

NEW PATTERNS IN STUDENT MOBILITY IN THE SOUTHERN AFRICA DEVELOPMENT COMMUNITY¹

Based on data from the UIS, OECD and Eurostat, this information bulletin examines new patterns in student mobility in the Southern Africa Development Community (SADC). The findings show that the SADC has the highest outbound mobility ratio worldwide (6%), though growth in local tertiary enrolment surpasses the outflow of students (at least in some countries). Moreover, unlike their African counterparts pursuing tertiary education in Europe and North America, nearly one-half of SADC mobile students are choosing to study in South Africa. Social science, business and law are the most popular disciplines amongst mobile students from the region. This paper concludes that SADC students' tendency to remain within the region parallels SADC's vision for regionalisation and intra-region mobility. It also suggests that increasing local enrolment and outbound student mobility are both alternative pathways to expanding access to educational opportunities for SADC students.

BACKGROUND

Since the 1970s, there has been a great expansion in higher education enrolment across the world. In 2009, over 165 million students participated in higher education, which is a five-fold increase since 1970 and a three-fold increase since 1980. A growing trend is also seen in cross-border higher education, which is characterized by the movement of people (students, professors, scholars, researchers, experts and consultants), programmes (courses, academic programmes and degrees), and providers (institutions, consortia and companies) across national borders (Knight, 2006). Increasingly, students from one country go to pursue post-secondary education in another country, and academic staff from one country travel to pursue academic activities or the academic profession elsewhere. The implementation of the General Agreement on Trade in Services (GATS) by the World Trade Organization (WTO) in 1995, which included education as one of the 12 service sectors and recognised it as a tradable service (Knight, 2003; Knight, 2004), has given a significant boost to this cross-border higher education movement.

The mobility of students worldwide is perhaps the most visible form of cross-border higher education, and one that has been monitored over years. According to the UNESCO Institute for Statistics (UIS), in 1980 the population of internationally mobile students was about 1.1 million. The number increased slightly to 1.3 million in 1990 but by 2009 had tripled to 3.4 million. The number of mobile students has been expected to grow to 8 million by 2020 (Altbach, 2006). These figures may even be underestimated, because, as Neave (1992) observed, they only tend to capture students pursuing an award at a foreign institution and often fail to include other types of student mobility, such as short-term exchange programmes that are not necessarily designed to lead to a degree in the host country. Thus, the actual cross-border mobility of higher education students could be much higher. Not only has the

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number of mobile students skyrocketed, particularly in the 21st century, but the population and higher education systems from which these students come have changed drastically. This is contrary to the trend observed in the previous century during which mobile students from developing countries were generally from the most privileged sections of society (World Bank, 2010).

Many countries around the world have implemented policies and/or programmes that aim to increase the outflow of students going to pursue a post-secondary degree abroad (outbound students) and/or the inflow of foreign students coming to pursue degree programmes in the host country (inbound students). Countries which have historically been popular destinations for international students (i.e. Australia, France, Germany, the United Kingdom and the United States) host even greater numbers of overseas students seeking foreign academic credentials. In addition, some countries have emerged as new popular destinations for international students, such as China, Malaysia, the Republic of Korea and South Africa.

Student mobility has been linked to different factors. Studies have shown, for instance, that access to education (Mazzarol and Souter, 2002), the quality of education (Cubillo, Sanchez and Cervino, 2006), employment prospects (Lin, 2007), and the desire for qualifications with worldwide recognition (Mpinganjira and Rugimbana, 2009) are some of the most important drivers leading students to pursue higher education in a foreign country. Thus, the lack of adequate educational opportunities in the home country and the appeal of better opportunities abroad are some of the factors that influence cross-border mobility.

Student mobility has become a topic of much discussion on the policy agenda of international and regional organizations. It is also attracting increased attention in Africa, given the challenges with which the continent is confronted regarding the development of human capital and the achievement of sustainable development. Higher education is now widely recognised as an important driver of socio-economic growth and human development – even though this recognition has occurred after many years of neglect by both national governments and international organizations. Organizations, such as UNESCO, the World Bank, the European Union and the African Union, now recognise that without a strong higher education system, it is difficult (or maybe impossible) for any developing country, in Africa or elsewhere, to achieve sustainable development (World Bank, 2009)

Yet, Sub-Saharan Africa is the region that faces the greatest challenges in the provision of higher education, despite very substantial increases in enrolment over the past four decades, with an average annual growth rate of 8.4% over the past four decades, compared to 4.3% for the world as a whole. Currently, over 4.8 million students are enrolled in higher education institutions in Sub-Saharan Africa. This number represents an increase of 20-fold since 1970, when total enrolment was less than 0.2 million students for the entire Sub-Saharan region. At the current rate of expansion, it is projected that by 2015 Africa will have twice as many tertiary students as in 2006 (i.e. about 18.6 million enrolments in 2015)² (World Bank, 2010).

However, with its average gross enrolment ratio (GER)³ in tertiary education of just 6% (UNESCO, 2010a), Sub-Saharan Africa lags behind the rest of the world where ratios range between 13% in South West Asia and 72% in North America and Western Europe, though the ratios for most developing regions are between 20% and 40%. Furthermore, the gap between Sub-Saharan Africa and other world regions has widened in the last three decades. In addition, higher education systems in most countries within this region suffer from poor quality, due in part to inadequate financing of

² See World Bank (2010, page 28-29). Based on the projection, in 2015 Sub-Saharan Africa might have twice as many tertiary enrolments as in 2006.

³ The gross enrolment ratio (GER) is used to measure the level of participation in a given level of education. It is calculated by expressing total enrolment in a specific level of education, regardless of age, as a percentage of the population in the theoretical age group for the same level of education. For the tertiary level, the population used is that of the five-year age group following the official secondary school graduation age.

higher education (Pillay, 2008). Indeed, the challenges of shrinking public funding for higher education and too rapid an increase in enrolment have resulted, among others, in the erosion of the quality of education (Butcher et al., 2008; Pillay, 2008). Low levels of participation in higher education and the poor quality of academic programmes hamper the development of human resources and economic growth in the region. Thus, discussion of academic mobility in Africa often considers the broader context that characterises the continent, particularly with respect to access to higher education and the quality of higher education, as they relate to the formation of the human capital needed to accelerate economic growth and sustainable development.

However, it is important to note that discussions about the mobility of African students and academic staff often result in mixed views. Academic mobility can, in fact, be a double-edged sword. On the one hand, increasingly large numbers of African students and scholars pursue opportunities out of Africa. This is viewed as a positive trend, given the expectation that countries and the continent will benefit from foreign experiences and expertise. On the other hand, a significant number of individuals who pursue these opportunities out of Africa do not return, thus depriving the continent of the critical human resource capacity needed for its development. Indeed, many view this 'brain drain' as the biggest challenge to development. Not only does brain drain lead to very substantial outflows of African graduates and scholars, but it also comes at a considerable financial cost. It has been estimated, for instance, that each year \$4 billion is spent on salaries for approximately 100,000 western expatriates who "help make up the loss of professionals in Sub-Saharan Africa" (Teichler and Yağcı, 2009). Thus, while the mobility of African students and scholars outside Africa can be viewed as a positive trend that can be of benefit to the countries and the region, concerns about brain drain have emerged that raise doubts about this form of mobility.

An alternative form of mobility, one that takes place within Africa, has been considered as critical in strengthening higher education systems and helping build the human capacity that will contribute to sustainable development within the continent. A number of initiatives and programmes have been developed in that respect. In Sub-Saharan Africa, for instance, the Southern Africa Development Community (SADC) included student and staff mobility in its 1997 *Protocol on Education and Training*. SADC specifically recommended that higher education institutions in its member states reserve at least 5% of their admissions for students from other SADC countries. Standardization of entrance requirements, harmonization of academic years, ease of credit transfer, provision of in-state tuition and fee rates to students from other SADC countries, the establishment of joint academic programme, and the easing of immigration formalities are some of the mechanisms that the organization recommended to facilitate the mobility of students (and of academic staff) (SADC, 1997).

In 2004, the Association of African Universities (AAU), in partnership with UNESCO and the South African Council on Higher Education, convened a meeting to discuss the implications of the WTO's General Agreement on Trade in Services on African higher education. The *Accra Declaration*⁴ that resulted from the workshop reaffirmed stakeholders' commitment to enhancing access to higher education and increasing academic mobility within the African continent. A number of programmes aimed at facilitating the mobility of students have been put in place. For instance, in 2007 the African Union established the *Mwalimu Nyerere African Union Scholarship Scheme* which is designed to enable African students to study at recognised higher education institutions on the continent, in areas related to science and technology. Students who participate in this programme are required to work in Africa for a minimum of two years after graduation. In November 2010, this programme benefitted from European Union financial support of US\$46.5 million, which has allowed it to be extended for four years (beginning in 2011).

⁴ The *Accra Declaration on GATS and the Internationalization of Higher Education in Africa* can be found at <http://www.che.ac.za/documents/d000060/AccraDeclaration-Final.pdf>.

Information about new patterns in SADC student mobility is critical. From the perspectives of sending countries, understanding where students study abroad and what kinds of educational programmes these students pursue may drive policymakers to re-evaluate their domestic education systems. In particular, this region aims to tap into academic mobility to improve higher education quality. In this paper, we first examine student mobility by identifying new patterns and trends in the mobility of SADC students. More specifically, we highlight the volume of student mobility in the SADC region and compare this ratio to the rest of Africa. We examine the extent to which the outflow of students relates to the increase in local enrolment to provide a more complete picture of the participation in tertiary education in countries. We identify major destinations for SADC students in the world and within Africa and how the flows differ from other African students. We investigate and highlight the different kinds of educational programmes that SADC mobile students seek abroad.

DATA

The data used in this paper are mainly from the UIS Questionnaire on Statistics of Tertiary Education and a joint education data collection exercise led by the UIS, OECD and Eurostat. These data cover over 200 countries and territories, ranging from 1999 to 2009. In addition, supplementary data were obtained from South Africa, the United Kingdom and the United States.

Internationally mobile students are defined as students who have crossed an international border and moved to another country (of which they are not citizens) with the objective to study. These students' countries of origin are usually conceptualised by their country of permanent or usual residence, or their country of prior education (i.e. the country in which they obtained the educational qualifications required to enter the programme they are studying abroad). Though these two concepts--permanent residence and prior education--are preferred, students' country of citizenship is also used as a proxy in countries where data on the residential status or prior education of mobile students are not available.

Data analysed in this paper exclude students on short-term exchange programmes of one year or less. In other words, the data used in this paper mainly include students who cross an international border in order to pursue a degree programme, rather than those who go for the purpose of earning some credits.

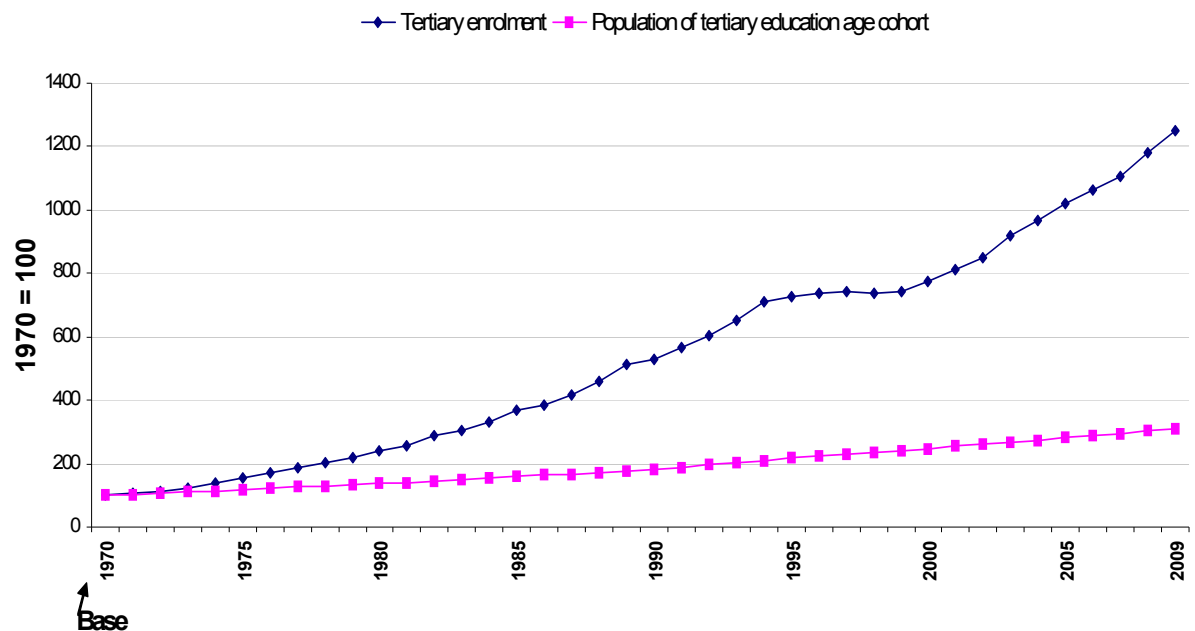
PATTERNS IN HIGHER EDUCATION AND STUDENT MOBILITY

Explosive growth in tertiary enrolment, yet relatively low participation ratios

Over 1.5 million students were enrolled in higher education institutions in SADC in 2009, a 13-fold increase since 1970, which is much faster than the growth for the world (5-fold increase) but slower than that for Sub-Saharan Africa as a whole (20-fold increase). The increasing demand for higher education in the region is evident when comparing the growth in tertiary enrolment with that in the population of tertiary age. As shown in **Figure 1**, the growth in tertiary enrolment, which started to soar in 1990, is much faster than that in the relevant tertiary-age population (13 times for enrolment versus 3 times for population). In Sub-Saharan Africa, a much higher ratio of participation in secondary than tertiary education points to even greater pressure for further growth as more and more graduates from upper secondary schools seek to pursue higher education (UNESCO-UIS, 2010b), either in local education institutions or by studying abroad. In addition, to accumulate the knowledge and skills needed for the long-term growth prospects of Sub-Saharan Africa, it is critical to stimulate investment in tertiary-level training, as advised by the World Bank (World Bank, 2009). Thus, one can foresee further expansion of higher education systems in the region.

Despite the rapid growth, only about 6 out of 100 people in the tertiary education age group were enrolled in higher education in SADC in 2009, compared to the global average of 27 out of 100.

FIGURE 1. CHANGE IN TERTIARY ENROLMENT AND TERTIARY-AGE POPULATION IN SADC, 1970-2009



Sources: Enrolment data: UNESCO Institute for Statistics database; population data: United Nations Population Division (UNPD).

Outbound enrolment increases the overall level of participation in tertiary education

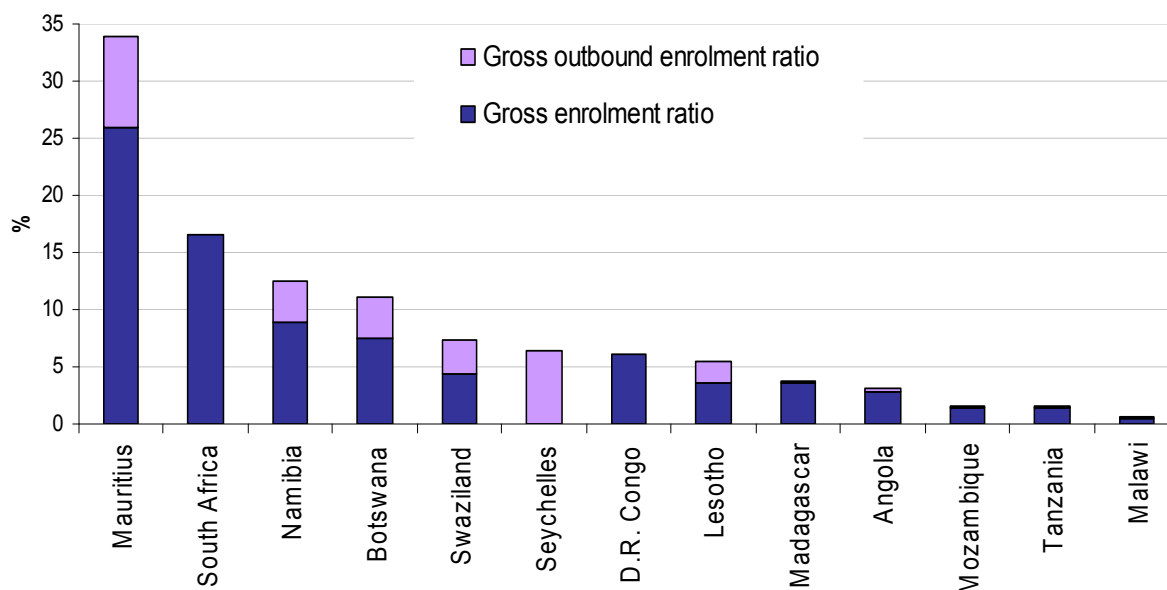
Examining student mobility in relation to local enrolment may provide a more complete picture of a country's human resource capacity. This may especially be the case when students who graduate abroad return home. It may also be the case even if they choose to remain abroad, if at the same time they contribute to social, political or economic development in their home countries. Both the enrolment at local institutions and the pursuit of academic programmes abroad (outbound students) can shed light on issues of access opportunities to tertiary education.

In some countries, the level of participation in tertiary education increases substantially when outbound enrolment is taken into consideration. **Figure 2** presents the tertiary gross enrolment ratio (GER) and the gross outbound enrolment ratio (i.e. outbound GER, which is defined as mobile students from a given country expressed as a percentage of the population of tertiary age). Combining these two ratios provides a more comprehensive perspective on the total level of participation in tertiary education across the region. Namibia, for example, has a relatively high GER for tertiary education: 9%, suggesting that nearly one in ten people of tertiary age are studying in higher education. In addition, some 7,800 students of Namibian origin study abroad, or a further 3% of the tertiary-age population. All in all, 12% of Namibians of the relevant age group participate in tertiary education.

Other countries which also have significant high levels of participation in tertiary education, locally or abroad, include Botswana, the Democratic Republic of the Congo, Lesotho, Mauritius, Namibia, Seychelles, South Africa and Swaziland (*see Figure 2*). Except for South Africa and the Democratic Republic of the Congo, countries with small populations tend to have a large proportion of students abroad. These countries generally take advantage of the extensive tertiary education opportunities available in South Africa or other countries.

In contrast, countries such as the Democratic Republic of the Congo and South Africa – with large populations and relatively large tertiary education systems – have small proportions of outbound mobile students. South Africa, which has one of the most extensive tertiary education systems in the region, has fewer than 6,000 students studying abroad, representing about 0.1% of its tertiary-age population. The same is true for Nigeria: about 26,000 (0.2% of its tertiary-age population) are studying abroad.

FIGURE 2. GROSS OUTBOUND ENROLMENT RATIO AND GROSS ENROLMENT RATIO FOR TERTIARY EDUCATION, 2009



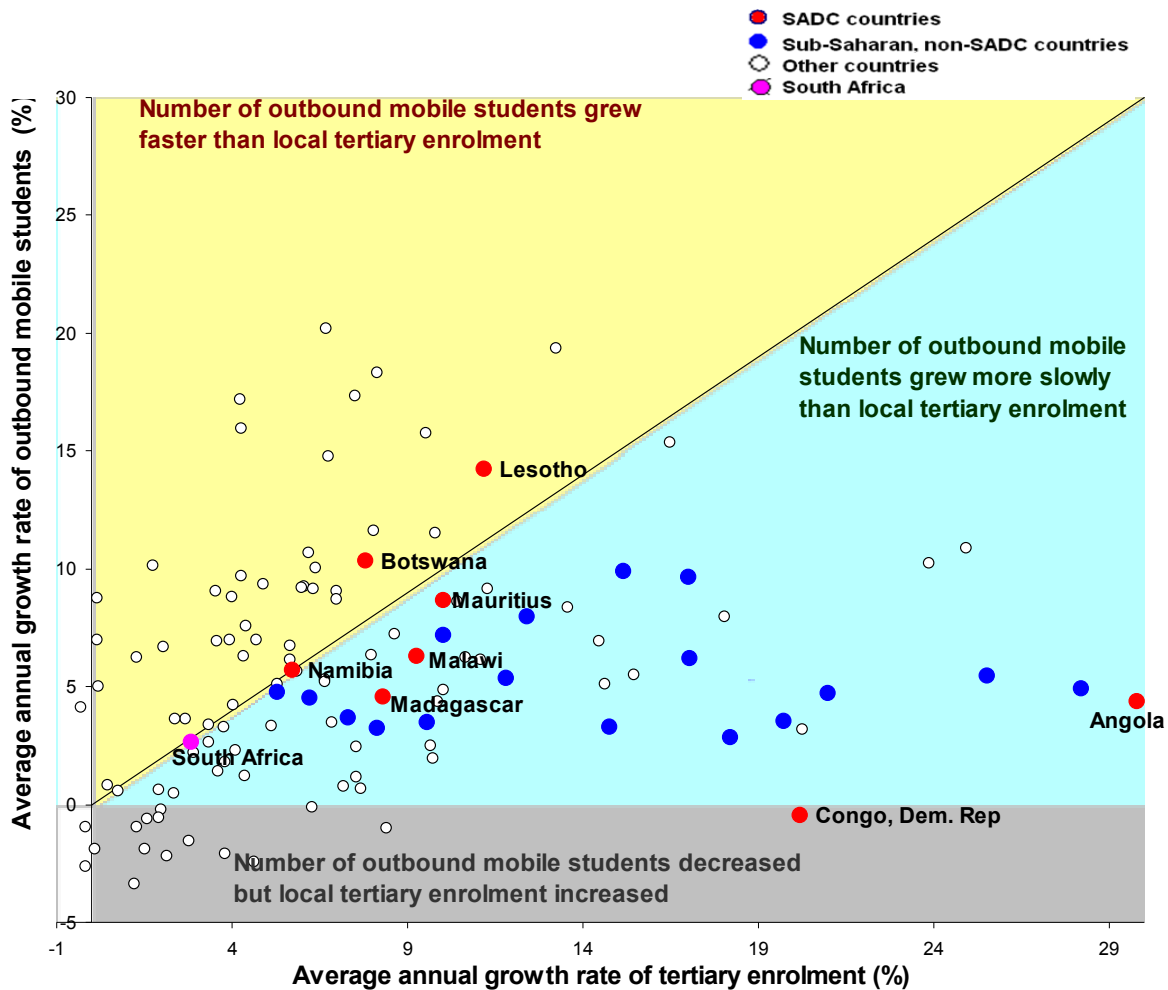
Source: UNESCO Institute for Statistics database.

In several SADC countries, the growth in local tertiary enrolment surpasses that in outbound mobile students, but rapid expansion in enrolment without sufficient funding for higher education has raised concerns about the quality of higher education

Figure 3 compares the average annual growth rates in local tertiary enrolment and in the number of outbound mobile students in Sub-Saharan African countries between 1999 and 2009. The zone below the diagonal line indicates countries where local tertiary enrolment is growing more rapidly than the number of outbound mobile students, which suggests that countries are becoming more able to meet local demand for higher education. A slower growth in outbound mobile students may also imply that countries are less able to afford to send large numbers of students abroad. Most Sub-Saharan African countries are located in this zone, with the Democratic Republic of the Congo being a particularly extreme example with decreasing numbers of mobile students contrasting with an increase in local enrolment. As discussed in several studies, the rapid expansion in enrolment with shrinking public funding for higher education in most African countries has raised concerns about the quality of higher education (Butcher et al., 2008; Pillary, 2008; World Bank, 2009).

The zone above the diagonal line indicates countries where mobile numbers are growing faster than tertiary enrolment at home. There are only two SADC countries in that group: Botswana and Lesotho. In the case of Lesotho, the government provides scholarships to send students abroad (UNESCO-UIS, 2011) which may contribute to the high number of outbound mobile students.

FIGURE 3. AVERAGE ANNUAL GROWTH RATES FOR TERTIARY ENROLMENT AND OUTBOUND MOBILE STUDENTS BY COUNTRY, 1999 AND 2009



Note: Data for South Africa include enrolment in public institutions only.
Source: UNESCO Institute for Statistics database.

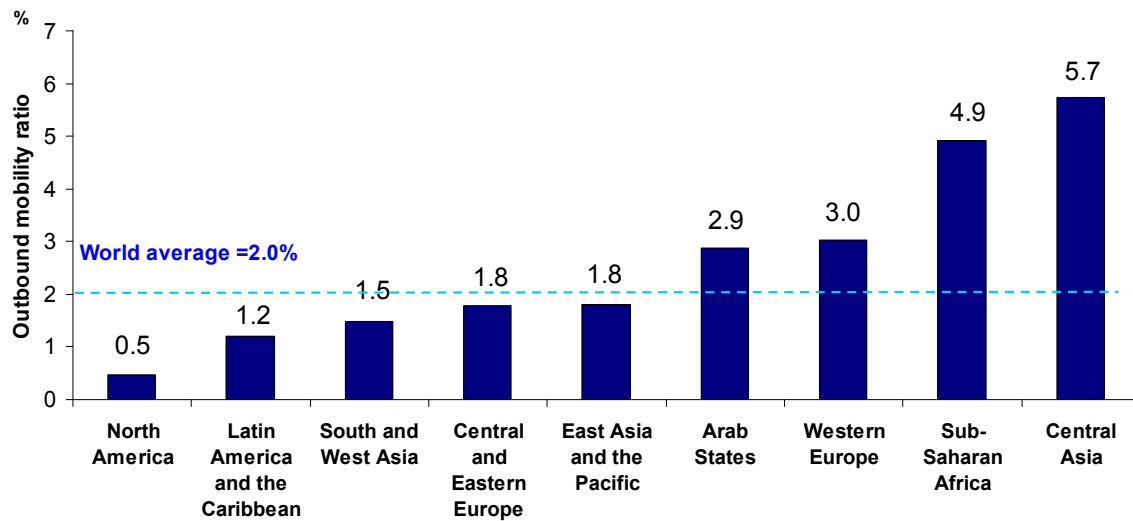
SADC students are among the most mobile students worldwide, with 6 out of every 100 tertiary students studying abroad

In 2009, some 89,000 SADC students studied outside their home countries and the number accounted for 5.8% of tertiary enrolment (i.e. outbound mobility ratio⁵) in the region. The ratio is higher than the regional average for Sub-Saharan African (4.9%) (see **Figure 4**) and is three times higher than the world average (2.0%). SADC students are also more mobile than non-SADC Sub-Saharan Africans (outbound mobility ratio is 4.5%) (see **Figure 5**). The relatively higher regional student mobility may partially result from the SADC *Protocol on Education and Training* (1997), which aims to facilitate mobility. Despite what has been agreed in the Protocol, it is stated that several countries, except for

⁵ Outbound mobility ratio is used to measure the level of mobility and is calculated by total students studying abroad expressed as a percentage of all students at the same level of education. For the country-level indicator, the ratio is all students studying abroad from that country expressed as a percentage of all students studying within the country – both local and mobile.

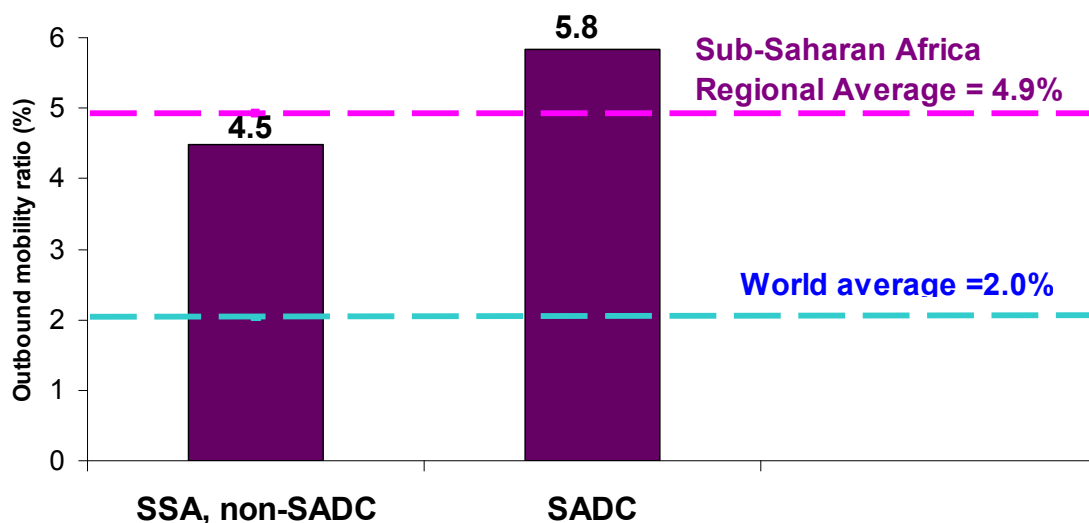
South Africa, Swaziland and Zimbabwe, continued to charge higher fees for SADC students than national students which is a potential barrier to student mobility (Butcher et al., 2008). However, country-level outbound mobility ratios are highly variable, ranging from 1% in the Democratic Republic of Congo to 43% in Namibia.

FIGURE 4. NUMBER OF MOBILE STUDENTS FROM A GIVEN REGION AS A PERCENTAGE OF TERTIARY ENROLMENT IN THAT REGION (OUTBOUND MOBILITY RATIO), 2009



Source: UNESCO Institute for Statistics database.

FIGURE 5. OUTBOUND MOBILITY RATIO IN SADC AND SUB-SAHARAN AFRICA NON-SADC COUNTRIES, 2009



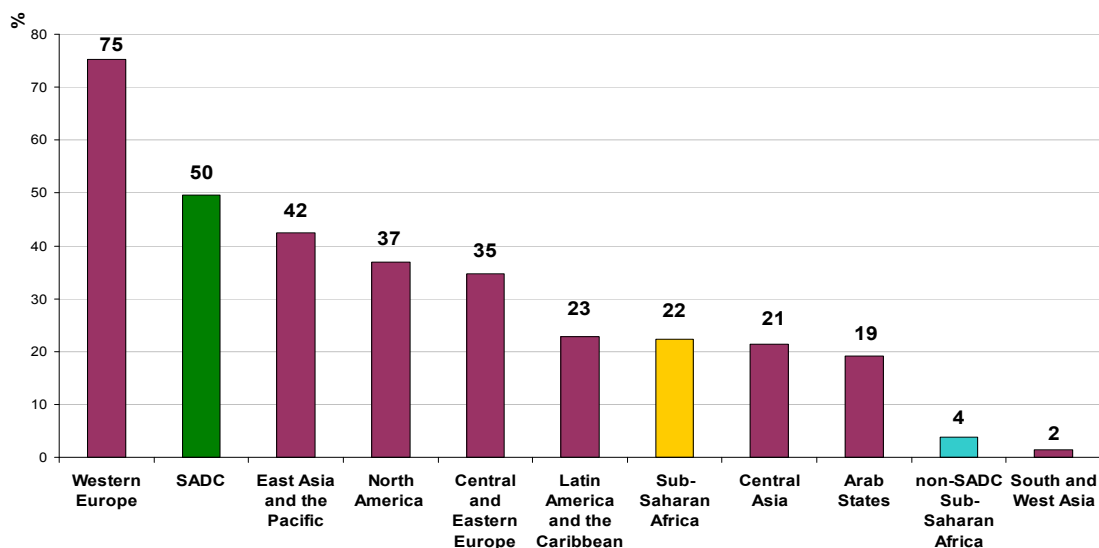
Source: UNESCO Institute for Statistics database.

One-half of all SADC mobile students stay within their own region, contrary to the student flows elsewhere in Sub-Saharan Africa

Similar to most developing regions, Sub-Saharan Africa has a high flow of students to countries outside their own region (UNESCO-UIS, 2009). However, disaggregated data show that indeed the proportion of SADC mobile students staying in their own region is as high as 50% - second only to Western Europe. Nearly one-half of all mobile students from SADC go to study in South Africa, followed by the United Kingdom (10%), the United States (8%), France (7%) and Australia (6%) (see **Figure 7**). In addition, two Portuguese-speaking countries, Brazil and Portugal, also host a total of 6% of mobile students from SADC.

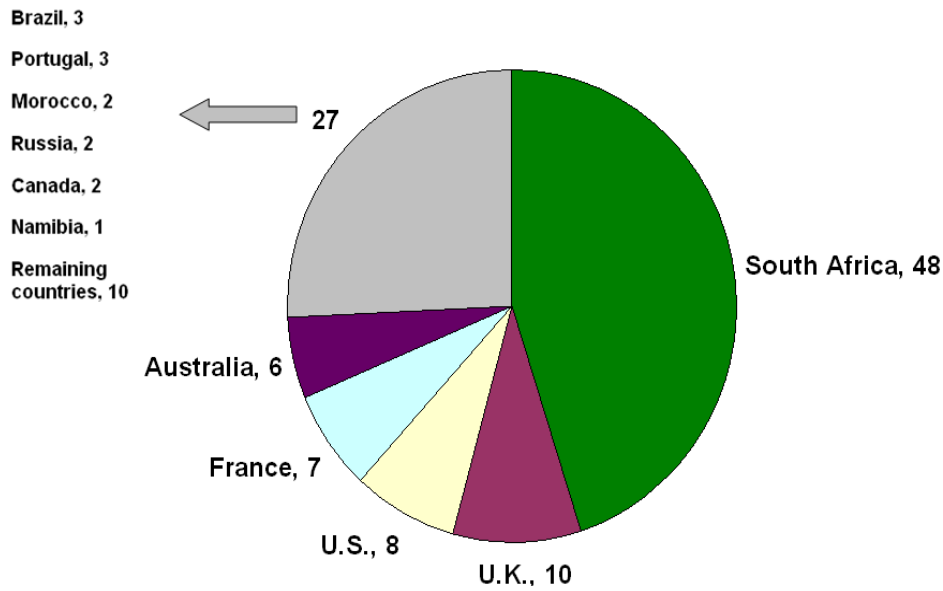
By contrast, outbound students from non-SADC Sub-Saharan Africa are considerably less likely to remain within their own region (see **Figure 8**). Only 1% of students from non-SADC Sub-Saharan African countries go to study in South Africa and only 5% study elsewhere in Africa. The majority (about 69%) of mobile students from elsewhere in Sub-Saharan Africa study in Canada, France, Germany, the United Kingdom or the United States. Not surprisingly, mobile African students' choices of destination are still often influenced by colonial and linguistic links. For instance, 85% of mobile students from Madagascar study in France, while 51% of Angolan mobile students study in Brazil or Portugal with which they have linguistic and/or colonial ties.

FIGURE 6. PERCENTAGE OF MOBILE STUDENTS STUDYING IN ANOTHER COUNTRY WITHIN THEIR OWN REGION/SUB-REGION, 2009



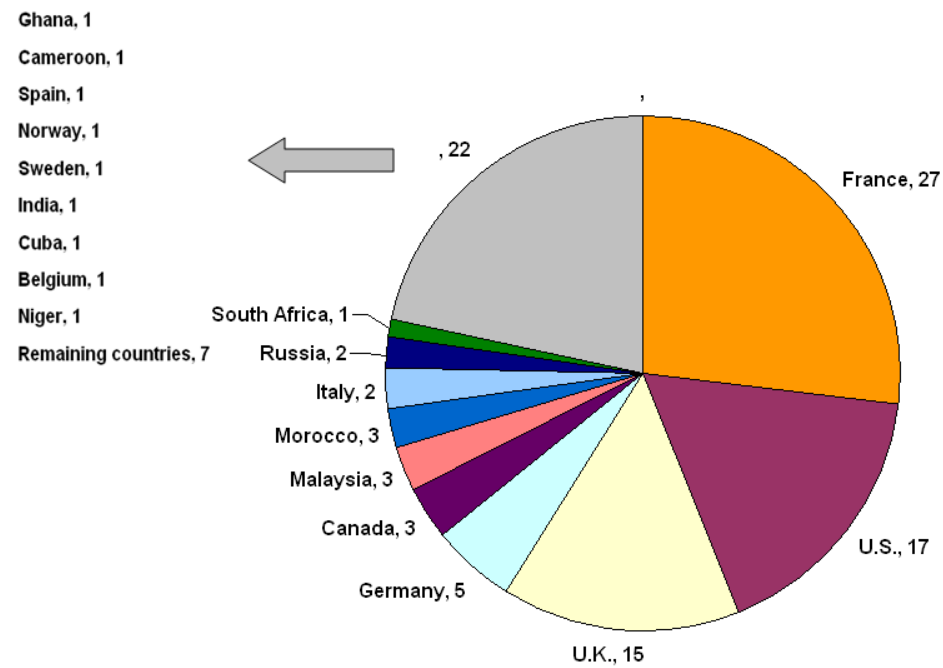
Source: UNESCO Institute for Statistics database.

FIGURE 7. PERCENTAGE DISTRIBUTION OF SADC MOBILE STUDENTS BY DESTINATION, 2009



Source: UNESCO Institute for Statistics database.

FIGURE 8. PERCENTAGE DISTRIBUTION OF NON-SADC SUB-SAHARAN AFRICAN MOBILE STUDENTS BY DESTINATION, 2009



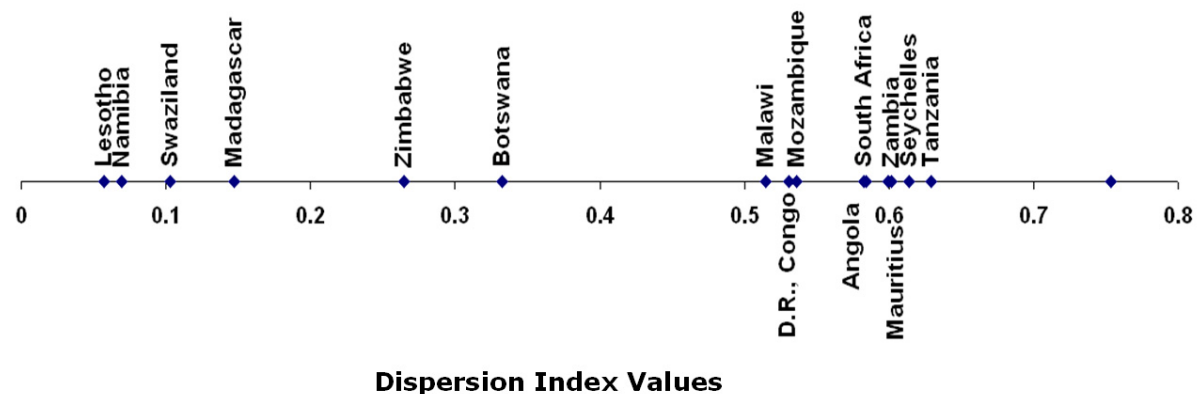
Source: UNESCO Institute for Statistics database.

To what extent are the flows of mobile students dispersed or concentrated?

Another way of looking at student mobility is to examine the extent to which students from a given country are concentrated in or dispersed over a number of countries of destination. The *dispersion index*⁶ (see **Figure 9**) provides insight into this issue. A high dispersion index indicates that students from a given country are well dispersed across a wide range of countries. Assuming that outbound students eventually return after they complete their degree abroad (or remain abroad while contributing to the social, political or economic development of Africa), a greater dispersion of students may imply a wider range of new ideas that returning students may bring back to their home countries. Countries which have a relatively high dispersion index include: Angola, Malawi, Mauritius, Mozambique, the Seychelles, South Africa, the United Republic of Tanzania and Zambia.

By comparison, countries which have a relatively smaller dispersion index include: Botswana, Lesotho, Madagascar, Namibia, Swaziland and Zimbabwe. Students from these countries are fairly concentrated typically in one main destination. These students mainly go to study in South Africa, except that the majority of mobile students from Madagascar study in France. The higher education sector in South Africa is well developed with a strong infrastructure and several well-respected research institutions that are attractive to international students. South Africa hosted about 61,000 international students in 2009⁷, two-thirds of which came from other SADC nations. South Africa is not only the leading host country in Africa, but also ranks 11th amongst host countries worldwide. South Africa is making an important contribution to the continent's human resource development and helping to retain skilled graduates in Africa (MacGregor, 2007).

FIGURE 9. DISPERSION INDEX VALUES BY COUNTRY, 2009



Students are concentrated in few countries

Students are dispersed over many countries



Source: UNESCO Institute for Statistics database.

⁶ The Dispersion Index is used to measure the extent to which students from a given country who study abroad are dispersed over many countries or concentrated in a few countries of destination. The formula can be seen on page 41 in UNESCO-UIS (2009).

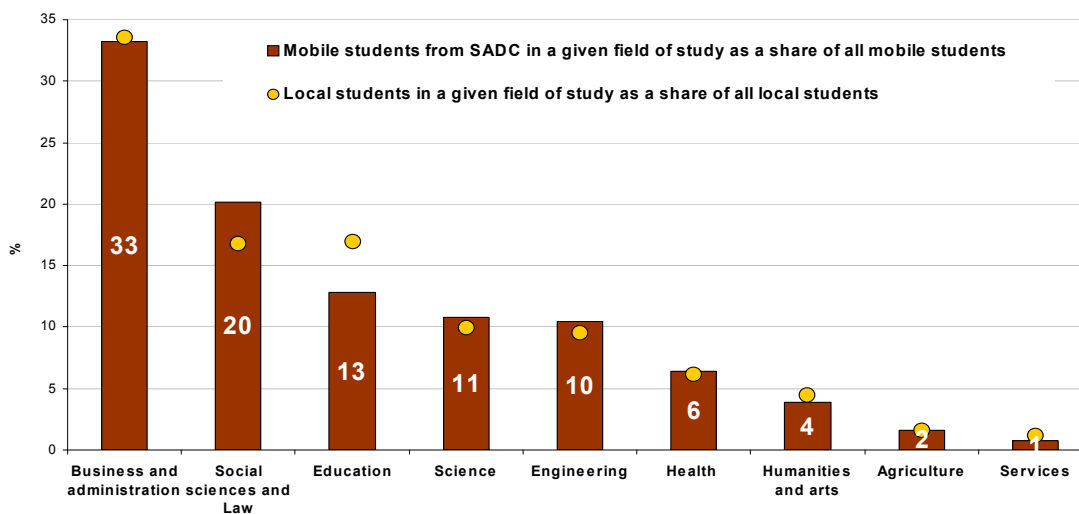
⁷ Higher education statistics disseminated by the South African government do not include students studying in private institutions. Thus, the numbers of international students are under-reported.

Business and administration is the most popular field of study for SADC mobile students, followed by social science and law

To assist policymakers with planning the supply of educational programmes needed by students and the society, information about enrolment by types of programme, both locally and abroad, is critical. However, the incomplete country-level data submitted to the UIS do not allow us to capture the distribution of student enrolment by field of study within the SADC region. Through the survey of universities in SADC, Butcher et al. (2008) found that most SADC students (about 70%) are enrolled in the humanities and social sciences. Enrolment in science, engineering and technology account for 22%, whilst enrolment in health sciences is relatively low at 7%.

Regarding the field of education that mobile students pursue abroad, business and administration⁸ appears to be the most popular field of study for SADC mobile students, which is also true in general for mobile students worldwide (UNESCO-UIS, 2009). About one-third of SADC mobile students in South Africa study in this field, and one-quarter in the United Kingdom and the United States (see **Figures 10 and 11**). The next most popular programmes in South Africa are social science and law (20%) and education (13%); and in the United Kingdom and the United States, health (16%) and social science and law (16%). The number of SADC students studying in health science programmes, both locally and abroad, is low (about 77,500 within the region and 2,300 in the United Kingdom and the United States).

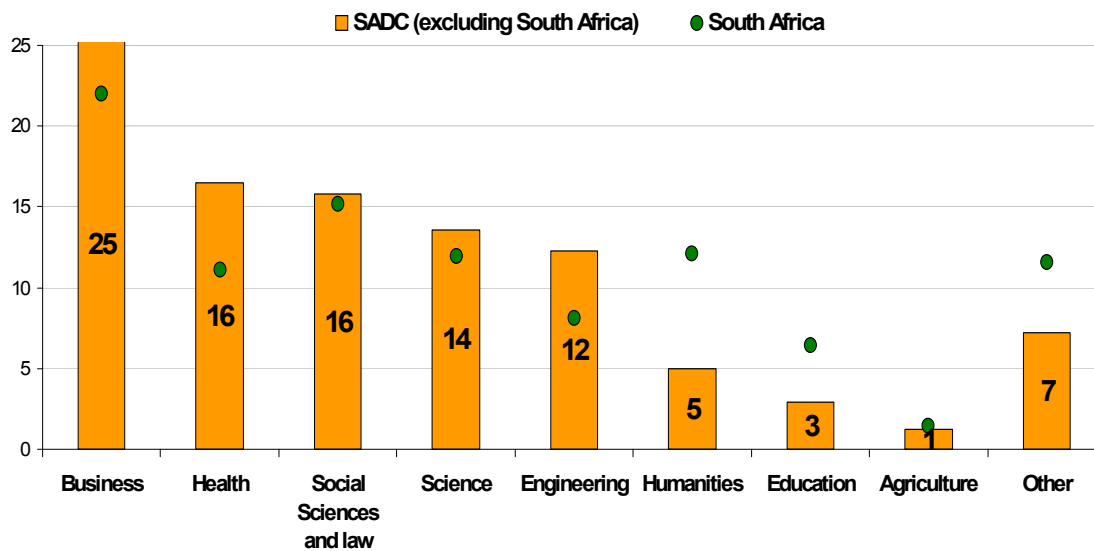
FIGURE 10. DISTRIBUTION OF TERTIARY ENROLMENT BY FIELD OF EDUCATION AND ORIGIN OF STUDENTS, 2009, SOUTH AFRICA



Source: South Africa Higher Education Management Information Systems.

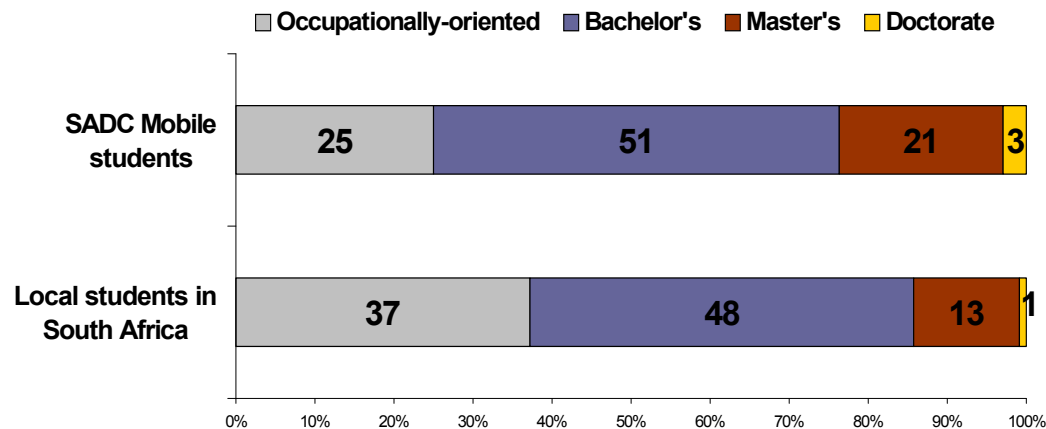
⁸ According to the International Standard Classification of Education (ISCED), business and administration is a sub-field of education under the broad field of social sciences, business and law.

FIGURE 11. PERCENTAGE DISTRIBUTION OF TERTIARY ENROLMENT BY FIELD OF EDUCATION AND ORIGIN OF MOBILE STUDENTS STUDYING IN THE UNITED KINGDOM AND THE UNITED STATES, 2009



Sources: Higher Education Statistics Agency (HESA) and National Science Foundation.

FIGURE 12. PERCENTAGE DISTRIBUTION OF TERTIARY STUDENTS STUDYING IN SOUTH AFRICA BY PROGRAMME TYPE AND ORIGIN OF STUDENTS, 2009



Note: First-degree programmes include occupationally-oriented and bachelor's degree programmes.
 Source: South Africa Higher Education Management Information Systems.

A general concern in Sub-Saharan Africa is the imbalance between the humanities and social sciences on the one hand and engineering and technology on the other, and the consequent shortage of needed knowledge and skills in areas such as biotechnology and information and communication technology (ICT) (IEASA, 2011). The knowledge and skills of science, technology and engineering are critical to support the knowledge-based economy. Several developing countries in Asia are aware of their importance and have started to stimulate investment in tertiary-level science and technology education. However, science infrastructure in the SADC region is weak, though there are cases

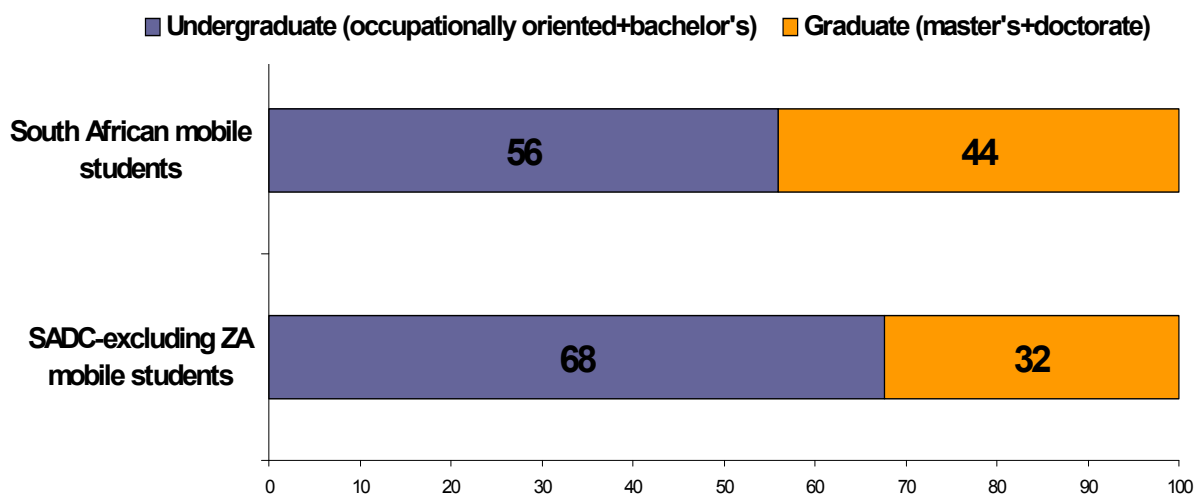
(particularly in South Africa) where strong networks link with world-class research institutions outside Africa (Butcher et al., 2008). It is likely that insufficient exposure to science and technology training prior to tertiary education results in low motivation or readiness for tertiary-level training locally or abroad in these fields. Stronger national science policies may lead to improvements in the situation (Mouton et al., 2008).

First-degree programmes are in relatively greater demand by SADC students compared to more advanced degrees

SADC mobile students have a greater demand for first-degree programmes than they do for more advanced programmes (e.g. Master's or doctorate degrees). In 2009, three-quarters of SADC mobile students studying in South Africa were in first-degree programmes (see **Figure 12**). Similarly, two-thirds of their counterparts studying in the United Kingdom and the United States were enrolled in first-degree programmes (see **Figure 13**). In contrast, students from developing countries in Asia, such as China, India and Thailand, are about three times as likely to choose more advanced programmes in the United Kingdom and United States. This finding suggests that higher education systems in SADC, in general, have insufficient places for local students who desire to attend college or universities. Consequently, upper-secondary graduates leave their home country and seek overseas education opportunities instead. Furthermore, low capacity in the higher education system in this region is compounded by a lack of post-graduate programmes in many higher education institutions (Butcher et al., 2008; Mouton et al., 2008).

However, unlike their counterparts from other SADC nations, mobile students from South Africa have relatively greater demand for advanced programmes in the United Kingdom and the United States (see **Figure 13**). South Africa has high capacity in its higher education systems to meet the need for undergraduate programmes from local students and students from other countries.

FIGURE 13. PERCENTAGE DISTRIBUTION OF SADC TERTIARY GRADUATES WHO STUDIED IN THE UNITED KINGDOM AND THE UNITED STATES BY PROGRAMME TYPE AND ORIGIN OF STUDENTS, 2009



Sources: Higher Education Statistics Agency (HESA) and National Science Foundation.

SUMMARY AND CONCLUSION

There are relatively low levels of participation in tertiary education in the SADC region with only about 6 of 100 people of tertiary education age being enrolled in higher education institutions locally. The region lags well behind the rest of the world, where gross enrolment ratios range between 13% in South and West Asia and 72% in North America and Western Europe; with most developing regions ranging between 20% and 40%. The level of participation in tertiary education for SADC students is enhanced if account is taken of outbound students, suggesting that studying locally or outside the home country are alternative (and perhaps complementary) pathways to expanding tertiary education access opportunities for SADC students.

In several SADC countries, the growth in local tertiary enrolment surpasses that of outbound mobile students, but rapid expansion in enrolments without sufficient funding for higher education has raised concerns about the quality of higher education (Butcher, Wilson-Strydom, and et al., 2008; Pillary, 2008; World Bank, 2009) .

SADC students are among the most mobile students worldwide. In 2009, some 89,000 students from the region were studying abroad - approximately 6 out of every 100 tertiary students from the region (outbound mobility ratio: 5.8%). By comparison, the outbound mobility ratio is higher than non-SADC sub-Saharan Africa (4.5%) and is three time higher than that for the world (2.0%). High outbound ratios appear in countries with small populations, such as Mauritius and Namibia and in countries where studying abroad is in part financially supported by the government such as Lesotho; whereas more populous countries tend to have low outbound ratios, such as the Democratic Republic of Congo, and in South Africa, where higher education capacity is strong. Indeed, South Africa plays an important role as a regional hub of higher education on the continent by hosting over 61,000 international students in total, and ranks as the 11th top host country worldwide.

Currently, about a half of all SADC mobile students study in other SADC nations, mostly in South Africa itself. By comparison, only 4% of mobile students from elsewhere in Sub-Saharan Africa remain within their own region. This intra-region flow seems to be in line with the SADC vision for regionalism, and also with the principles of the 1997 SADC *Protocol on Education and Training*, at least as far as academic mobility is concerned. Mobile students from Angola, Malawi, Mauritius, Mozambique, the Seychelles, South Africa, the United Republic of Tanzania, and Zambia are relatively well-dispersed across a wide range of host countries. On the other hand, mobile students from Botswana, Lesotho, Namibia, Swaziland and Zimbabwe mainly study in South Africa, whilst those from Madagascar generally choose to study in France.

Business and administration is the most popular discipline for SADC mobile students who study in South Africa, followed by Social science and law, and Education. For their counterparts who study in the United Kingdom and the United States, the most popular fields remain Business and administration, followed by Health, and Social science and law.

SADC mobile students have a greater demand for first-degree programmes than they do for more advanced programmes (e.g. Master's or doctorate degrees) abroad. About two-thirds to three-quarters of SADC mobile students studying in South Africa, the United Kingdom or the United States are enrolled in first-degree programmes. By comparison, students from countries such as China, India and Thailand in Asia are about three times as likely to choose more advanced programmes in the United Kingdom or the United States.

By highlighting, new patterns in student mobility in the region, we hope to raise more awareness and attract the attention of researchers, policymakers, and higher education leaders to an increasingly important trend (student mobility) in the formation, retention but also loss of human capital within the SADC region.

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