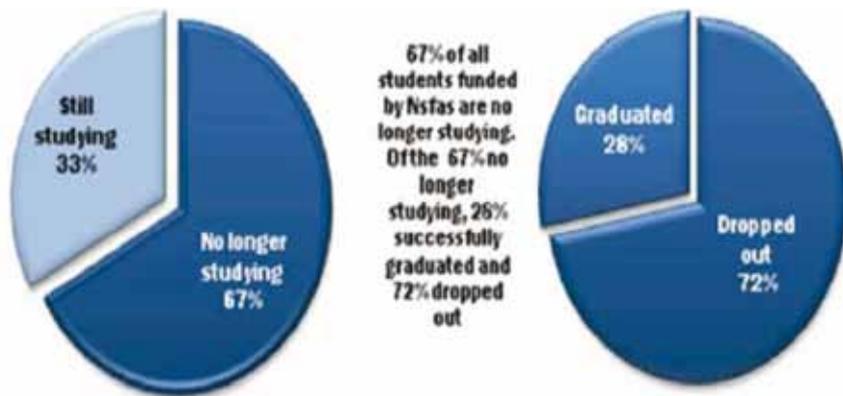
- The NSFAS provided financial aid to 659 000 students since 1999. The NSFAS distributed R12 billion in student financial aid since 1999.
- The dropout rate of NSFAS students is alarmingly high (see Figure 16). The main reason for this high dropout rate is the fact that NSFAS allocations as a percentage of the full cost of study (FCS) at the respective institutions, which was on average R43 358 in 2009 for the 23 higher education institutions, ranged between 25% and 75%. Nineteen of the 23 higher education institutions allocated less than 50% of their FCS in terms of annual loans to NSFAS students in 2009.
- There was a steady increase in NSFAS income annually. The income was R441m in 1999 and increased to R3 291m in 2010. The 2010 income consists of state allocations of R2 455m (HE and FET jointly), R731m in recovered money and interest, as well as R104m from other funding sources (including private sector funding).
- In 2008 NSFAS provided aid to 17 percent of all higher education students.
- The race-based allocation formula to distribute the state NSFAS allocations to Higher Education Institutions should be abandoned, since race is no longer a proxy for poverty.
- The annual family income upper threshold of R122 000 (in order for a student to qualify for a NSFAS loan) is too low. This results in a high percentage of students unable to afford HE, the so-called "missing middle" group.
- Although there are some important management and administrative strengths in the NSFAS which should be lauded, there are also important shortcomings, especially as far as the governance of the NSFAS is concerned.

- Perhaps the most important finding, as suggested by the above points, is that the annual allocation to the NSFAS is totally inadequate to provide for student needs annually. On average in 2008 only about 42% of FCS was funded in the higher education sector by NSFAS loans. Different cost scenario models show that in “a modest but realistic scenario”, where it is assumed that the gross enrolment rate will increase to 20% by 2020, while full-cost allocations will be provided to the poorest 14% of the higher education students, the total cost for higher education student financial aid should have been R5.3bn in 2010 (compared to the actual R2.2bn awarded in 2009). This cost will increase to R6.6bn (in 2009 prices) in 2020. The most extreme scenario, namely where the GER for higher education increased to 24% in 2020 and 40% of the higher education students qualify for full- cost allocations, will lead to a total cost of R22.7bn (in 2009 prices) in 2020. The outcomes of the nine cost scenarios are summarised in Table 13.

The Ministerial Committee proposed that a new higher education student aid model for the NSFAS should be comprised of three components aimed at different segments of the higher education student body:

- Component 1: Full state subsidy of poor students and those from working-class backgrounds, to be progressively realised over a specific period;
- Component 2: An income-contingent loan scheme for the children of public sector employees, earning salaries up to R300 000 per annum, funded by the Government Employees Pension Fund (GEPPF);
- Component 3: Income-contingent loan scheme funded by the state or other state agency for students from lower-middle-income families.

FIGURE 16: NSFAS STUDENT DROPOUT RATE SINCE 1999



Source: Report of the Ministerial Committee on the Review of the NSFAS (2010)

TABLE 13: ESTIMATES FOR FULLY SUBSIDISED HE STUDENTS WITH VARYING GER AND VARYING PERCENTAGE OF POOR STUDENTS

Participation Rate (%)	% of poor or working class students	Estimated Cost in 2010 (R. bn)	Estimated Cost in 2020 (R. bn)
17	14	5.2	5,6
	25	9.2	10.0
	40	14.8	16.0
20	14	5.3	6.6
	25	9.5	11.7
	40	15,2	18.7
24	14	5.5	7.9
	25	9.8	14.2
	40	15.7	22.7

Source: Report of the Ministerial Committee on the Review of the NSFAS (2010)

3.4 The third stream of income

It has already been indicated that higher education institutions worldwide are pressurised to extend their so-called third income stream, i.e. their income excluding allocations by the state for general or earmarked purposes, or payments by students/households by means of tuition fees. This is becoming especially crucial in countries that experienced cuts in the state allocations to higher education as a result of a reprioritisation by government, or as a result of the economic recession since 2008 (see also Section 3.3 in this regard). It was indicated in Section 4.1 that the third stream income of higher education institutions had increased substantially in South Africa during the last two decades and comprised about 33% of total income for the higher education sector in 2007. Figure 14 shows that the joint third stream income at the two public Namibian higher education institutions is also increasing slowly. The contribution of this income stream was 10% in 2007. According to Steyn and de Villiers (2006), third stream income universally originates mainly from the following three sources:

- *Philanthropic funding:* Donations by alumni or other individuals and endowments by private sector companies; in many cases only the proceeds of the investments from the donations and endowments are used annually;
- *Entrepreneurial funding:* Selling the institutional knowledge by means of consultancy, contract research and short (not-subsidised) courses, e.g. language teaching courses and continuous education courses, or providing services for payment, e.g. library services and data networks services;
- *Earmarked research allocations:* These allocations are usually made by state departments or state agencies (separate from the higher education allocation for general purposes made by the Education Ministry) on a competitive basis to fund specific research projects undertaken by selected researchers.

According to Weiler (2000), there are some potential problems when the market becomes the third player (government and the institution being the first and second) in higher education. External funding such as contract research being performed for the private sector could compromise institutional priorities. It is important to ensure that direct and indirect costs are covered in these contracts and that the institutions' long-term capabilities, including the training of young researchers, are not eroded. An example of contract research which is beneficial to both the institutional and the third player's interests is research done by masters' and doctoral students to fulfil the theses requirements of their formal studies.

Although all the different streams of income should be included in higher education institutions' financial statements, it is frequently difficult to disentangle the sizes of the contributions to the third income stream associated with especially entrepreneurial activities. According to the Rhodes University study already referred to in Section 4.1, the percentage distribution in 2007 of the various sources of third stream income of South African Universities with third stream income exceeding 30% of total income is as indicated in Table 14.

TABLE 14: DISTRIBUTION OF THIRD STREAM INCOME SOURCES FOR UNIVERSITIES IN SOUTH AFRICA WITH THIRD STREAM INCOME > 30% OF TOTAL INCOME IN 2007 ACCORDING TO SOURCE OF INCOME

Source of income	% of third stream income
Contracts (private and competitive research projects)	34
Profit from investments (long term)	21
Sales of services (e.g. renting and short courses)	18
Interest and dividends (short term)	15
Donations and gifts	9
Other	3

The popular view is that the third stream income is of major importance to a higher education institution since it could be used to balance the budget if a deficit is encountered on the budget as a result of insufficient first and second stream income. This view is mostly incorrect, since third stream income is usually earmarked for specific projects or purposes. Even investment income is mostly ring-fenced, e.g. as bursaries for students enrolling for specific academic programmes. However, with proper planning some third stream income can be used effectively to enhance especially the academic capacity of an higher education institution. Examples of this are the acquisition of state of the art laboratory equipment as part of a research contract, which could then also be used in future on a broader level; and the creation of high- level specialised academic expertise as a result of the involvement of postgraduate students and academic staff in contract research funded by private companies or by state departments and state agencies on a competitive basis.

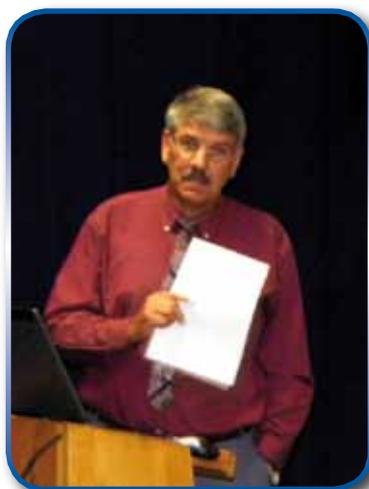
It is also important to acknowledge that many universities are increasingly engaged in community interaction projects as part of their line function activities. Although these projects are usually geared towards the upliftment of some part of society they are also a useful way to promote the image of the institution. Third stream income ensuing from these activities is usually not very significant".

4. SUMMARY AND CONCLUDING NOTES

In his concluding remarks, Dr. Steyn stated that the paper was meant to be an overview of global trends in student participation and funding of higher education, hence academically definitive conclusions are not possible. However, he pointed out that the following points were of interest:

- Since 1970 global enrolment in higher education has increased much faster than the world population. Sub-Saharan Africa's average annual growth rate in higher education enrolments is the highest of all world regions, but higher education enrolments in Sub-Saharan Africa still only comprised 3% of all higher education enrolments in the world in 2007.

- The GER of Namibia was 6% in 2007. This is the same as the average GER for Sub-Saharan African countries in 2007, but much lower than South Africa's GER of 15% and the world average of 26% in the same year. The relatively low GER for Namibia is the result of the high percentage of Namibian students enrolled at higher educationls outside Namibia.
- Many indicators can be defined to measure the public or state funding of higher education for a country in a given year. The most prominent indicator is perhaps Indicator 4 defined in Section 3.1, namely the state allocation to higher education as percentage of GDP. Although the South African case study for the period 1995 to 2010 reveals a definite decrease in Indicator 4 for the period 1999-2007 (and also for other measures of higher education funding), this was apparently not a worldwide phenomenon. The average value of Indicator 4 for 84 countries around the world was 0.81 in 2001, while the average value of Indicator 4 for 101 countries was 0.84 in 2007. This result, as well as other measures calculated for the OECD countries and highlighted in this overview, show that although some countries could have experienced a downward trend in relative higher education funding during the period 2000 to 2007, this was definitely not a worldwide trend. It seems, however, that the current worldwide economic recession, which started in 2008, is currently eroding state higher education funding in some countries. It is still too early to determine the extent of this phenomenon.
- Most countries accept the need for private funding of higher education in the form of student tuition fees. In most countries the state takes the responsibility of ensuring that no student with the ability and enthusiasm for higher education study should be excluded from enrolling by making a contribution towards student financial aid schemes. The case study of the NSFAS of South Africa shows that student financial aid is very complex to manage and has many pitfalls. It is especially important to ensure that the size of a loan awarded to a student should at least cover a substantial part of the full cost of his/her study.
- Although generally state allocations to higher education sectors in the different countries kept track with the growth in the economies of the countries and the tuition fees also mostly kept track with inflation, the quest for a significant increase in third stream income gathered momentum at most universities around the world during the last decade. Why did this happen? The answer to this question could be that a substantial third income stream makes it possible for an higher education institutions to increase its academic standing, as far as both teaching and research are concerned. More technologically advanced equipment can be acquired, more renowned academic staff can be appointed, and more scholarships for the best postgraduate students can be set up by using third stream income.



Dr. Gert Steyn concluding his presentation

Dr. Steyn further stated that higher education can only be successful if there are committed academic staff, managers and students. The funds and many enrolments contribute to this success, but it is the people who actually count.

Session FOUR

QUESTIONS AND ANSWERS

What follows are questions and/or comments from the floor and answers/responses from the presenter. In every case a verbatim version of the transcript forms the basis of this section. Questions from the floor have been grouped, i.e. A, B, etc., with responses from the speaker following the questions, to make proceedings more reader-friendly.

In response to Dr. Steyn's presentation, the following key comments, concerns and/or questions emerged:

A "I just want to know, generally in South Africa, what are the statistics in terms of the funding of private higher education institutions?"

"In South Africa, private higher education institutions are not funded by government, thus there are no statistics for that". There are also no loan funding for students at private higher education institutions, thus the state does not fund students studying at private higher education institutions. Private higher education institutions do not form a large part of the higher education sector in South Africa compared to the public institutions, but you know, not even the enrolment data is being completed, so I cannot provide you with any statistics."

B "The state funding to students, is it in the form of loans or bursaries?"

"The South African government is only contributing to the National Student Financial Aid Scheme (NSFAS) via the universities. The allocation of funds is done according to a race-based formula that indicates how much should be given to each university. Universities should work within the framework of the NSFAS to award loans to the students. It is part of the allocation to the university, but a certain portion is earmarked for students. Universities are the agents for the NSFAS and they are awarding the loans according to the rules of the NSFAS. The NSFAS is actually established by an Act of Parliament (Act No. 56 of 1999). There is quite a lot of administrative governance issues that was part of the reason why the NSFAS was actually investigated, but the main problem indicated that the funds are not adequate. Only R3, 291million was allocated to the NSFAS in 2010 for the universities sector, but about R31, 400 million is also allocated to what we call the first educational training sector."

C "You indicated three streams of possible funding for higher education. I would like to add the fourth and that is, education tax. Secondly, across the globe the definition of higher education differs. The definition of higher education in Namibia is not the same like in South Africa. But you did not define higher education. Thirdly, I disagree that the allocation of loans are public funding. Loans are 100% repayable and as long as they are to be paid back, they cannot be regarded as public funding".

"Education tax is actually applicable to graduates and is an addition to the usual income tax. If you are a graduate and you were subsidized by the state, you are required to pay tax on the loan amount. This type of tax is used in some countries. Now, for your other question; I just used private as a compliment of public. It could consist of various types of funding, and you are correct. It could be a private household that is paying the fees or a big organization sponsoring a university, either a public university or a private university. The definition of higher education, I have not dealt with, but in the UNESCO publication there is a specific OECD definition that is widely used. It is true that there is no generally accepted definition of what higher education ought to be and we must be careful when we define higher education."

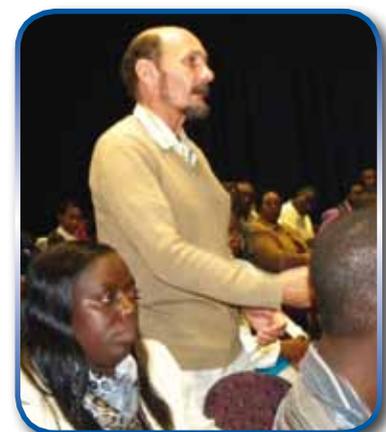
D. "In your lecture, you made mention of differences, characteristics, etc. of blacks, coloureds, whites, and so forth, in South Africa. Considering that the majority of the South African youth are blacks and with regard to the differences and so forth, how do we move forward in terms of access. I also have a few comments: I do not think higher education can be regarded as a private good. There have been numerous debates whether higher education is a private or a public good. I believe higher education is a public good, because when a graduate obtained a qualification from an institution, he/she develops himself/herself and he/she equally is a member of the society that he/she will help develop. And therefore, being a public good, government should fund it. As regards the 70% of dropouts, it justifies what students always say, especially in South Africa and Namibia, that governments need to fund students fully or just keep their money. I think you would agree with me."

"The major part of the loan is allocated to African students at present, but the proposal is that the race-based formula must be abolished. However, the funds allocated to the universities for the last 10 years, were calculated on the basis that an African student is counted as allocated rate three (3), a Coloured as rate two (2), an Indian as rate one (1) and Whites as rate zero (0); and that is how the funds were actually distributed. So, a university like Stellenbosch with 60% white students received, for example, 10% of the funds while the University of Kwa-Zulu Natal received more than that. Thus, more funds went to the African student. But things have changed in SA. There is quite a lot of White and Indian students with low household incomes and that is why the Administrative Committee proposed that only the family-income must determine whether the student is eligible for a loan and not the colour of the skin. On the issue of public good and private good, I differ with you. If you obtained an engineering degree, you are going to earn, according to the statistics, a salary that is three to four times higher than that of a person who is not educated by the state. So, you pay now for what you are going to earn later. If you do not have the money, you can obtain a loan from the bank or the state but, of course, many cannot get a loan from the bank because they are not credit worthy."

E. "I also want to add something to the characteristic of higher education as a private good. It seems to me that the proposed funding formula leans heavily in favour of government funding for its own and immediate benefit. Sometimes this kind of notion translates into jobs created by governments and the kind of expertise required by the public sector. I think that such perceptions result in skewed funding of higher education by governments."

"If you are referring to the draft proposed funding formula, there is no indication that the government can decide on the number of students enrolled, or where they should enrol. The formula is used for the allocation of funds. The major fields of study are one of the factors determining the amount of money to be allocated to an institution which is about 40%. The government cannot decide how many students an institution should enrol and it can also not determine the allocation according to that."

F. "I have some very brief comments. Firstly, this is a very interesting debate; the debate on what constitutes a public good and what constitutes a private good, and by extension, what constitutes the public sphere and the private sphere. It is one of the perennial questions that have not been resolved by the philosophers. Pre-eminently, one can still argue that higher education particularly, should be considered a public good for the reasons that you also provided. But you can consider it also from a philosophical point of view as a private good. For example, one can pose questions such as: Who determines relevance, and what is the relevance of higher education? The whole debate is much more complicated, because there are different types of relevance in higher education. Certain kinds of relevance are absolutely private, some are even personal.



**Prof. André du Pisani
making some observations**

But what I think is fundamental in all these discussions, is the construct of justice rather than equity or equality. The fundamental question of justice is the fundamental issue. How do we see social justice, historical justice and so on? People debate funding formulas, you know, people are offering these different funding formulas and they are very important for policy perspectives, but we do not debate justice and that is what we need to talk about.”

“I agree with you on the relevance of higher education, social justice, and so forth, but since that is not my field, I am not in a position to give my personal view on that.”

G. “I want to follow up on the element of justice. If you look at many legal instruments we have in this country, and also in various other countries, particularly with reference to the Namibian Constitution, there is no mention of tertiary education per se. Now in your view, do you think perhaps it would benefit us if we have to define tertiary education in terms of the human rights concept? In Namibia, the recovery of loans from the graduates has been proven to be challenging. Now, with reference to what is happening in South Africa and perhaps in other parts of the world, what are the legal instruments in place to bring better results to this exercise? And my last question is, looking at the gross domestic product of both Namibia and South Africa, and also the current rate of loan allocation; is it really possible for us to be able to give “free” loans to students looking at the factual economic situation of the two countries?”

“The recovering of loans is very tricky in SA. We have the income contingent recovery scheme; and by law, repayment of loans starts when an individual is in full-time permanent employment and his/her salary is at least R26,300, which is considered the threshold level of income. The repayment rate starts at 3% to 8% of the salary. But that law was challenged by some of the students because the common perception is that it is against the Constitution. So, the proposal of the Ministerial Committee is to look at the tax recovery, but not the contingent scheme. So, I cannot say what will happen, but all the Acts must be reviewed, that is for sure. Fourteen percent (14%) of the students receiving loans do not pay it back. Eventually, it will cost the government R5 billion and the government is only budgeting R2,2 billion. If the enrolment rate increases to 24% and the percentage (14%) of those who do not pay back, increases to 20%, then in 10/20 years, in real terms that R5 billion will escalate to R20 billion. This is not economically viable in SA; perhaps ¾ billion is, but not 5 to 20 billion. I think the same applies to Namibia.”

H. “Does the draft funding formula proposal cater for students with disabilities. What criteria do you use to allocate funds to students with disabilities. In terms of higher education being viewed as either a public good or private good, my opinion is that higher education could be viewed as a private good; a private benefit. When you look for instance at a lawyer who earns a salary four times higher than that of a clerk, it is obvious that the lawyer will be in a better position to afford good quality services. I would therefore, classify higher education as a private benefit and not as a public benefit.”

“I do not know about any funding formula that can go to that level, there is no formula that is based on, for example, gender (male/female) and so on. It is true that students with disabilities are a challenging factor to the institutions and there are some costs involved to make a campus user-friendly for them. These costs are reasonable and government takes note of that. But students with disabilities form a very small proportion, perhaps 0, 5% of the total student population and I think all the institutions have the same percentage of students with disabilities. I think the issue of catering for students with disabilities, is overlooked, because learners are sometimes not sure whether they will have the opportunity to pursue further studies. South African universities actually invite students to indicate their disabilities but it is, first of all, difficult to classify disabilities. There is a standard classification; and not all disabilities have a negative effect on studies. If the disability has a negative effect on studies, there are specific practices in place to accommodate the student, for example, to allocate more time to such a student

when writing examinations. But not all students with disabilities are open about it, which makes it difficult to accommodate them."

VOTE OF THANKS

Ms. Fredrika Uahengo, member of the Capacity Building Committee (NCHE)

Good evening ladies and gentlemen. It is a privilege for me to give the vote of thanks on behalf of the Capacity Building Committee of the National Council for Higher Education. First and foremost, our sincere appreciation and gratitude goes to Dr. Steyn for having accepted our invitation. Thank you so much, Sir, for your educative and well researched presentation. The Capacity Building Committee of the NCHE would also like to thank the NCHE for having made this public lecture a reality, especially the Executive Director and the Secretariat staff members. Thank you for the logistical facilitation of this event; and keep up the good work. Last but not least, to all the participants, thank you for coming, thank you for your active participation, and may God bless you all. I thank you for your kind co-operation.



Ms. Fredrika Uahengo

Public Lecture PROGRAMME

19 MAY 2010: GZ FUNCTION CENTRE

Chairperson: Dr. Lischen Haoses-Gorases, Member: Capacity Building Committee (NCHE)
Speaker: Dr. Gert Steyn, Director: Institutional Research, Stellenbosch University, South Africa

SESSION ONE

18H00-18H15: Registration
Opening and welcoming remarks: Ms. Benitha Nakaambo, Chairperson: Capacity Building Committee (NCHE)

SESSION TWO

Public lecture objectives: Ms. Etambuyu Mbuye, Director: Higher Education (NCHE)
Introduction of the guest speaker: Dr. Lischen Haoses-Gorases

SESSION THREE

Presentation: Student access to and funding of higher education: A General Overview:
Dr. Gert Steyn, Director: Institutional Research, Stellenbosch University, South Africa

SESSION FOUR

Questions and answers
Vote of Thanks: Ms. Fredrika Uahengo, Member: Capacity Building Committee (NCHE)

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