

Education and the labour market in Botswana

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Using primary data from a 1993/4 Household Income and Expenditure Survey in Botswana, this article presents empirical results on occupational attainment, its determinants, and the extent of filtering down in Botswana's labour market, given changes in labour market conditions over time. It was found that the Botswana labour market has been characterised by some 'filtering down' of educated workers into less skilled jobs as the supply of skilled manpower exceeded demand. Those who entered the labour market earlier, those with more education, those located in the urban areas and male workers are more likely to occupy jobs that are higher up in the hierarchy than to be in an unskilled blue-collar job. Jobs higher up in the hierarchy are also more rewarding financially. The article shows that there is occupational segregation of workers by gender in Botswana's labour market in that female workers are generally confined to a narrow range of occupations. The policy implications are that employment creation has to be pursued vigorously and the issue of gender discrimination investigated further.

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1. INTRODUCTION

The contribution of education to economic development is well documented in development literature. Since the pioneering work of Schultz (1961) and Denison (1962), to the more recent analysis of the East Asian economic miracle (World Bank, 1993), analysts have identified education as an important determinant of economic growth. It is in recognition of the potential role of education that most governments in sub-Saharan Africa have allocated a large part of their budgets to the education sector. For instance, Botswana's budget for education has grown from 15 per cent or less in the 1970s to more than 20 per cent in the 1990s (Siphambe, 1997). Most of the countries started with a severe shortage of skilled local manpower and have moved to a position where there is a current surplus of skilled labour.

For most countries in the region, including Botswana, the economy is at present unable to absorb all the output from the expanded education system. The likely result of the increased supply of skilled manpower, given the few jobs available, is a 'filtering down' of educated workers into less skilled jobs. Partly generating this situation is the expanded school system which alters the composition of the labour supply, with each cohort of workers entering the job market being more educated than the last. Occupation and year of entry into the labour market may thus play a central role in the wage determination process in Botswana.

Using primary data from a 1993/4 Household Income and Expenditure Survey, this article explores the extent of filtering down in Botswana's labour market and estimates a multinomial logistic model of occupational attainment. The findings should contribute

to the formulation of sound education policies and also present some useful lessons for other sub-Saharan countries.

2. THE COUNTRY'S SETTING

Botswana's impressive performance since gaining independence in 1966 is one of the few success stories of economic development in sub-Saharan Africa. For the period 1965–90, growth per capita averaged 8.4 per cent per annum. The country has, however, experienced lower average annual growth rates of about 1.7 per cent in the 1990s (Freeman & Lindauer, 1999). The fast growth in the 1970s and 1980s enabled Botswana to move from a position of severe poverty to being one of the richest countries in the region, and it is one of the few in sub-Saharan Africa now classified as a middle-income country. Much of this success is attributable to the exploitation of large diamond deposits discovered one year after independence. Other important aspects of Botswana's political economy – including political pluralism, sound economic management, relatively well-developed human resources and an early demographic transition which reduced the dependency ratio – also contributed to this success story (Harvey & Lewis, 1990; Holm, 1994; Rodrik, 1998; Freeman & Lindauer, 1999).

Botswana's success has also been evidenced by good performance in terms of human development indicators, showing that some part of these resources has been transformed successfully into human development. In 1998, Botswana ranked 97th out of 174 countries in the world and fourth in Africa after Seychelles, Mauritius and South Africa (Republic of Botswana, 1999). A number of other important human development indicators, such as life expectancy, high literacy rates and low mortality rates have also been changing favourably. Life expectancy rose from 50 in 1970 to 68 in 1995, with 52 for sub-Saharan Africa as a whole. Infant mortality fell from 95 per 1 000 live births in 1970 to 56 in 1995, with 92 per 1 000 for sub-Saharan Africa (Freeman & Lindauer, 1999). Education was a further important human development aspect that received tremendous attention from the Botswanan government.

The lack of skilled and educated Botswana was one of the most important constraints on development at independence and for many years afterwards.² At independence, there were few schools or educated Botswana owing to the colonial government's neglect of education. The few schools that existed were a result of local and missionary initiatives. At independence, there were 40 Botswana who were university graduates and about 100 with a senior secondary certificate (Harvey & Lewis, 1990). Most of the university graduates were trained outside the country, mainly in the Republic of South Africa. Botswana was, however, not exceptional in terms of neglect of education by the colonial government. With a population eight times that of Botswana, Zambia, for instance, had only twice as many university graduates at independence, even though it had ten times as many secondary school graduates (Harvey & Lewis, 1990).

Given the small human capital inherited from the colonial government, the Botswana government had to invest heavily in education, but there were still severe shortages. These were mainly due to the long time lags inherent in education and rapid economic growth that increased the demand for educated people (Harvey & Lewis, 1990). Most of these critical manpower shortages were being met by heavy importation of skilled labour, an expensive undertaking for the Botswanan government. Just two years prior

to independence, only 24 of the 184 administrative posts were held by Batswana, and only 275 of the 623 posts in the technical, executive and secretarial grades (Colclough & McCarthy, 1980).

Since independence, school enrolment at all levels has increased considerably in response to the manpower constraint. In 1970, 65 per cent of children of primary school-going age were enrolled and by 1995 this percentage had increased to 115 per cent. By comparison, the primary school enrolment ratio for the whole of sub-Saharan Africa was 73 per cent in 1995. The age group enrolled in secondary education in Botswana also increased remarkably from 7 per cent in 1970 to 57 per cent in 1995, while the ratio was 25 per cent for sub-Saharan Africa. Post-secondary (tertiary) enrolment increased slightly from 1 per cent in 1970 to 3 per cent in 1991 (Freeman & Lindauer, 1999; World Bank, 1994: 217). Compared with other countries in the region, the increase in enrolment in secondary education between 1970 and 1991 for Botswana was exceptional. Enrolment in South Africa increased from 30–54 per cent over the same period, Zimbabwe from 4–13 per cent and Lesotho from 7–25 per cent (World Bank, 1994: 216–7).

During the late 1970s, the government began to be increasingly aware of the equity issues of education, as there was clear evidence that a number of students were unable to complete some levels of education owing to financial constraints. In line with the goal of education for all, the government abolished school fees, first for primary schooling in 1978 and later for secondary education in 1989.

While the education system was expanding at such a tremendous rate, the ability of the economy to absorb all the graduates from the schools was very limited. Unemployment became rampant, especially among the youth who had completed only primary and Junior Certificate levels of education. The unemployment rate was estimated at 13,9 per cent in 1991 and had risen to 21,6 per cent in 1994. According to the latest estimates, that figure has remained almost unchanged at 21,5 per cent (CSO, 1998).

3. DESCRIPTION OF DATA

Data from the Household Income and Expenditure Survey (HIES) were gathered from 3 608 households across Botswana. The households were selected from dwellings within 144 blocks (which is equivalent to an enumeration area but sometimes smaller), which were randomly selected from 3 088 blocks. This represents approximately 5 per cent of the blocks. Since the blocks were of different sizes, the Central Statistical Office (CSO) had to use a weighting system to allow for as much representation of the sample as possible. In relatively larger blocks, more households were included in the sample. Seventy-two of these 144 blocks are from the urban areas, 36 from the urban villages and the remaining 36 are from the rural areas or villages. In the last census, large villages like Serowe and Kanye were reclassified as urban villages. Most of these large villages have grown in terms of economic activity and population, and almost qualify to be called urban areas.

In this study, we defined the labour force as being composed of persons aged between 15 and 65 years. The sample comprised 1 870 males (55 per cent) and 1 512 females (45 per cent). The location of the sample is as follows: 2 086 (61,7 per cent) urban dwellers, 839 (24,8 per cent) urban village dwellers and 457 (13,5 per cent) rural dwellers.

4. SOME CHARACTERISTICS OF BOTSWANA'S LABOUR MARKET

This section presents some of the major characteristics of Botswana's labour market based on various data sources and HIES data. According to the 1995/6 Labour Force Survey, the labour force comprised 761 589 Batswana aged between 15 and 65 years. Of these, 66 per cent were economically active. (The most common age range of a labour force is 15 to 64 years. For some reason, survey reports from the government of Botswana define the labour force as being 12 years of age and above. In order to come in line with the international standard, the author had to adjust the original CSO 1995 Labour Force Survey data.)

Of those who were economically active, 93 060 (or 21,5 per cent) were unemployed. When the discouraged unemployed members of the labour force are added, the unemployment rate increases to about 35 per cent. There is also a significant proportion of those who are visibly underemployed among those classified as being employed (estimated at 8 per cent) (CSO, 1998).

The survey also shows that the majority of the unemployed were women (55 per cent) and that a substantial percentage (71 per cent) of these female workers were young people (15–34 years of age). For primary and secondary school leavers, unemployment is higher for both male and female workers.

The largest employer in the economy is the government, with about 33 per cent of total employment. The second largest employer is the private sector, which represents about 32 per cent. The third largest is the informal sector (including domestic/private households) with 17 per cent. Traditional agriculture and parastatals contribute 14 and 4 per cent of total employment respectively. The distribution of employees by gender shows that the government has an almost equal distribution, while the private sector is male-dominated, with 63 per cent of the workforce being men. Female workers dominate the informal sector, making up about 67 per cent of the total.

Table 1 shows the mean values and standard deviation of characteristics of the sample of workers from the HIES data by gender. Fifty-six per cent of the sample is male. Male employees are significantly older on average and more experienced than female employees. Potential experience is measured as age minus number of years of schooling minus entry age for primary schooling (7 years) for those with seven or more years of schooling. For those with less than seven years of schooling, experience is measured as age minus 14 (entry age to labour market). This correction was made to avoid overestimating the early experience of those with fewer years of education.

These results reflect the fact that the participation of women in the labour market was relatively lower in the past. The majority of the older workers, especially in the less skilled jobs, are men, given that in the past women were relegated to non-market activities. Women's participation has, however, been increasing quite rapidly. According to a 1994/5 Labour Force Survey, women constitute about 45 per cent of the formal labour force, a figure that has risen from about 34 per cent in 1991.

Female employees are on average significantly more educated than male employees and yet they earn much less than their male counterparts. Both average and median earnings are significantly higher for male workers than for female workers. Kann et al (1988) obtained similar results to those reflected in Table 1. They show that, at every level of education obtained, women receive a lower average monthly salary than men.

Table 1: Characteristics of workers, means and standard deviation of selected variables in the sample, overall and by gender

Variable	Mean	Standard deviation	Sample size
Sex (1 = M, 0 = F)	0,56	0,5	3 101
Age			
Overall	34,3	10,5	3 101
Male	35,3	11,3	1 744
Female	32,9	9,3	1 357
Potential experience (years)			
Overall	18,4	11	3 101
Male	19,4	11,7	1 744
Female	17	9,9	1 357
Years of schooling			
Overall	7,3	4,5	3 101
Male	6,9	4,9	1 744
Female	7,8	3,8	1 357
Monthly earnings (pula) ¹			
Overall	927 (498)	1 242	3 101
Male	1 111 (595)	1 437	1 744
Female	692 (350)	881	1 357

Source: 1994/5 HIES data.

Note: ¹The figures reported in brackets are median earnings.

One of the major reasons for the higher average education of women has been given as the different roles played by boys and girls in Tswana societies. According to Kossoudjie & Mueller (1983), boys usually played a major role in cattle herding, which took them away from the village. They therefore tended to start school at a later stage and finish earlier. This could still be the major reason for the differential in schooling observed in this sample, especially for the older generation. Its validity is, however, questionable when applied to the recent cohorts, given that boys no longer spend that much time in the cattle post.³ We would therefore expect schooling differences by gender to diminish over time as more boys start their schooling earlier and finish later.

Female workers earn less on average than their male counterparts. This may reflect a number of things. One might be that female workers are discriminated against in the labour market. Secondly, it may be that female workers occupy jobs that are less rewarding financially than 'male jobs'. A partial answer to this issue is provided in Section 5 of this article.

Table 2 shows average earnings by level of education and also whether the worker is a public or private sector employee. Average earnings increase as the level of education increases. Except for those with no schooling, public sector employees on average earn

Table 2: Average earnings by level of education, sector and gender

	Employees			Private public employees		
	All	Male	Female	All	Male	Female
Illiterate	608	658	210	584	676	348
Lower primary	535	609	304	667	972	438
Higher primary	526	622	403	705	809	455
Lower secondary	669	774	577	1 024	1 105	953
Higher secondary	1 265	1 395	1 088	1 319	1 541	1 083
Higher education	2 416	2 364	2 485	2 842	3 491	1 967

Source: 1994/5 HIES data.

more than private sector employees at all education levels. Earnings ratios between those with no education and those with post-secondary education are slightly higher for public sector employees. Results from Kann et al (1988) show that for workers with no education or primary education only, the average salary was higher in government, whereas for those with secondary and tertiary education the private sector paid a higher salary.

In the present study, the higher wages and salaries of those in the public sector with secondary and tertiary education as opposed to those in the private sector reflect three things:

- Firstly, the 'decompression' exercise of 1990 emanating from the Revised Incomes Policy increased government salaries for higher-level workers quite significantly. There was a concern that government was losing its skilled manpower to the private sector, which the Revised Incomes Policy proposed to redress by increasing government salaries for the higher scales to match the salaries in the private sector (Republic of Botswana, 1990).
- Secondly, owing to the relative abundance of graduates from secondary and tertiary levels of education, the private sector no longer needs to pay higher wages than the government in order to attract employees.
- Another major factor has been the strong financial position of the government, which has made it possible to offer salaries and wages that are quite high. For most of the time, the government of Botswana has run large budget surpluses owing to its good financial position. Underspending by most ministries and departments also contributed significantly to these large surpluses.

With regard to gender, it is the female workers who have higher ratios in both sectors. The ratio is significantly greater between female employees in the private sector (1:12 compared with 1:4 for male employees). Earnings are therefore highly differentiated between female employees. Earnings differentials between male and female workers are also higher at lower education levels and become narrower as the level of education increases. This implies that earnings differentials between male and female employees are, in fact, equalised as education levels increase. This equalisation is more pronounced in the private sector, an important reason being that the private sector is more competitive than the public sector and therefore more likely to reward workers according to their marginal productivity than according to such variables as gender.

Table 3: Proportion of workers in each occupation and average earnings in each occupation

	Manage- rial (OCC1)	Middle white collar (OCC2)	Junior white collar (OCC3)	Skilled blue collar (OCC4)	Semi- skilled blue collar (OCC5)	Un- skilled (OCC6)
Male workers	74	44	25	91	59	38
Female workers	26	56	75	9	41	62
Total	100	100	100	100	100	100
Average earnings (pula)	3 088	1 511	856	855,16	614	424

Source: 1994/5 HIES data.

Table 3 shows the frequency tabulation of the distribution of workers by gender and occupations. (The next section discusses how the occupations were derived.)

Male workers constitute a greater proportion of the following occupations: professional, skilled blue-collar and semi-skilled blue-collar jobs. Females, on the other hand, dominate middle white-collar, junior white-collar and unskilled blue-collar occupations.

The average earnings of all the occupations are also shown in the same table. Occupations dominated by female workers (OCC2 and 3) in the white-collar section are on average less rewarding financially compared with those dominated by male workers (OCC1). In manual occupations, those dominated by females (OCC6) are also less rewarding than the male-dominated ones (OCC4 and 5). Occupational segregation is therefore an important explanation for the already observed phenomenon that women in the Botswanan labour force are generally more educated than men, even though they earn less than their male counterparts.

5. THE RELATIONSHIP BETWEEN EDUCATION AND THE LABOUR MARKET OVER TIME⁴

5.1 Model and variables

To explore the relationship between education and labour markets over time, broad categories of occupational groups were constructed on the basis of skill requirements:

- The occupations ranked the highest are professional/managerial (OCC1), and include doctors, economists and lecturers.
- The next highest is the middle white-collar group (OCC2), which includes primary school teachers and nurses.
- The third highest on the list is junior white-collar workers (OCC3), eg clerks and typists.
- The next is a category of skilled blue-collar workers (OCC4), eg carpenters, electricians and bricklayers.

- The fifth category is a group of semi-skilled blue-collar workers (OCC5), eg factory workers.
- At the bottom of the list are unskilled blue-collar workers (OCC6). These include cleaners, gardeners, messengers and domestic staff.

To explore the determinants of occupational choice, a logit function was run for each occupation. The dependent variable took the value of 1 if the person is in that occupation, and 0 otherwise. The independent variables included five variables measuring educational attainment (no schooling being the lowest and higher education the highest), five variables measuring cohort effects, a dummy for gender (1 = male, 0 = female), and a dummy for location of worker (1 = urban worker, 0 = urban village). It was expected that the more educated would favour the more skill-intensive jobs. Age was used as a proxy for date of entry into the labour force.

5.2 Results

Table 4 presents maximum likelihood estimates of the variables included in the equation. The chi-square – which is a test for the null hypothesis that the coefficient for all the terms in the current model, except the constant, is zero – is shown at the bottom of Table 4. The model chi-square for all five occupations is significant at a 1 per cent level of significance. These results imply that not all the coefficients in the model are zero in value. The goodness of fit of the model is quite high for all five occupations, as indicated by the R-square (R^2), which ranges from a low of 30 per cent for occupation 1, to a high of 60 per cent for occupation 5. (Note that the use of R^2 as a measure of goodness of fit is questionable and usually very low in value. For more details on this issue, refer to Gujarati, 1988.)

Table 4 also shows the results of occupation determination for the five occupations. For the occupation of professionals (OCC1), having only primary schooling and/or a lower secondary Junior Certificate are significant determinants relative to being in the unskilled blue-collar job category (OCC6). The coefficients are negative, implying that having these characteristics decreases the likelihood of a worker being employed in the professional occupations vis-à-vis being in OCC6. This is explained by the fact that there has been an increased supply of people with higher levels of education who tend to outcompete the others in the race for these jobs. Moreover, these jobs are more likely to require the higher skills that are normally associated with higher levels of education.

In the middle white-collar occupations (OCC2), being aged under 25 years, having attended primary or lower secondary school, being located in an urban area and being male, all have negative and significant coefficients. The implication is that having these characteristics reduces the likelihood of a person being employed in a middle white-collar job, as compared with being in an unskilled blue-collar job (OCC6).

Being aged 45–54 years, or 55 and above, has positive and significant coefficients. This implies that workers aged 45 years and above have a greater chance of occupying jobs in the middle white-collar category, relative to being in an unskilled blue-collar job. The year of entry to this occupation therefore matters, as early entry favours the older workers. This clearly reflects that some filtering down did occur as the labour market changed over time, especially with increases in supply of a relatively more educated labour force than at independence and the early periods of post-independence.

For junior white-collar occupations (OCC3), the following characteristics have negative

Table 4: Multinomial logit model of occupational attainment (excluded class: unskilled blue-collar workers, OCC6)¹

	Managerial (OCC1)	Middle white collar (OCC2)	Junior white collar (OCC3)	Skilled blue collar (OCC4)	Semi-skilled blue collar (OCC5)
No schooling	- 15,4 (0,02)	- 14,3 (0,3)	- 11,2 (1,3)	- 3,9 (22,6)*	- 2,36 (8,3)*
Primary education	- 6,3 (13,95)*	- 6,9 (71,2)*	- 4,8 (50,7)*	- 3,02 (17,7)*	- 1,9 (6,8)*
Junior Certificate	- 3,5 (6,08)*	- 3,4 (24,96)*	- 2,7 (17,9)*	- 2,06 (8,1)*	- 1,23 (2,7)*
Higher education	20,89 (0,03)	7,2 (0,06)	-	4,19 (0,04)	-
Age < 25	- 10,2 (0,02)	- 2,2 (10,7)*	- 0,89 (4,6)*	- 0,76 (4,1)*	- 0,22 (0,4)
Age 25-34	- 9,6 (0,03)	- 0,08 (0,03)	0,26 (0,58)	- 0,36 (1,5)	- 0,02 (0,006)
Age 45-54	1,55 (1,88)	1,04 (2,04)*	1,01 (3,8)*	- 0,94 (3,1)*	0,12 (0,08)
Age 55+	- 8,1 (0,0008)	2,3 (5,1)*	- 0,44 (0,12)	- 5,99 (0,2)	- 0,75 (0,45)
Gender	1,35 (1,75)	- 0,88 (5,5)*	- 0,46 (2,7)*	2,87 (86,1)*	0,94 (17,9)*
Location	- 1,56 (1,6)	- 1,03 (5,7)*	- 0,48 (2,5)*	0,33 (0,01)	- 0,12 (0,17)
Constant	1,76	3,7	3,3	0,46	0,59
Chi-square	241,98	314,69	174,93	198,73	32,6
Chow R ²	0,31	0,41	0,45	0,35	0,60

Notes: ¹Figures in parenthesis are Wald statistics. * Significantly at the 5 per cent confidence level.

and significant coefficients: being under 25 years of age, having been to primary and junior secondary school, one's gender and location. These characteristics reduce the likelihood of a person holding a junior white-collar job. This again reflects the job filtering that causes those who enter the labour market later and/or those with fewer years of education to be outcompeted for jobs in this occupation category. Being male also reduces the probability of a worker being in one of these occupations, ie female workers are more likely to be in this occupation group than male ones. On the other hand, the coefficient for age between 45-54 years is positive, implying that a person in this age group is more likely to be in this occupation group. Given that competition for jobs in the labour market was not that intense before, it was in fact easier for this cohort to enter junior white-collar jobs, even with fewer years of education than the present cohort.

In the skilled blue-collar (OCC4) occupation group, only gender has a significant and positive coefficient. This implies that being male increases the likelihood of a worker being found in these occupations rather than in occupation group 6. Being aged under 25, or between 45-54, having attended lower secondary school or less, all have negative and significant coefficients. These characteristics decrease the likelihood of a worker being in a skilled blue-collar occupation, relative to being in an unskilled blue-collar job.

Occupation group 5 is made up of semi-skilled blue-collar workers. Lower secondary or a lower level of education reduces the chances of being in this occupation vis-à-vis occupation group 6 (unskilled blue-collar jobs). In other words, a worker with these characteristics is more likely to find an unskilled than a semi-skilled blue-collar job.

Gender has a positive coefficient for this occupation group, implying that being male increases the worker's probability of being in this category.

In general, those workers with lower secondary and primary education levels tend to find it difficult to locate in any of the occupations up the hierarchy vis-à-vis the unskilled blue-collar occupations (OCC6). The likelihood of these persons occupying any of the higher-ranked jobs is reduced when compared with those with a higher secondary education. Being under 25 years of age also shows up as a significant factor that reduces people's chances of locating in occupations higher up the hierarchy. On the other hand, being aged 45–54 significantly increases workers' chances of occupying higher-level jobs, particularly white-collar jobs.

These results indicate that some filtering down of jobs occurred when labour market conditions changed. Under the present labour market conditions, one is no longer guaranteed a white-collar job if one leaves school before completing secondary education, whereas in the past most people with such qualifications automatically got those jobs. Being older increases one's likelihood of being in an occupation that demands more skills. Given the tighter labour market, it is quite obvious that it will be those aged 25 and under (who also have less experience), who will be found in jobs in the lower hierarchy, which are also likely to pay less. This is mainly because the economy is unable to absorb the entire potential labour force, as is reflected by the higher unemployment and underemployment rates.

The behaviour of the gender variable confirms the results presented in Table 3, ie that there is occupational segregation on the basis of gender. Female workers tend to dominate middle and junior white-collar jobs, which are financially less rewarding than the managerial or professional jobs dominated by men. Women also dominate the unskilled and semi-skilled blue-collar jobs that pay less than the skilled blue-collar jobs dominated by men.

It is not clear, however, whether occupational segregation is itself a discrimination from a biased labour market, or whether the labour market is merely responding to workers having different observed characteristics that are heavily shaped at the family level. For instance, it could be that the family was encouraging girls to take up jobs such as nursing, primary teaching or secretarial work, while encouraging boys to aim for professional jobs such as managers and doctors. Clearly, if the socialisation process at the family level is effective, the chosen occupation in the end will follow along that line and the labour market will respond by taking the workers into their already chosen occupations.

6. CONCLUSIONS AND POLICY IMPLICATIONS

Earnings in Botswana's labour market, as in most labour markets, are highly differentiated by gender, type of organisation and educational attainment. An anomaly in Botswana's case is that females earn significantly less than their male counterparts and yet they are on average more educated. Part of the reason for this discrepancy is the existence of occupational segregation. Female workers generally occupy jobs that pay less than those of their male counterparts. It is also likely that part of the discrepancy is due to discrimination in the labour market in Botswana on the basis of gender, an aspect on which more research needs to be done. It is also observed from this study that the public sector offers higher pay packages than the private sector for employment with similar education qualifications. This is a reflection of the strong financial position

of the government, which is quite unusual in the sub-Saharan region. Qualifications may also play a more important role in determining wages in the public sector than in the private sector.

This article has shown that the labour market in Botswana has been characterised by some filtering down as labour market conditions changed. As labour supply exceeded demand over time, the labour market responded by escalating the minimum requirement for jobs. Higher-educated workers were also accepting jobs that were previously occupied by people with lower education levels. In general, those workers with higher levels of education, those who are older, and male workers are likely to locate in jobs ranked higher in the employment hierarchy. These jobs are also financially more rewarding.

As educational qualifications continue to be devalued in the labour market, there is likely to be (as is already evident) increased pressure for more places at the upper secondary and tertiary education levels. Some governments respond to such pressures by expanding those levels of education as well, although this approach simply postpones the real problem. As Kann et al (1988: 127) observe, giving people additional education does not in itself create jobs (except for the teaching staff involved). Jobs are created by investment and government job creation policies, and not by expanding schools. This therefore means that employment creation has to be pursued purposefully and vigorously.

Despite good economic performance in Botswana, as measured by the annual growth rate, employment has always lagged behind, as is evidenced by increasing unemployment rates. In recognition of employment and other problems associated with the dominance of diamond mining, economic diversification has always been at the forefront of the government's development strategy, as indicated by the successive themes of the National Development Plans (NDPs). Economic diversification has, however, not progressed as rapidly as was anticipated. There is therefore a need to emphasise and support investment projects that are more labour intensive and have relatively strong linkages with the rest of the economy. One of the potential sectors for economic diversification is the tourism industry.

Lastly, the filtering down of education qualifications and job competition may have made a major contribution towards stimulating growth, especially in the private sector. This is based on the argument that better educated workers are likely to be more productive than less educated ones. There is, however, a cost to society if the filtering down is accompanied by high unemployment of those with lesser education, which is what happened in Botswana. When some human resources remain unutilised, the economy operates suboptimally.

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