

Cross-country comparison of TVET systems, practices and policies, and employability of youth in Sub-Saharan Africa¹

MOSES OKETCH

Abstract

In recent years, organisations such as the African Development Bank (AfDB), and several African governments have conceded that TVET may have a positive impact on harnessing the youth dividend. There has been some progress in some countries, but there is still insufficient understanding of the place of TVET and youth skills development. The criticisms of TVET in the past, and attitudes toward it, coupled with a period of neglect by governments and donors have all resulted in insufficient understanding of the positive effects TVET can have on the youth and on economic development compared to other regions of the world that have had clearly developed agenda for youth skills development through further colleges, community colleges, or apprenticeships.

Nevertheless, there are signs of renewed interest and possible progress, and some countries have started to put in place innovative policies to strengthen Technical and Vocational Education and Training (TVET) systems. But this progress is limited and hasn't been well researched and understood in comparison with other regions of the world. This is partly due to the past attitudes toward TVET, but may also result from limited understanding of the present positive role that TVET can play to harness youth dividend in the region. This paper aims to add to better and more research evidence on the role of TVET in youth skills development and employment in Africa using key economic and education highlights and the cases of Kenya, Ghana and Botswana by examining the policies and practices that characterize

1 This paper partly draws on Oketch, Moses (2014): Education policy, vocational training, and the youth in Sub-Saharan Africa, WIDER Working Paper, No. 2014/069. Contribution by Golo Henseke, particularly on the key highlights, is appreciated and acknowledged.

the TVET landscape across these Sub-Saharan African countries from a political economy approach.

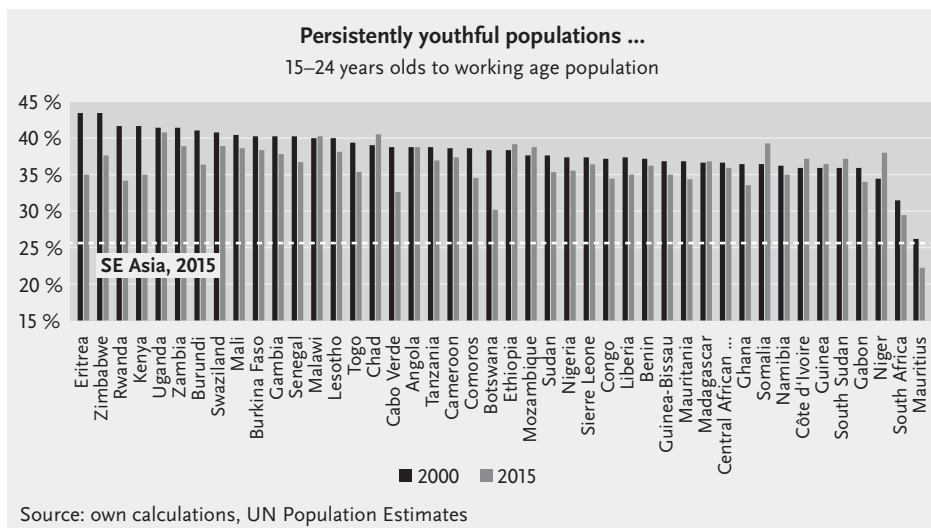
Introduction

Youth bulge and youth unemployment in Sub-Saharan Africa (SSA) has prompted a fresh consideration of the role of TVET in school- to- work transition. Eleven million youth are expected to enter the labour force each year for the next decade, 80 per cent of employment is in low quality informal sector, and whereas the formal wage employment is growing fast and will eventually employ more, seizing opportunity and scaling up informal sector to offer quality jobs is essential and urgent (Filmer and Fox, 2014). Previously TVET had fallen out of favour, especially within the international education investment discourse, and had been viewed especially by organisations such as the World Bank as expensive and inefficient public education investment, that had better be shifted to those demanding it and to the private sector providers (Bennell, 1998; Johanson and Adams, 2004). Now it is understood that it can make a necessary contribution to realising youth dividend in Sub-Saharan Africa, and in concert with other macro-economic factors, has a role to play in efforts to address youth unemployment and boost national economic productivity (AfDB, 2015).

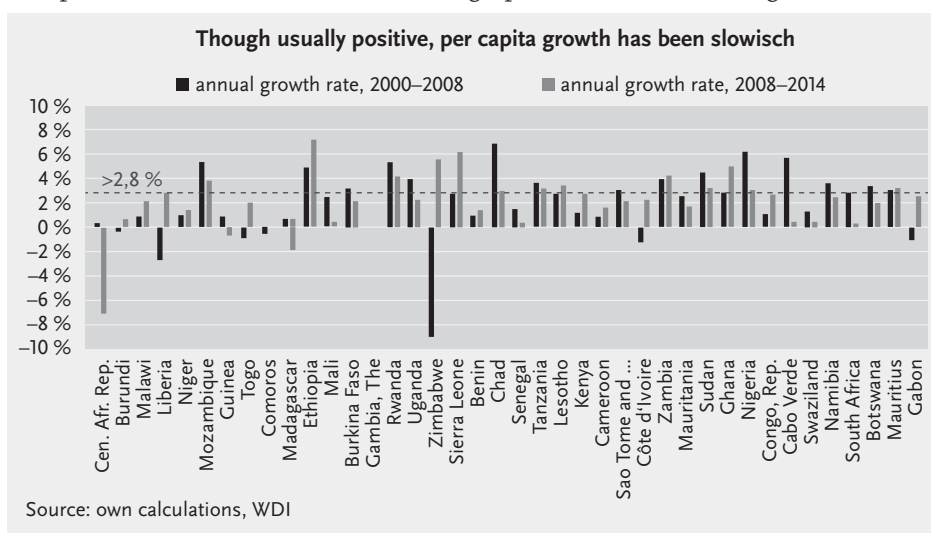
AfDB has particularly been at the forefront in promoting TVET in recent years, the complete opposite of what its close partner but totally independent organisation the World Bank did during the 1980s when priority completely shifted from TVET to basic education. AfDB appears to highlight several roles for TVET under its strategic objectives for advancing youth dividend in the region. These include making the case for TVET as the means for developing skills that lead to jobs; and a direct financial support through loans for strengthening post-secondary TVET provision in areas of skills deficit in engineering and mining.

Against this background, this paper examines the policies and practices that have characterized the TVET landscape across three Sub-Saharan African countries of Ghana, Kenya and Botswana from a political economy perspective and comments on how TVET can be applied to remove what Hansen has described as restrained formal economic options for the youth in Africa (Hansen, 2015).

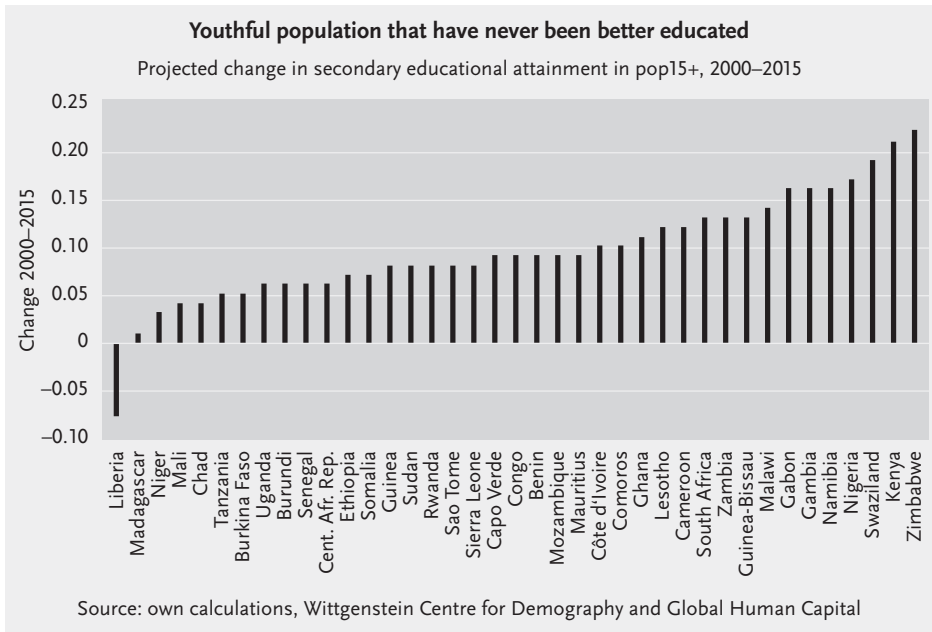
Context Highlights



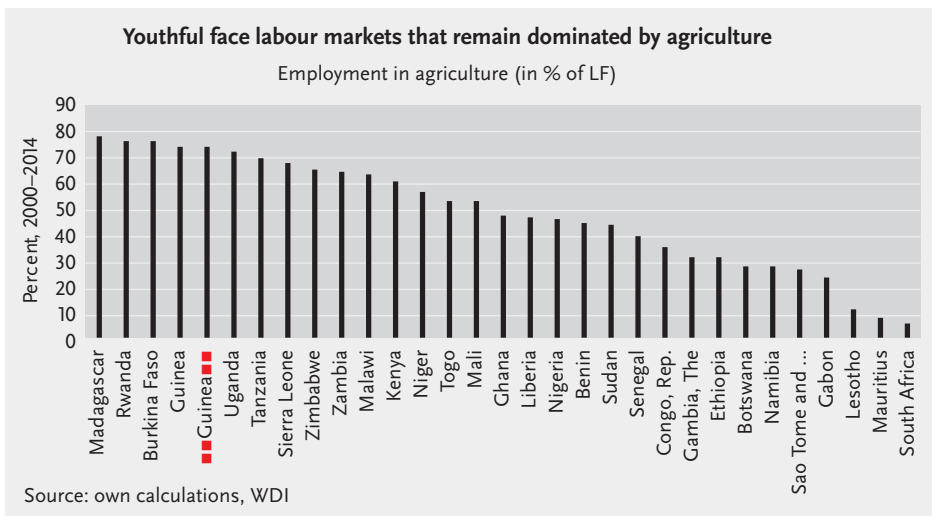
The above Figure illustrates the very youthful population in SSA, which can be seen both as a source of hope and contention. Demographic dividend is the hopeful side but large investment into schooling is required in combination with sufficient labour market demand to leverage this demographic potential. There is also large youth bulges, which in some countries have started to decline. This is a sign that peaks have been reached and demographic dividend is kicking in.



Improvement in economic development has often been slow, but over the last decade, SSA has grown better than the world average. At current growth rates, some countries will manage to double GDP per capital within a generation (25 years).



Despite strains on education systems in SSA and concerns about low quality associated with poor teaching methods and overcrowded classrooms due to past high fertility, populations today have never been better educated. The Figure above displays change in fraction of population 15 + with at least secondary education attainment. Apart from drop in Liberia, secondary education has expanded from a small one percentage point in Madagascar to over 20 percentage points in Kenya and Zimbabwe.



Despite improvement in secondary education attainment, employment is dominated by agriculture. Employment in agriculture often implies: 1) for individuals- mainly contributing family member and vulnerable work, underemployment, not full time, and poor skills usage. This is because most of the agricultural activity is subsistence; 2) for society- structural change towards more productive and innovative manufacturing and services sector inhibited.

At the same time African countries have been democratising since early 1990s, with elections, although not perfect now the norm. This political scenario together with the demographic and economic trends presented above has meant that youth in SSA hold an unenviable position. On the one hand, they are considered ‘agents of change’ driven by aspiration for better life as portrayed by their classification in the youth dividend, a term used to imply their potential present and future contribution to Africa’s productive labor force, and on the other hand, they are viewed as ‘a lost generation’ who are trapped by their economic vulnerability’ (Resnick and Thurlow, 2015). This is the context in which organisations such as the African Development Bank and several African governments have now conceded that TVET may have a positive impact on school-to-work transition.

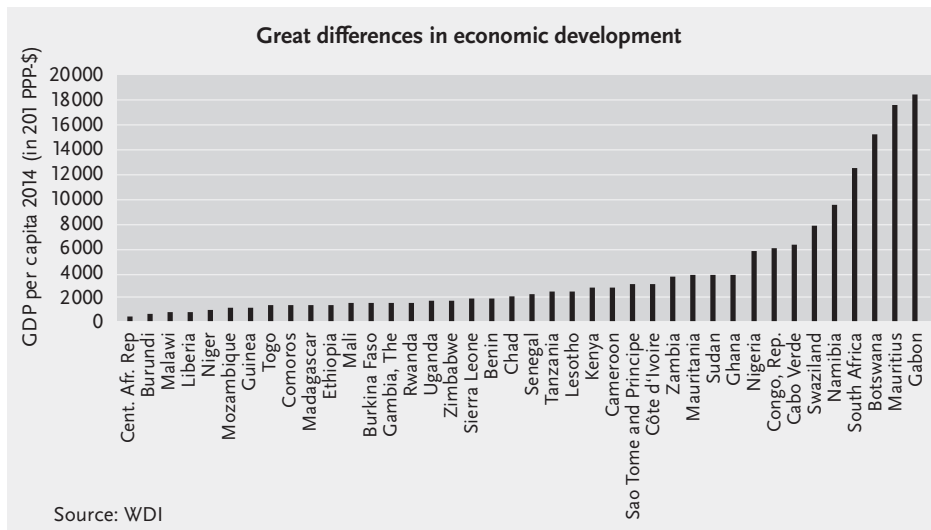
An overview of TVET trends in SSA

So far in most Sub-Saharan African countries, TVET has played a marginal role (Oketch 2015) despite recurring policy measures to combat youth unemployment and to promote economic growth through an expansion of TVET provisions. Enrolment in Vocational Education as share of all enrolled in secondary education is below 10% in most countries. Several scholars have focused on the difficulties with the promotion of technical and Vocational Education and Training which is attributed to a number of issues, not least, its mismatch with young people’s aspirations (Oketch 2007; Atchoarena and Delluc 2001; Foster, 1965; Biavaschi et al 2012).

Although TVET has a difficult standing in Sub-Saharan African countries, there is some evidence indicating that it leads to better integration into wage employment as a study on Ethiopia shows (Garcia and Fares 2008). There is also literature which have paid attention to the considerable share of self-employed (Aggarwal, Hofmann and Phiri 2010; Nübler, Hofmann and Greiner 2009).

The Case Studies – Ghana, Kenya and Botswana

There are great differences in the economic development of countries in SSA. The figure below illustrates this, but the three country cases in this paper, Ghana, Kenya and Botswana are among those that have shown improvement with Botswana way ahead of the other two. It is in this economic context that TVET reforms in the three countries is reviewed.



Ghana Case Study

TVET has formed an integral part of the education system since Ghana attained independence in 1957. Several reforms have taken place to align the education system with the needs of the society, but of these, the main reform focused on TVET integration in the education system was the 1987 reform which also changed the structure of the education system. Before the 1987 reform, the dominant provision at the secondary level was general education. The 1987 reform introduced pre-vocational skills programme made up of 12 subjects and pre-technical skills programme made up of 5 subjects (Akyeampong, 2005).

TVET was embedded within the Junior Secondary School (JSS) which now had a dual function: i) preparation of students for further Senior Secondary School (SSS); and ii) terminal qualification for entry into the labour market or self-employment. Greater diversification occurred at the SSS level. A significant feature of the diversified SSS curriculum was and still remains the case, the opportunity it accorded students studying different pathways to also select from other pathways. The combination was such that students in the TVET pathway could also select one or two elective subjects in science or languages such as French. It requires students to mix subjects as between general core subjects and TVET related subjects.

The reformed education system and the diversification introduced in the SSS was to address some of the challenges that had beset TVET in Ghana and to remove the dual track model by integrating TVET with general education, under what was referred to as a diversified secondary system. The merit of this was to encourage or allow those in the TVET pathway subjects to have the opportunity for progression into Further Education similar to those who were in the general pathway.

The reform expanded access as had been intended and helped to remove the impediments that had previously existed for TVET. At the JSS level, there was clear input into TVET and at the SSS level, there was diversification based on areas of strength and interests that students brought with them from the JSS. But even this attempt to integrate TVET and general education did not do the trick of amending the negative perceptions that had been associated with TVET subjects.

The attempt to introduce TVET early on in the system creates undesirable dual track and the attempt to diversify does not offer strong solution. The recommendation then is to strengthen liberal arts and science in the early years and allow for different pathways later on with the possibility for lateral and vertical movement. This does mean that the agenda for TVET in Ghana has to shift away from considering it as a means of coping with youth pre-vocational skills and those unable to transit into SSS, but rather that the foundation of all education up to JSS should be general arts and science and at SSS, serious TVET can be introduced. This would also mean that JSS is not terminal as such, but is the preparation for SSS where proper TVET skills can be instilled and those willing to proceed to university from the TVET strand can do so, and those wanting to join the labour market will also feel adequately prepared to do so.

Kenya Case Study

Since attaining independence in 1963, TVET has been viewed as a central pillar in addressing the issue of youth unemployment in Kenya. According to Mwiria (2005, p. 227) interest in vocationalising the secondary school curriculum dates back to the mid- 1970s and like Ghana, it was not until 1986 that the major reform to institutionalise vocational school curriculum was introduced. Similar to Ghana, this led to restructuring of the education system which introduced the current system known as the 8-4-4. This new system of education entrenched vocational curriculum right at the primary and secondary level mainly to equip the youth with pre-employment vocational skills. The system was changed from what was previously elite academic model of 7-4-2-3.

In terms of the curriculum content, the TVET under the 8-4-4 system comprised core vocational subjects and industrial subjects. The aim was to instill among the learners skills for self-reliance in self-employment ventures.

Mwiria (2005) offered an extensive review of the 8-4-4 system and its TVET character, looking at specific examples. He concluded with depressing comments: The whole policy change, including restructuring the education structure as was in Ghana's case ill-conceived to address the crisis problem of youth unemployment. "By blaming education for this [unemployment] crisis, education was made a victim for a problem it is incapable of resolving" (Mwiria 2005, p. 294). The causes of unemployment were not well understood and believing that TVET was the solution without first understanding the problem was in itself misplaced. Consequently the 8-4-4 system has been much criticised. Today the super elite simply don't want to follow the system and have enrolled their children in the inter-

national schools that basically maintained the elite British model. In the end, the 8-4-4 vocational content and requirements have been watered down so much such that its original vocational orientation has almost disappeared.

The Kenya vision 2030 that sets out priorities to make Kenya a middle-income country is promoting innovation and high level technical skills. It recognises the fact that the youth are Kenya's potential but it has no illusion similar to that which led to the 8-4-4 that simple integration of TVET in the education system will deliver the vision. It recognises rapid urbanisation and the need to create better jobs, to professionalise and expand the informal sector. This is much different from the 8-4-4 vision of TVET which was aimed as containing the youth in the villages and teaching them to appreciate agriculture.

Botswana Case study

Botswana is considered to have been successful in its implementation of TVET. Weeks (2005) attribute this success to Botswana's resistance to implement a full vocationalised secondary school curriculum. Instead Botswana opted for only providing some pre-Vocational Education through a limited number of practical subjects. Full-vocationalisation which Weeks (2005) defined as "the devotion of more than three to five hours a week to master trade of secondary schools is not possible in Botswana, nor has the government endorsed it" (p. 136). Botswana also invested heavily in TVET infrastructure because it had adequate resources and small population to do so (Weeks, 2005).

In 1977 and 1979 the first national Commission on education stated as follows "The purpose of the schools at all levels will be to prepare children for useful, productive life in the real world. They should have the basic skills of literacy, numeracy and the knowledge that will make them self-reliant later in life, whether they continue full-time schooling, study on their own, find employment, or become self-employed" (Botswana, 1977, p. 3 cited in Weeks 2005, p. 100). The first commission recommended that in senior secondary schools students should not take more than one practical subject. There was the clear belief that to take more than one practical subject might disadvantage a student when it came to tertiary selection (Weeks, 2005).

According to Weeks (2005) the second commission came about in the 1993–94 period and it simply re-affirmed the need to return to the 7-3-2 structure. It was aimed to guaranteeing universal access to basic education whilst consolidating vocationalising the curriculum content at the basic education level (Weeks, 2005). Botswana is unique in the sense captured by the comment from the second commission below, responding to criticism that it had not vocationalised enough:

"However, in terms of international trends it could be said that Botswana enjoys the advantage of having a senior secondary curriculum, which may be regarded as contemporary among middle-income developing countries as it has not suffered from, misdirected 'vocationalisation' efforts. The trend among middle-income countries is that emphasis should be placed on cognitive development, language,

mathematics, and science at the secondary level. **Training for employment should begin after education. Botswana is therefore correctly aligned in concentrating on the academic disciplines.** At the same time the key workplace-related subjects like Commerce and Design and Technology are being introduced (Botswana, 1993, p. 172 in Weeks, 2005, p. 100). In this regard, reforms in Botswana have been different from those of Kenya and Ghana.

As Weeks noted, it is recognised in Botswana that three to five hours a week on a practical subject will not usually lead to the mastery of what is required on the job or in self-employment. This is very different to what is happening in other countries where practical subjects were simply ‘sold’ to students and parents on the grounds that they will lead to employment, or if no jobs are available, at least to self-employment (King and McGrath, 1999; Lewin and Caillods, 2001 in Weeks, 2005, p. 138).

Botswana remained committed to systematically promote its pre-vocational education instead of trying to vocationalise its secondary schools. It also invested well in the facilities and human resources that supported this commitment. Even Foster who had been famous for writing the vocational school fallacy agreed in 2002, that Botswana had got it right, noting that Botswana had achieved “an appropriate structural and institutional environment” to support pre-Vocational Education in secondary schools (Foster, 2002, p. 28 cited in Weeks, 2005, p. 139).

Conclusion

To conclude, it could be argued that there are equally as many reasons why TVET in the education systems in Kenya and Ghana have failed as there are in favour of TVET integration. On the one hand there are benefits to increased TVET integration and initiatives that can have a positive impact on youth employability. On the other hand reviewed evidence suggest that there are negative effects to the way TVET has been implemented in the cases of Ghana and Kenya in the past and these effects have affected not only perceptions at the primary and secondary level, but TVET opportunities more generally, particularly because far from being a support for skills for jobs, TVET has trapped youth into dead end jobs without progression into higher levels of education or professionalised trades. However with these limitations in mind, it is potentially possible to reform TVET in order to realise Africa youth dividend, as shown by the case of Botswana. Firstly through addressing the capacity challenges by the renewed interest in TVET as shown by organisations such as AfDB, and clear national framework for TVET being put in place in countries such as Kenya where there is now a TVET Act, the contributions of TVET to addressing youth employability can be repositioned and nuanced so as to address the marginalised position of TVET within education system and for training.

Secondly the finance of TVET is also weak and the Kenya government 2012 draft framework for education under its 2010 new constitution acknowledges that the

government has paid and continues to pay low attention to TVET (MoE, 2012). The case of Botswana has highlighted the importance of adequate resources for TVET. The interest shown by AfDB to provide loans for TVET in Kenya and Ghana is a move in the right direction but more will be needed from national governments in terms of demonstrating priority for TVET by allocating adequate resources to the sector. Where private providers are more innovative and can offer functional and better labour market demand aligned TVET than governments, they can be supported through government fiscal incentives such as loans, and conducive policies that ensure growth and quality. Leveraging on public money to promote public-private partnerships in TVET provision can have “leverage effect” on TVET quality and relevance. Because private providers have been left to operate without government support and supervision, there are large variations in the quality of what is offered in the present private provision.

Some countries such as Botswana have a working framework for TVET. Several countries are now considering having similar framework to harmonise policy and practices. Where these frameworks exist, it is thought they begin to support integration of TVET as part of the plan to address youth employment. Compared to Kenya and Ghana, Botswana has arguably invested better in TVET and has thought through the TVET they wanted although the discussion in this paper has not matched this with evidence on actual youth employment in Botswana. This will require the next phase of this research to determine whether policies and trends deemed as appropriate, such as those in Botswana translate into better actual employability of youth with TVET qualifications. For majority of countries in SSA, TVET has remained desperately dysfunctional and inadequate to address youth unemployment and will require radical changes. Policies remain prescriptive with general statements about the potential of TVET, but these are immediately countered by system weaknesses and threats which simply render governments’ capability in so far as mounting functional TVET inadequate, and the perception of relevance of TVET offered in government institutions is low among employers.

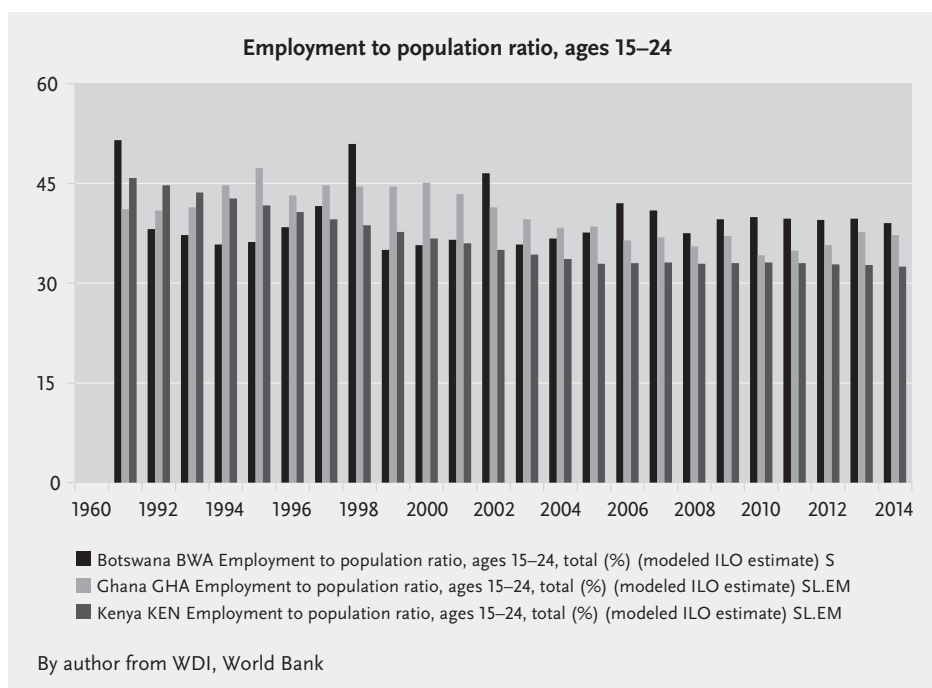
References

- AfDB. (2015).** Support to Technical Vocational Education & Training for Relevant Skills Development – Phase II. Retrieved from http://www.afdb.org/fileadmin/uploads/afdb/Documents/Boards-Documents/Kenya-Support_to_Technical_Vocational_Education_and_Training_for_Relevant_Skills_Development_Phase_II.pdf
- Aggarwal, A., Hofmann, C., Phiri, A. and International Labour Organisation, & Skills and Employability Department, ILO Decent Work Team for South and Eastern Africa, International Labour Office. (2010).** *A study on informal apprenticeship in Malawi.* Geneva.
- Akyeampong, K. (2005).** Vocationalisation of secondary education in Ghana. In J. Lauglo & R. Maclean (Eds.), *Vocationalisation of Secondary Education Revisited* (pp. 149–225). The Netherlands: Dordrecht.
-

- Atchoarena, D., & Delluc, A. M. (2001).** *Revisiting technical and vocational education and training in sub-Saharan Africa*. Paris.
- Bennell, P., & Segerstrom, J. (1998).** Vocational Education and Training in Developing Countries: Has the World Bank Got it Right? *International Journal of Educational Development*, pp. 271–278.
- Biavaschi, C., Eichhorst, W., Giulietti, C., Kendzia, M. J., Muravyev, A., Pieters, J., ... Zimmermann, K. F. (2012).** *Youth Unemployment and vocational training*.
- Filmer, D., & Fox, L. (2014).** *Youth employment in sub-Saharan Africa*. Washington, DC.
- Foster, P. J. (1965).** The vocational school fallacy in development. In A. Anderson & M. Bowman (Eds.), *Education and Economic Development*. Chicago: Aldine.
- Garcia, M., & Fares, J. (2008).** Why is it important for Africa to invest in its youth. *Youth in Africa's Labor Market*, pp. 3–14.
- Hansen, K. T. (2015).** Cities of youth: Post-millennial cases of mobility and sociality. In J. Thurlow & D. Resnick (Eds.), *African Youth and the Persistence of Marginalization: Employment, politics, and prospects for change* (pp. 67–84). London, New York: Routledge.
- Johanson, R. K., & Adams, A. V. (2004).** *Skills Development in Sub-Saharan Africa*. Washington, DC.
- King, K., & Martin, C. (2002).** The vocational school fallacy revisited: education, aspiration and work in Ghana 1959–2000. *International Journal of Educational Development*, pp. 5–26.
- Mwiria, K. (2005).** Vocationalisation fo secondary education; Kenya case study. In J. Lauglo & R. Maclean (Eds.), *Vocationalisation of Secondary Education Revisited* (pp. 227–305). The Netherlands: Dordrecht.
- Nübler, I., Hofmann, C., & Greiner, C. (2009).** *Understanding informal apprenticeship: Findings from empirical research in Tanzania*. Geneva.
- Oketch, M. O. (2007).** To vocationalise or not to vocationalise? Perspectives on current trends and issues in technical and vocational education and training (TVET) in Africa. *International Journal of Educational Development*, pp. 220–234.
- Oketch, M. O. (2015).** Education policy, vocational training, and the youth in sub-Saharan Africa. In J. Thurlow & D. Resnick (Eds.), *African Youth and the Persistence of Marginalization: Employment, politics, and prospects for change* (pp. 133–151). London, New York: Routledge.
- Resnick, D., & Thurlow, J. (Eds.). (2015).** *African Youth and the Persistence of Marginalization: Employment, Politics, and Prospects for Change*. London, New York: Routledge.
- Weeks, G. S. (2005).** Pre-vocational Secondary Education in Botswana. In J. Lauglo & R. Maclean (Eds.), *Vocationalisation of Secondary Education Revisited* (pp. 93–147). The Netherlands: Dordrecht.

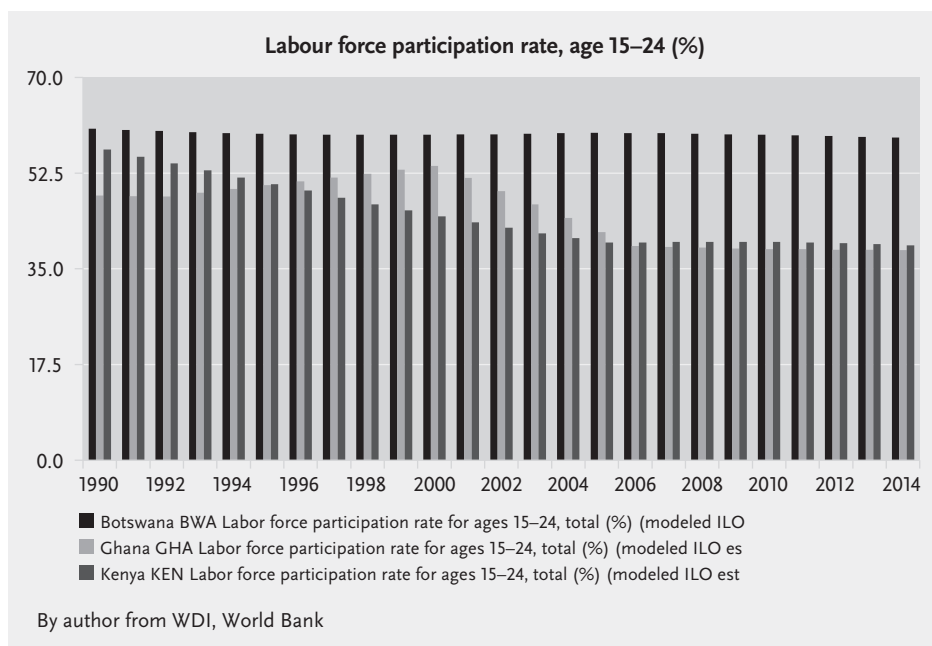
Appendix 1: Trends in Employment, Economic Growth and School Enrolment- Botswana, Ghana and Kenya

Employment to population ratio, ages 15–24



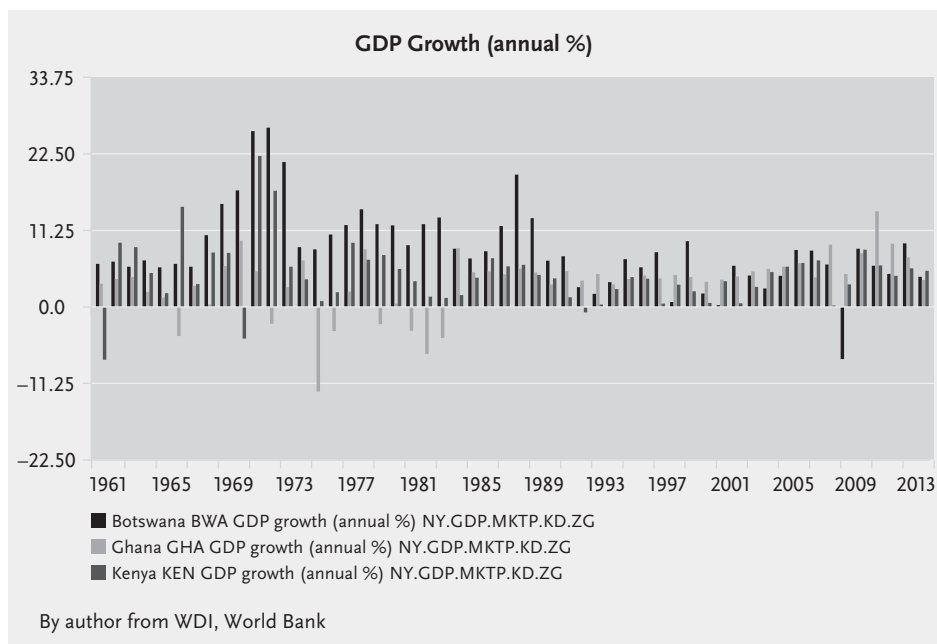
By author from WDI, World Bank

Labour force participation rate, age 15–24 (%)



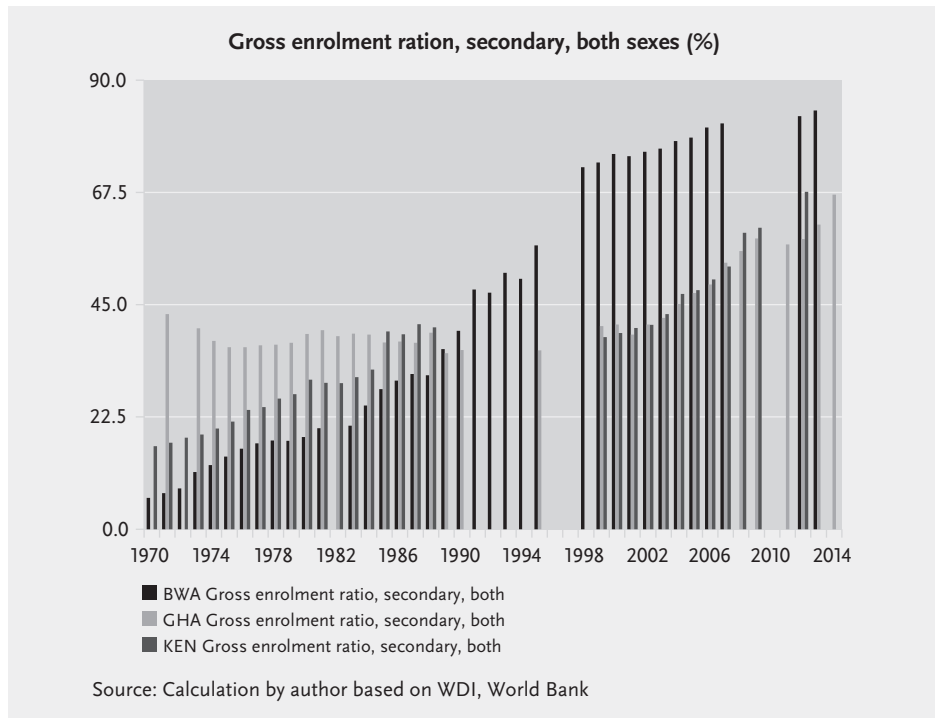
By author from WDI, World Bank

GDP Growth (annual %)



By the author from WDI, World Bank

Gross enrolment ration, secondary, both sexes (%)



Source: Calculation by author based on WDI, World Bank