Inequalities in Higher Education and the Structure of the Labour Market

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Preface

The Employment and Economic Policy Research Programme of the Human Sciences Research Council publishes this Occasional Paper series. The series is designed to contribute to knowledge and stimulate debate on employment and unemployment dynamics. We invite comments and responses from readers.

About the Author

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Inequalities in Higher Education and the Structure of the Labour Market

Introduction

The relationship between education and economic growth and development in South Africa has been widely studied and its importance acknowledged. Higher education has a particularly important role to play in the overall development of the economy. It has over the years provided society with highly skilled, professional workers and must continue to do so. Higher education also has a key role to play in extending educational benefits to the disadvantaged, thus contributing to equal opportunities and fairness. However, for these roles to be realised, the education system has to be effective and efficient with improved education outcomes. The changing nature of labour markets is placing a premium on technical expertise and occupational competencies as well as on the matching of educational qualifications with prospective employment. All this has serious consequences for higher education, especially in the context of greater demand for and wider participation in higher education.

This paper looks at the inequities in higher education and their consequences in the labour market for people with higher education. The inequalities in the type and source of human capital acquired are often overlooked, and it is argued here that they perpetuate inequalities observed in the labour market. Inequities in acquired human capital eventually influence educational attainment, which in turn influences labour market prospects. This is reflected in the selection or sifting of the potential employees in the labour market. Those with longer years of schooling have better prospects in the labour market. But also of significance is the type of qualification acquired during schooling. Qualification differences translate into different types of skills acquired – a major indicator of employability. These differences are increasingly accounting for the continuing racial disparities in the labour market, particularly in the context of the growing demand for skilled labour. Whereas demand-side factors such as discrimination in terms of physical appearance, i.e. race and or gender, still influence employment in South Africa, there is evidence that their impact is declining.

The paper is part of the research on the employment experiences of university graduates in South Africa. The research is based on a sample of 2 672 university graduates in South Africa who obtained their qualifications between 1990 and 1998 across all fields of study. The study – a mail survey – was conducted between 1999

and 2000. It is by far the most comprehensive tracer study of university graduates ever conducted in the country. The main research deals with various issues relating to the labour market experiences of graduates, eg. the time it took to find the first job, period of unemployment, sector of employment, mobility between sectors (sectors defined broadly as private, public or self-employed), relationship between studies and job held, further studies contemplated and intentions to move abroad.

Education and the labour market prospects The occupational segregations and inequalities in the South African labour market are a result of two phenomena – discrimination and acquired human capital. The labour market is characterised by racial job segregation both between sectors and between occupational categories. For example, African and coloured workers have poorer economic outcomes than their white and Asian counterparts. They are largely concentrated in the less skilled and less well-paid jobs, with limited upward mobility in either the internal or the external labour market. Previous labour market policies deliberately restricted the access of Africans in particular to skilled jobs, certain sectors and certain occupational categories. Pre-labour market discrimination through unequal provision of and access to education and training reinforced the labour market policies. This ensured that Africans would not acquire the skills needed to access professional jobs and move up the job ladder, either in the internal or external labour market. This, in turn, affected their socio-economic status.

Education, among other outcomes, improves the level of labour productivity by enhancing individuals' innate intellectual ability and equipping them with the 'tools' needed to be more productive at work. These tools include an increased capability for logical reasoning, conceptualisation, communication and other soft skills, and more specific job skills imparted in courses such as accounting, engineering and medical science. Hence, business majors have better job prospects than history majors, for example, because they have skills employers are willing to pay more to procure. Accordingly, those with higher education qualifications have better economic prospects than those who do not. The positive correlation between the years of schooling and higher earnings is substantiated by numerous studies (Rospabe 2001; Moll 1996).

Nevertheless, differences in the impact of various 'skills' acquired through education on income and socio-economic outcomes are usually overlooked. More years of schooling undeniably imply a better chance of gaining employment than fewer years. But even for those with similar years of schooling there are differences in economic prospects as a result of differences in acquired skills. In the case of individuals whose qualifications do not reflect the acquisition of specific professional skills, especially those who hold general bachelor's degrees, their qualifications serve only as a signal of their potential to employers. In many cases, they take longer to realise employment and when they do their entry level jobs do not necessarily require the years of schooling they possess. They start at the bottom of the job ladder and have to prove themselves in the labour market to reach higher income levels. A combination of their potential and training will determine their progression up the ladder. As will be seen in the next section, the field of study, which signals the type of skills acquired through education, plays a significant role in employability of university graduates in this case.

It is also acknowledged that education is not the only factor that accounts for inequities in the labour market. There is evidence that the correlation between schooling and earnings is weaker for some segments of the population than for others (Keswell & Poswell 2002). There are differences in the labour market in terms of income and occupational status across workers with similar observable characteristics, eg. human capital and experience, but with different physical appearances, eg. race and/or gender. These differences are in most instances the result of economic discrimination. Discrimination implies that equally productive groups do not receive similar recognition and compensation for their productive characteristics. Whereas discrimination in the labour market still exists and accounts for some of the inequities, its effect is apparently declining. Van der Berg (2001) analysed the impact of quality of schooling on inequalities and argued that the residual earnings differentials attributable to labour market discrimination might be smaller than thought if cognisance is taken of the large differentials in education quality. He further argued that labour market race discrimination has declined as a cause of inequality compared to other factors such as education, location, and family size and composition.

Various labour laws, policies and initiatives have been put in place to address the inequities in the labour market and in the education sector. In the labour market, affirmative action laws and skills development laws have been enforced. The Employment Equity Act (1998) seeks to ensure that people with equal observable productivity skills are treated equally in the labour market. Complementing the Employment Equity Act is the Skills Development Strategy of 1998, which seeks to encourage the provision of and access to training within firms, especially to members of the previously disadvantaged communities.

These labour market interventions have gone a long way towards addressing the existing disparities. However, despite the considerable progress made in achieving redress, inequities are still stark. This is largely because the interventions focus on the demand-side sources of differences in economic outcome. The inequities in education – higher education in particular – are inextricably linked to the labour market structure. They to a large extent determine the prospects of graduates as job-seekers. Actual and perceived quality differentials in education and in various types of qualifications account for most of the inequities in the labour market. Africans tend to study in fields with poorer economic and labour market outcomes, eg. the humanities and arts-related fields. In many cases, this is not because they choose to. Many Africans are constrained by the requirements of various departments in higher education institutions, lack of finance and poor academic backgrounds, all of which make it difficult for them to cope and successfully complete their studies. Some are also constrained by a lack of career guidance and access to reliable labour market information to assist them to make informed decisions before entering higher education.

Inequities in education The education structure reflects the legacy of apartheid. Whereas Africans' participation in primary, secondary and higher education has increased, they still lag behind in educational attainment because of the continuing severe inequalities in some areas. Education provision in many public schools is still of poor quality. Dropout and repetition rates among Africans remain high at primary and secondary school level, with many learners dropping out of secondary school before they can write the senior certificate exam (Perry 2003).

Despite the observed significant increases in the number of senior certificate holders in the past decade, the proportion of learners who actually sit for the exam remains low. The quality of the senior certificate exam also continues to be of concern. The large majority of learners still opt to write the senior certificate exam on the standard grade rather than on the higher grade. Consequently, the proportion of those passing with endorsement – which is a requirement for admission to universities – and in mathematics and science, remains low. It is estimated that of the average of 460 000 learners who sat for the senior certificate exam between 2000 and 2002, only 14% entered public higher education (universities and technikons). It is further estimated that about 37% of these candidates who sat for senior certificate exams failed and 15% dropped out (Subotzky 2003). The proportion of those obtaining a senior certificate pass in mathematics and science is even lower. The proportion of learners who pass the senior certificate exam with endorsement constitutes a significant inflow into higher education institutions, particularly universities. Although technikons also require senior certificate endorsement, they do enrol a significant proportion of students without a senior certificate endorsement, and a number of university departments also make concessions and do the same.

The improvements observed with regard to senior certificate pass rates are reflected in increases in enrolment rates in higher education. Enrolment rates of Africans increased to 60% in 2002 (provisional figures) from 29% in 1988 compared to whites whose enrolment rates declined from 58% to 28% during the same period (Subotzky 2003). However, enrolment patterns by field of study still show a bias towards the humanities and arts relative to other fields. For example, in 2000, university and technikon enrolments show that 50% of those enrolled were in the humanities and social sciences, while science, engineering and technology, and business, commerce and management sciences had 26% and 24% enrolments respectively. Table 1 below indicates that the humanities and social sciences graduates continue to constitute a higher proportion of those who graduate from universities compared to other fields of study. Also of concern is the fact that many students either drop out of higher education while others take longer to obtain their qualification. The challenge is to increase completion rates of those who enter higher education. It is estimated that in 2000-2001, only 14% of those enrolled actually completed their course of study. Of those who did not complete their course of study, only 70% returned while 15% dropped out (Subotzky 2003). It is not clear if those who returned did eventually complete their course of study. Nevertheless, this shows that there is a significant proportion of drop-outs in higher education.

Table 1: University graduations by Classification Educational Subject Matter group, 1995–2001

CESM group	1995	1996	1997	1998	2000	2001
SET	11 800	11 800	12 300	12 900	15 500	16 135
BC	11 000	10 500	11 200	11 600	12 400	13 225
HSS	28 700	28 100	30 700	30 400	39 100	42 992
Total	51 500	50 400	54 200	54 900	67 000	72 352

Sources: 1995 –1998: Cloete & Bunting (2000); 2000: DoE (2000, 2001a) (cited from Subotzky 2003)

The 2002 enrolment figures attest to the improvements observed in secondary schooling. Overall, the proportions of those enrolled in various fields of study show a move away from a concentration of graduates in humanities and arts-related fields and an improvement in enrolments in science, engineering and technology-related fields, and in business and commerce. These figures also show a shift with regard to race. There is an increase in Africans enrolling in the fields of science and business and commerce relative to those who enrol in the humanities and arts. However, it remains to be seen if these enrolment rates will translate into similar proportions in graduation rates in the coming years.

Table 2: Enrolment distribution in three Departments of Education's fields of study, by population group, 2002

Field of study	Africans	Coloureds	Indians	Whites	Total
Humanities	25, 4	38,1	27,5	41,1	31,4
Business and commerce	40,0	27,2	27,6	20,6	32,0
SET	34,6	34,7	44,9	38,3	36,6
Total	100,0	100,0	100,0	100,0	100,0

(cited from Cosser 2004)

Notes:

1 Data for 2000 are not available for the University of North West.

2 Totals here are lower than in Table 2 as they are based on different data available at the time. Various estimates of enrolments made at different times produced slightly different conclusions, based on the available data at the time. The DoE figures are constantly revised.

Graduate prospects Those who manage to obtain a higher education qualification have a better chance in the labour market than those who do not. A skill bias is clearly evident where, despite the high unemployment rate in the general population, the unemployment rate of individuals with higher education qualifications is relatively low. However, not all of these people are successfully and satisfactorily absorbed. Higher education qualifications do not necessarily translate into improved job prospects, although one is more likely to have better job prospects with such qualifications than without them.

The inequalities in education are inextricably linked to the labour market structure. This structure determines the expectations that higher education graduates have as job-seekers. Inequalities in higher education, namely differentiation between and within various institutions and between and within various disciplines, are directly linked to the differentiation between various occupations in the labour market. The clustering of graduates (mostly Africans) in the humanities and social sciences fields perpetuates the segmentation of the labour market as it was when previously racially determined. Graduates in these fields of study have poor labour market outcomes. They are thus relegated to inferior positions in the labour market, with lower economic prospects and little chance of mobility in either the internal or external labour market.

Employment The results of the tracer study used in this paper attest to the low unemployment rate of graduates, which is also reported by other national studies. In this study, it was found that 60% of graduates secured employment immediately[1]

after qualifying, a further 28% secured employment between a month and six months after qualifying, 6% did so between 7 and 12 months after qualifying, and 6% took more that a year to find employment after obtaining their qualifications. However, racial segmentation in the graduate labour market is evident largely because white and Asian graduates engage in different labour market processes compared to Africans and coloureds.

Naturally, field of study plays a major role in securing employment. Merely having a university qualification is not good enough as various degrees impart different skills to graduates, thus sending different signals to potential employers. Graduates in fields with a more professional focus, such as medical sciences (79%) and engineering (77%), found employment more quickly than those who studied in fields of a general nature (Table 3).

Table 3: Period before finding employment, by field of study

Field of study	Immediately %	Between 1 & 6 months %	Between 7 & 12 months %	Between 1 & 2 years %	More than 2 years %	Total %
Natural sciences	55,0	38,8	3,8	2,1	0,4	100
Engineering	77,2	18,3	3,0	1,0	0,5	100
Agriculture	61,6	31,4	5,8	1,2	0,0	100
Medical sciences	79,3	18,5	2,2	0,0	0,0	100
Humanities and arts	46,8	33,1	8,5	7,3	4,2	100
Education	57,0	33,8	3,9	4,4	0,9	100
Law	49,6	30,2	8,6	7,2	4,1	100
EMS*	65,4	23,3	6,2	3,7	4,3	100
Total	59,5	28,4	5,9	4,2	2,0	100

**EMS: Economic and management sciences*

In a labour market marked by disparities and inequities, factors such as race and gender can be expected to play a significant role in employability. With respect to race, although Africans were concentrated in fields of study with poorer employment prospects, a comparison within the study fields indicated that their white counterparts had better prospects. For example, white graduates constituted a higher proportion (70%) of those who found immediate employment compared with 57, 8% of Africans, 57% of coloureds and 52% of Asians. In other words, within study fields the differences varied according to race. More than 50% of white graduates found immediate employment in all study fields, whereas the only fields where more than 50% of Africans found employment immediately were engineering (88%), medical sciences (66%) and agriculture (53%). It was only in engineering that African graduates experienced the highest proportion (88,9%) of those securing immediate employment compared to 78,3%, 50% and 50% for whites, Asians and coloureds respectively. The

disadvantage of Africans and coloureds in the labour market emerged clearly in this analysis. In fields with a professional focus, insignificant differences existed in terms of being absorbed into the labour market, but significant differences were evident in general fields such as the humanities and arts, and economic and management sciences (Table 4).

Table 4: Proportion of graduates employed immediately, by race

Field of study	Asian %	African %	Coloured %	White %
Natural sciences	30,0	45,9	52,2	59,9
Engineering	50,0	88,9	50,0	78,3
Agriculture		53,3	83,3	64,3
Medical sciences	46,0	65,7	32,5	91,2
Humanities and arts	53,6	38,7	33,3	56,4
Education	71,4	49,3	28,6	75,0
Law	36,4	26,8	51,6	69,6
EMS*	53,5	37,5	42,2	74,8
Total	47,6	43,0	42,2	70,4

**EMS: Economic and management sciences*

Gender, on the other hand, seemed to show insignificant differences. Although a higher proportion of men were absorbed into the labour market more quickly than women, a significant number of women were absorbed fairly quickly. It was only in the humanities and arts and in law where less than 50% of the women found employment immediately, although in the humanities and arts the men had a similar experience (Table 5).

Table 5: Period before finding employment, by gender

Field of study	Immediately		Between 1 & 6 months		Between 7 & 12 months		Between 1 & 2 years		More than 2 years	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Natural sciences	58,7	50,9	35,7	42,1	3,2	4,4	1,6	2,6	0,8	
Engineering	78,5	70,0	16,9	26,7	3,5		0,6	3,3	0,6	
Agriculture	67,3	54,1	28,6	35,1	2,0	10,8	2,0			
Medical sciences	81,3	78,5	16,0	19,5	2,7	2,1				
Humanities and arts	48,0	46,1	30,2	34,9	8,2	8,8	7,5	7,2	6,0	3,1
Education	54,9	58,7	32,4	34,9	6,9	1,6	3,9	4,8	2,0	
Law	50,0	49,2	25,0	37,3	8,8	8,5	8,8	5,1	7,5	
EMS*	67,9	62,6	18,4	29,0	8,2	3,8	3,6	3,8	2,0	0,8
Total	62,3	57,0	24,7	31,9	6,3	5,5	3,9	4,4	2,8	1,3

**EMS: Economic and management sciences*

Of particular interest are the differences stemming from institution attended and the rate at which these graduates are absorbed into the labour market. Differences by institution attended indicate that graduates from historically white universities (HWUs) had better employment prospects than those from historically black universities (HBUs). This is partly due to employer perceptions regarding the quality of education at historically black universities. It could also be explained by HBUs having disproportionate numbers of students graduating in fields with lower employment prospects, i.e. the humanities and arts, and education. Overall, of those who found employment immediately, only about 40% were from HBUs compared to 69% from HWUs. While field of study partly explains these differences, indications of disadvantage for those graduating from HBUs are also evident. For example, the law graduates from HBUs and from HWUs had different labour market experiences – 27% of HBU graduates found employment immediately compared to 67,5% of their HWU counterparts. In economic and management sciences, the figures were 38,5% for HBUs and 73,5% for HWUs respectively.

Table 6 below clearly shows the disadvantage experienced by students from HBUs. Higher proportions of students from HWUs are absorbed in the labour market fairly quickly (within six months of graduating) whereas those from HBUs take longer to find employment. It is likely that institutions serve as a signal in the labour market in terms of which graduates from HWUs are assumed to have characteristics that correlate with higher performance in the labour market, compared to graduates from HBUs. In the context of a skills shortage, this constitutes a substantial waste in the higher education system insofar as it serves labour market needs for both job-seeker and the economy.

Table 6: Period before finding employment, by field of study and institution attended

Field of study	**Immediately**		**Between 1 & 6 months**		**Between 7 & 12 months**		**Between 1 & 2 years**		**More than 2 years**	
	HBU %	HWU %	HBU %	HWU %	HBU %	HWU %	HBU %	HWU %	HBU %	HWU %
Natural sciences	40,0	59,5	47,3	36,2	10,9	1,6	1,8	2,2	0,0	0,5
Engineering	60,0	77,7	20,0	18,3	0,0	3,0	20,0	0,5	0,0	0,5
Agriculture	53,3	63,4	33,3	31,0	13,3	4,2	0,0	1,4	0,0	0,0
Medical sciences	57,3	88,8	37,8	10,1	4,9	1,1	0,0	0,0	0,0	0,0
Humanities and arts	34,0	55,8	36,3	30,9	10,9	6,9	11,2	4,6	7,6	1,8
Education	49,7	72,6	38,1	24,7	5,8	0,0	5,2	2,7	1,3	0,0
Law	27,4	67,5	37,1	24,7	14,5	3,9	12,9	2,6	8,1	1,3
EMS*	38,5	73,5	26,9	22,2	16,9	3,0	13,1	0,9	4,6	0,5
Total	40,5	68,8	35,9	24,8	10,5	3,6	8,6	2,0	4,5	0,8

**EMS: Economic and management sciences*

Levels at which graduates function in the labour market Naturally, it would be expected that graduates would hold jobs commensurate with their studies. These jobs would generally fall within the professional level and above. While in all race groups there were more graduates in professional jobs, whites made up the highest proportion (23,6%) of those in managerial positions, followed by Asians (19,6%), Africans (10,8%) and coloureds (10,6%) (Table 7).

Table 7: Level of function, by race

Level of function	Asian	African	Coloured	White	Other
Managerial	19,6	10,8	10,6	23,6	21,4
Supervisory	6,3	7,7	8,1	4,4	7,1
Professional/Technical	63,9	59,9	55,0	57,2	67,9
Administrative	5,1	13,1	16,3	10,4	
Operator	0,6	3,8	3,1	0,8	3,6
Trainee	4,4	4,6	6,9	3,5	
Total	100,0	100,0	100,0	100,0	100,0

It could be expected that the period spent in the labour market would heavily influence the level at which graduates function. This would be especially so for higher levels of employment such as management. An investigation of those who indicated that they were functioning at management level and the number of years they had worked did not reveal any differences that might account for more white and Asian graduates being in management compared to their African and coloured counterparts. The proportion of white and Asian graduates within each category of number of years worked was not as high as that of other race groups at the time of the survey (Table 8).

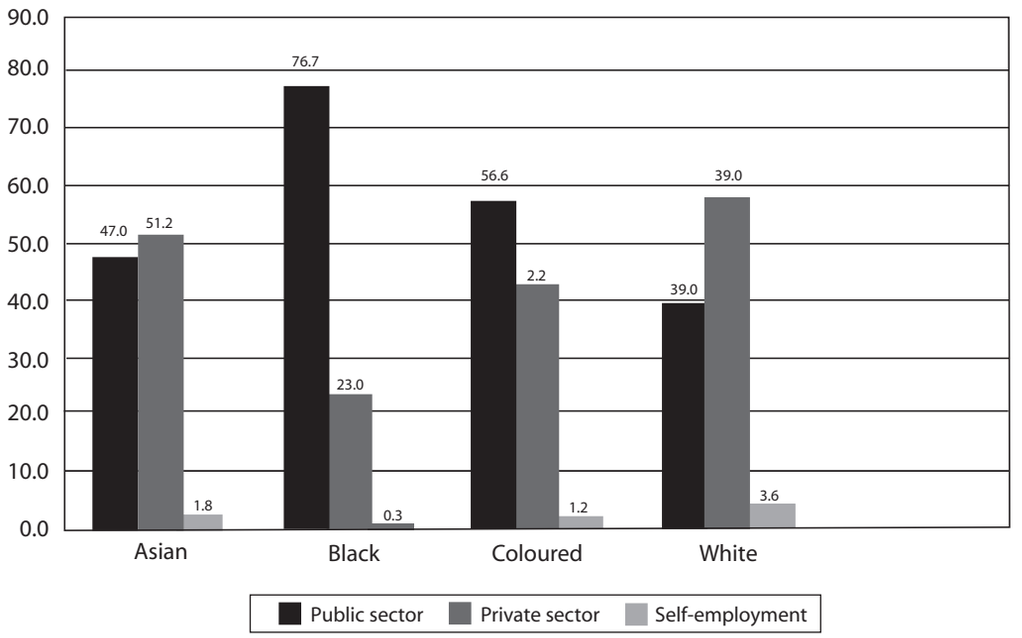
Table 8: Number of years worked by those in management, by race

Number of years worked	Asian	African	Coloured	White
0–5 years	46,7	34,4	58,8	38,6
6–10 years	36,7	50,8	35,3	51,8
11–15 years	16,7	14,8	5,9	7,5

Sector of employment The role of the public sector as an employer is of particular interest. It is the first sector of employment for a large proportion of graduates irrespective of field of study, race and gender. This is especially true for African graduates who make up higher proportions of those employed in this sector. As graduates change jobs and sectors of employment, Africans and coloured representation in this sector increases while that of Asians and whites decreases.

Differences were evident in terms of levels at which graduates function in these sectors. While the proportions of whites and Asians in professional levels were higher in the public sector (71,5% and 79,4% respectively), almost equal proportions of those functioning at managerial levels were apparent for all race groups. However, when one looks at the private

Figure 1: Sector of first job, by race



Source: Moleke 2004

sector, not only is the proportion of those functioning at professional levels higher for whites and Asians (51% and 47,8% respectively), but their proportions in management are higher as well (about 27% for both race groups), compared to Africans and coloureds (11,9% and 9,7% respectively) (Table 9).

Table 9: Level of function within sector of employment

Race	Managerial %	Super-visory %	Professional / Technical %	Admini-strative %	Operator %	Trainee %
Public sector						
Asian	8,8	5,9	79,4	2,9	1,5	1,5
Black	10,3	8,2	63,8	11,6	2,9	3,2
Coloured	11,0	9,9	58,2	9,9	3,3	7,7
White	10,2	5,1	71,5	9,5		3,6
Private sector						
Asian	27,5	7,2	47,8	8,7		8,7
Black	9,8	6,5	42,4	21,7	7,6	12,0
Coloured	11,3	6,5	46,8	25,8	3,2	6,5
White	27,2	4,4	51,1	12,1	1,2	4,0
Self-employed						
Asian	26,3	5,3	68,4			
Black	38,5		46,2	7,7	7,7	
Coloured			100,0			
White	39,1	1,8	52,7	4,1	1,2	1,2

The survey also looked at the movement of graduates between public and private employment and self-employment. Generally, it was mainly Asian and white graduates who moved into self-employment and, even then, mainly those in the medical and legal fields. Overall, only a small proportion of graduates in the survey were in self-employment. The movement between the public and private sector was much more significant. The public sector is an important first employer, particularly for African graduates. Other race groups tend to find subsequent jobs in the private sector, while African graduates tend to remain in public sector employment. The public sector is crucially important for African graduates – 76,7% of the African graduates surveyed found their first job in the public sector. This proportion rose to 82% of those reporting on their current job (compare Table 10 and Table 11).

Table 10: First job by sector, population group and field of study

Race	Natural sciences	Engineering	Agriculture	Medical sciences	Humanities and arts	Education	Law	EMS*	Total
Asian									
Public	60,0	37,5	100,0	55,1	62,1	100,0	9,1	23,3	47,0
Private	40,0	62,5		42,9	34,5		90,9	74,4	51,2
Self-employed				2,0	3,4			2,3	1,8
African									
Public	79,5	33,3	86,7	65,7	82,6	89,4	51,2	54,1	76,7
Private	20,5	66,7	13,3	31,4	17,4	10,6	48,8	44,7	23,0
Self-employed				2,9				1,2	0,3
Coloured									
Public	47,8		81,8	64,9	81,8	42,9	37,9	56,6	56,6
Private	47,8	100,0	18,2	33,8	18,2	57,1	62,1	42,2	42,2
Self-employed	4,3			1,4				1,2	1,2
White									
Public	47,1	31,3	36,6	62,7	44,0	72,7	43,3	18,5	39,0
Private	52,3	63,7	49,3	34,9	52,5	22,7	55,2	78,7	57,5
Self-employed	0,6	5,0	14,1	2,4	3,5	4,5	1,5	2,8	3,6

** EMS: Economic and management sciences*

Perceptions of the value of higher education The graduates were asked if they would choose the same or a different course of study if they could start again, to establish the value they placed on higher education. Interestingly, 48,6% said they would choose a different course of study, while 49% indicated that they would do the same course again. Only 1,6% indicated they would not enter higher education at all. Thus, while most of the graduates realised the value and importance of higher education, they appeared to make less informed decisions on their choice of study. This varied for different study fields. While all fields had graduates who indicated that they would choose a different course of study, most of these were in the humanities and arts (63%) and education (69,7%) (Table 12).

Table 11: Current job sector, by race and field of study

Race	Natural sciences	Engi-neering	Agri-culture	Medical sciences	Humanities and arts	Edu-cation	Law	EMS*	Total
Asian									
Public	50,0	28,6		40,0	70,4	80,0	18,2	34,9	43,9
Private	44,4	71,4	100,0	40,0	22,2		45,5	60,5	43,9
Self-employed	5,6			20,0	7,4	20,0	36,4	4,7	12,1
African									
Public	70,6	62,5	100,0	68,6	86,5	96,1	64,9	64,0	82,0
Private	29,4	37,5		14,3	11,9	3,9	27,0	34,9	15,7
Self-employed				17,1	1,6		8,1	1,2	2,4
Coloured									
Public	54,5			50,0	62,9	100,0	41,7	46,7	57,1
Private	40,9	100,0		41,7	35,7		33,3	53,3	39,1
Self-employed	4,5			8,3	1,4		25,0		3,7
White									
Public	35,9	19,6	26,8	35,2	38,2	61,9	24,6	16,4	29,0
Private	56,9	69,8	47,9	46,9	50,8	22,2	59,4	74,5	59,0
Self-employed	7,2	10,6	25,4	17,9	11,0	15,9	15,9	9,1	12,0

** EMS: Economic and management sciences*

Table 12: Hypothetical re-enrolment, by field of study

Field of study	Same course	Different course	Not enter higher education	Total
Natural sciences	54,5	43,2	2,3	100,0
Engineering	63,4	36,1	0,5	100,0
Agriculture	55,1	42,7	2,2	100,0
Medical sciences	57,4	42,6		100,0
Humanities and arts	35,0	63,0	2,0	100,0
Education	27,5	69,7	2,8	100,0
Law	55,6	42,4	2,0	100,0
EMS*	66,8	32,1	1,0	100,0
Total	49,8	48,6	1,6	100,0

**EMS: Economic and management sciences*

A survey of the actual situation revealed that 22,3% of those who studied further after obtaining their first degree changed their study field. The humanities and arts had the highest proportion (41,9%) of those who changed fields when studying further, with the next field of study being natural sciences (12,9%). Although this may not be conclusive, it shows the lower employability of the majority of those who hold humanities and arts qualifications and hence the need for them to change their field of study when pursuing further studies. It may also be an indicator of bad choices made due to lack of information prior to pursuing higher education studies. This, however,

is not to suggest that people pursue higher education and further studies purely for the purpose of finding a job, as continuous education occurs also as part of lifelong learning.

Summary and conclusion Current racial inequities have their roots in past racial injustices. The continuing racial differences in economic outcome are evident. Africans continue to be relatively disadvantaged compared to their white counterparts. Racial discrimination played a major role in the creation of these inequities, and, accordingly, various measures and initiatives have been introduced to redress the situation. However, they are not sufficient to eliminate disparities in the labour market based on race as they primarily address the demand-side sources of inequities. The continuing disparities point to a need to look into the role of supply factors in the phenomenon. Differences in human capital acquired are gaining prominence in accounting for the racial disparities in the labour market.

Field of study is the major determinant of employability for those with higher education qualifications. Those in fields of study that lead to a profession and those whose fields of study are perceived positively by potential employers tend to find employment quicker. The authorities have endeavoured to improve the participation of previously disadvantaged individuals in fields that will prepare them for professional jobs aligned to labour market needs. It is, however, not good enough to hold a higher education qualification – the type and quality of the qualification is even more important.

Race continues to play a role in employability in South Africa, irrespective of the field of study. Even within the same field of study, white graduates have better prospects than their African counterparts. However, the impact of race seems to be minimal when all other factors are taken into account. Of particular interest is the role played by the institution attended. Students from HBUs tend to have lower employment prospects and to take longer to find employment compared to students from HWUs. Institutional characteristics partly explain these differences. For example, HBUs generally produce graduates in the humanities and arts whose labour market outcomes are comparatively poor (this is not unique to South Africa). The large majority of these graduates are African. Hence, to some extent, it would be expected that these institutions would show lower levels of success with regard to the employability of their graduates. However, there are unexplained differences as well. Irrespective of field of study, race or gender, students from HWUs seem to have more success in the labour market. A possible explanation of these differences may lie in the differing quality of education in these institutions, whether perceived or real.

Differences were also noted in sector of employment, revealing a divide along racial and qualification-type lines. The public sector seemed to play a key role as an employer of graduates, particularly Africans. Fewer Africans switched jobs from the public to the private sector at the time of the survey, while whites switched from the public to the private sector and to self-employment. It is also interesting to note that in the public sector similar proportions of all race groups functioned at management level, whereas in the private sector more whites and Asians were managers compared to Africans and coloureds.

The differences pointed out here indicate that increasing participation rates, whether

in education or in the labour market, have done little to address the inequalities of the past. The lack of labour market information and proper career guidance in the early years of school does learners no justice. Many graduates are at a disadvantage due to their own ill-informed decisions with regard to study choice, prior education and access to an institution or course of study. Perceptions of potential employers about the quality of education in various institutions also play an important role in employability. Efforts must be made to change these perceptions. Although the divide between institutions of higher education is no longer along racial lines as the number of Africans in historically white institutions has risen, the historically predominantly black institutions are still predominantly black despite the mergers. It remains to be seen if the mergers will do anything to change prevailing perceptions.

Clearly, higher education has a major role to play in labour market re-adjustment, particularly in terms of countering and averting segmentation of the labour force. Because of the ever-growing demand for highly skilled people, particularly in the fields of science and technology, a policy intervention is required that will radically improve the quality of the delivery of the education system. Enhancing education's productive and distributive functions should be a priority of the authorities. Education should not only provide all the skills and competencies needed in a changing economy; it should also ensure that sections of the population are not left behind because of lack of appropriate skills and qualifications.

Endnote

1 Employment immediately in this study is defined as finding a job/employment immediately after obtaining a degree. This implies that no unemployment was experienced by these graduates.

References

Cosser, M, Du Toit, J & Visser, M (2004) *Dreaming of a higher education. Grade 12 learners' destinations one year on,* HSRC research monograph

Keswell, M & Poswell, L (2002) *Returns to education in South Africa 1996–2000*, CSSR working paper

Moll, P (1996) The collapse of primary schooling returns in South Africa 1960–1990, *Oxford Bulletin of Economics and Statistics* 58: 185–209

Moleke, P (2004) *Finding work: Employment experiences of South African graduates*, HSRC monograph

Perry, H & Arends, F (2003) Public schooling in *Human Resources Development Review 2003: Education, Employment and Skills in South Africa*, Cape Town: HSRC Press

Rospabe, S (2001) *An empirical evaluation of gender discrimination in employment, occupational attainment and wages in South Africa in the late 1990s*, Paper presented at the DPRU/FES Conference on Labour Markets and Poverty in South Africa, Johannesburg, 15–16 November

Subotzky G (2003) Public higher education in *Human Resources Development Review 2003: Education, Employment and Skills in South Africa.* Cape Town: HSRC Press

Van der Berg, S (2001) *The role of education in labour earnings, poverty and inequality*, Paper presented at the DPRU/FES Conference on Labour Markets and Poverty in South Africa, Johannesburg, 15–16 November