RUFORUM Working Document Series (ISSN 1607-9345), 2018, No. 17 (1): 135-140.
Available from *http://repository.ruforum.org*

Research Application Summary

Employer perception of TVET graduate competence: Case of Uganda

Okumu, I. M. & Bbaale, E.

School of Economics, Makerere University, P.O. Box, 7062, Kampala, Uganda
Corresponding Author: okumuim@gmail.com

Abstract

This paper qualitatively seeks to understand matching of TVET graduate competence in their vocations of study with the competence expectations of the employers. Both soft and technical competences were considered using cross sectional data that was collected from 102 firms that had activities in the Welding and Metal Fabrication, Horticulture and Plumbing TVET vocations. From the qualitative analysis there is a perceived skills gap in both soft and technical skills although the negative sentiment is more for technical skills. The private sector argues that the skills gap is potentially attributed to outdated learning technologies, ill-trained trainers, inadequate practical classes and poor student attitudes. Furthermore, since competence testing is not mandatory post TVET study besides being poorly marketed, as such employers are largely unaware of it thus not demanding for competence certification prior to employing a TVET graduate. As such whether a TVET graduate is competently productive or not at work place is attributed to luck. Policy wise therefore, upon completing TVET training, undertaking competence testing ought to be made mandatory. Besides, periodic entrepreneurial surveys could be helpful in matching TVET skilling to the dynamic work environment.

Key words: Employer perception, TVET graduate competence, Uganda

Résumé

Cet article cherche qualitativement à comprendre l'adéquation des compétences des diplômés TVET dans leurs vocations d'études avec les attentes des compétences par employeurs. Les compétences techniques et non techniques ont été prises en compte en utilisant des données transversales qui étaient collectées auprès de 102 entreprises exerçant des activités dans les vocations TVET en Soudage et Fabrication des métaux, Horticulture et Plomberie. D'après l'analyse qualitative, il existe un écart de compétences perçu dans les compétences techniques et non techniques, bien que le sentiment négatif concerne davantage les compétences techniques. Le secteur privé soutient que le déficit de compétences est potentiellement attribué à des technologies d'apprentissage obsolètes, à des formateurs mal formés, à des cours pratiques inadéquats et aux mauvaises attitudes des étudiants. En outre, étant donné que les tests de compétence ne sont pas obligatoires après l'étude TVET

en plus d'être mal commercialisés, les employeurs ne le savent pas et ne demandent donc pas de certification de compétence avant d'embaucher un diplômé TVET. En tant que tel, le fait qu'un diplômé TVET soit compétent ou non au lieu de travail est attribué à la chance. Par conséquent, en termes de politique, une fois la formation TVET terminée, entreprendre des tests de compétence devrait être rendu obligatoire En outre, enquêtes entrepreneuriales périodiques pourraient être utiles pour faire correspondre les compétences TVET à l'environnement de travail dynamique.

Mots clés: Perception des employeurs, compétence des diplômés TVET, Ouganda

---

Motivation. In spite of the growing trend for protectionism sentiment, there is no doubt that globalization has taken effect in all corners of the world. The effect of which has seen nations compete just like firms in the global space. The competitiveness of a country is measured by, among others, infrastructure development, macroeconomic stability and quality of human capital with each one of them driving an economy's productivity. Our concern is human capital development which is now being argued to drive an economy's development prospects more than macroeconomic stabilization. This is a thinking re-orientation as macroeconomic stabilization has often been drummed up a major driver of an economy's development process (Maclean *et al.*, 2013).

Human capital development in as much as it includes health indicators has increasingly come to mean enhancing human productive capacities through skilling that is aligned with an economy's production sectors. Indeed, there is consensus in empirical literature that human capital as measured by educational attainment drives economic growth (Barro, 1992 ; Mankiw *et al.,* 1992; Barro, 2001; Krueger and Lindhal, 2001) besides having economic returns equivalent to physical capital (De la Fuente, 2003). To therefore enhance the link between productive sectors and skilling, there has been a global clamor for Technical and Vocational Education and Training (TVET) as it is argued to have the potential of enhancing employability and productivity (Tilak, 2002). Even within East Africa, Escudero and Mourelo (2014) argue that TVET is one the most effective ways of enhancing youth employability.

Technical and Vocational Education and Training (TVET) is argued to enhance employability because skilling is occupational specific implying that there is a seamless transition from school to work. Indeed, using a data set of Dutch graduates who were interviewed three years after graduation, Heijke *et al.* (2003) showed that vocational education increased the likelihood of being matched to ones occupational domain. Besides, the ready madeness of TVET graduates for the various occupations of training also suggests productivity gains (Tilak, 2002). It is no surprise that economies like Uganda which are crumbling under the weight of high youth unemployment and low economic growth could look at TVET as a messiah. Indeed youth unemployment in Uganda over the period 2010 and 2013 averaged 7 percent; given that Uganda's population is expected to explode from 41.41 million in 2017 to 61.63 million by 2030 and to over 100 million by 2060 suggests that TVET is needed now more than ever because of its employability promise. It is important to note that high youth unemployment rate accentuates income inequality and poverty which are precursors for social and political instability thereby potentially further dampening Uganda's economic outlook. In the light of

the economic growth, over the period Financial Year (FY) 2011/12 to FY 2016/17 Uganda's economic growth averaged 4 percent (World Bank 2017) compared to an average of 7 percent in the decade prior to FY 2011/12. The recent low economic growth could partly suggest low factor productivity which speaks to some extent to skilling of labour and its compatibility with various vocations in the production space.

To reduce youth employment while at the same time increase productivity growth, TVET system should ensure that TVET graduates are not only matched with various occupational choices but are equally occupationally competent. However, it is important to note that being matched into ones occupational domain might not necessarily result in optimal occupational competence especially in Uganda where occupational competence certification is not the rule at job appointment or a precursor to practicing in a TVET graduate's occupational domain (Bbaale and Okumu 2017). As such using a cross sectional dataset administered at firm level in Uganda, this papers examines the private sector perception of TVET graduates in Plumbing, Welding and Metal Fabrication (WMF) and Horticulture as regards their occupational competence at work given the occupational competence expectations of the private sector.

The rationale of matching TVET graduate competence with labour market competence requirements is that the reverse results in less than optimal firm performance (low productivity) besides necessitating costly training either on job or otherwise whose cost could be partly incurred by the employer to improve the employees initial competences (Heijke *et al.,* 2003). Besides even if an employee engages in re-tooling TVET graduates to improve their competences, the quality of training at TVET institutions which determines the initial competences of TVET graduates is important. Indeed, there is a complementarily between the type and level of competence of a TVET graduate and on-the-job training (Barron *et al.,* 1989; Brunello, 2004). In that regard, there is a case for understanding private sector perception of TVET graduate competence. Furthermore, owing to the absence of empirical literature especially in a developing country setting like Uganda regarding employer perception of the TVET graduate competence, this paper is a step towards understanding quality of output that TVET institutions produce as perceived by the consumers.

Materials and Methods

Stratified two stage cluster sample designs was used to select local enterprises with first stratification level done on Eastern, Central, Northern and Western regions of Uganda. Within each region, business firms and trades were cross-classified on the nature of their main trade and potential employment of the technical school graduates in welding and metal fabrication, plumbing or horticulture.

To sample the business entities, an available list of entities in each of the following categories of graduates (a) WMF, (b) horticulture were used as sampling frames and (c) plumbing were obtained from a Uganda Bureau of Statistics (UBOS) database of registered enterprises. The frame had 3,366 enterprises in WMF and mechanics, 254 horticultural enterprises and 124

plumbers. The sampling frame of enterprises in WMF was taken as fairly complete since most businesses in this trade are registered. We believe that the assessment of technical abilities and competences of the graduates should be fairly similar across the different potential employers in the same field and thus partial incompleteness of the frame was not taken as a serious limitation. Thus, the information provided by the sampled business entity interviewees should fairly be generalizable to the entities that we might have been missed on our sampling frames. However, for the horticultural and plumbing related enterprises, where formal registration is still weak, we supplemented the sampling frame based on UBOS database with field listing. In the selected towns and trading centres for the horticultural and plumbing related enterprises, the research team generated a list of all the relevant enterprises in and around the locality. A supplementary sample was taken from this new sampling frame. Only enterprise owners or managers who are aware of TVET institutions or graduates were interviewed.

For the WMF, at least 12 entities were sampled using simple random sampling technique in each region. In each sampled entity, depending on its staff size, a maximum of three staff/managers were to be interviewed. While for horticultural and plumbing related enterprises between 5 to 6 enterprises were sampled from available frames and an extra 4 were sampled from the newly generated frames in each region. The data were coded and analyzed using STATA version 14. Descriptive statistics, including frequencies, means, and standard deviations were used to analyze the data. For qualitative data, thematic and content analysis was employed during the analysis.

Results

Our qualitative analysis indicates that employers perceive soft skills to be relevant across WMF, Horticulture and Plumbing vocations. However, from the analysis of performance of TVET graduates across various skill sets, there is evidence of poor skilling especially among Technical Skills. Employers perceive that poor skilling is attributed to outdated learning technologies, ill-trained trainers, inadequate practical classes and poor student attitudes. Furthermore upon completing TVET, graduates are expected to seek for competence certification at Directorate of Industrial Training (DIT); however, the inability to make competence testing compulsory besides low popularizing of competence certification among employers has meant that employers are not aware of competence certification as such they rely on Uganda Business and Technical Examination Board (UBTEB) and Directorate of Industrial Training (DIT) certificates of completion which do not necessarily imply competence in ones vocation of study.

This paper therefore suggests that upon completing TVET training, undertaking competence certification ought to be made mandatory prior to joining the production sector. Most importantly, undertaking TVET at whichever level ought to be made complete by undertaking a certificate of competence. This could institutionally imply clearly defining the mandates of UBTEB and DIT with one engaging in examination of TVET students and the other engaging in undertaking competence assessments. If for instance DIT engaged in competence testing while UBTEB in examining of TVET students, then, DIT competence testing could partly act as a first point of evaluating the quality of graduates being churned out by UBTEB before

being allowed to join the production sector. Besides, popularizing competence certification among employers could ensure that TVET graduates can only get job upon holding a competence certificate.

The evidence of poor performance of TVET graduates is attributed to inadequacies of tutor training, outdated training technologies and facilities incapacitating the optimal use of practical exercises and limited practical lessons exposure. The aforementioned weakness within TVET skilling partly point to financing. To the extent that, low financing could imply inadequate tutor training, outdated laboratories and technologies besides sluggishness in curriculum reviews and adoption of new training manuals. Under such circumstances the likelihood of TVET graduates to match employer expectations is compromised. Going forward, perhaps government of Uganda has to undertake some calibrations to establish what level of funds allocations to the TVET education subsector controlling for funds allocations to primary and university education subsectors can induce competitive TVET graduates.

Furthermore, making vocational education a two phase training framework could be helpful in marching TVET graduates with employment skill wise. The first phase which is currently being undertaken is training at TVET institutions where students get certificates of completion. Beyond that, it must compulsory that a certificate of competence is attained for purposes of completeness in skill training. Good enough Uganda's TVET structure already provides for the DIT whose mandate is to offer competence testing services. However, because competence testing is not mandatory for one to get a job upon completion of TVET training; competence tests have not be taken by TVET graduates. Indeed as a way for the institution to survive it has gone into offering TVET examinations just like UBTEB. Perhaps going forward, requiring all TVET graduates to undertake competence certification ought to be made mandatory as this has the advantage of taking to market proven TVET graduates with some reasonable degree of skill standardization in their respective vocations. In addition to competence testing entrepreneurs must be engaged in the entire TVET institutional framework from policy to training and competence testing. This could involve engaging the private sector in actual training or even undertaking periodic TVET entrepreneurial surveys as a way of capturing innovations in the work environment that could be helpful in enabling the training process keep pace with the ever changing working environment.

Finally, while we are able to identify evidence of inadequacies in skill sets, we are not able to tell whether having TVET training enhances ones productive output compared to an individual without TVET training although employers are able to tell us the relevance of various skills sets. Even then, subsequent studies could perhaps evaluate the performance of TVET graduates against that of non-TVET graduates in the same vocation as a way of measuring whether TVET gives its graduates an edge over non-TVET employees.

References

Okumu, M. I. and Bbaale, E. 2018. Technical and vocational education and training in

Uganda: A critical analysis. Unpublished manuscript.

Barro, R. J. 1997. Determinants of economic growth: a cross-country empirical study. Cambridge, MA: The MIT Press.

Barro, R. J. 2001. Human capital and growth. *American Economic Review* 91 (2): 12–17. DOI: 10.1257/aer.91.2.12

Barron, J. M., Black, D. A. and Lowebstein, M. A. 1989. Job matching and on the job training. *Journal of Labour Economics* 7 (1): 1–19. https://doi.org/10.1086/298196

Brunello, G. 2004. Labour market institutions and the complementarity between education and training in Europe. pp 188-210. In: Checchi D. and Lucifora C. (Eds.) Education, training and labour market outcomes in Europe. London, Palgrave Macmillan.

Cardy, L. R. and Selvarajan, T. T. 2006. Competencies: Alternative frameworks for competitive advantage. *Business Horizons* 49 (3): 235–245. https://doi.org/10.1016/j.bushor.2005.09.004

De la Fuente, A. 2003. Human capital and national competitiveness: the state of the evidence, http://ec.europa.eu/employment_social/news/2003/sep/fuente_en.pdf

Escudero V., Mourelo E.L. 2014. Understanding the drivers of the youth labour market in Kenya. pp 203-228. In: Malo M., Sciulli D. (Eds.). Disadvantaged workers. AIEL Series in Labour Economics. Springer, Cham

Heijke, H., Meng, C. and Ris, C. 2003. Fitting to the job: the role of generic and vocational competencies in adjustment and performance. *Labour Economics* 10 (2): 215-229. https://doi.org/10.1016/S0927-5371(03)00013-7

Kennedy, P. W. and Dresser, S. G. 2005. Creating a competency based workplace. *Benefits and Compensation Digest* 42 (2): 20–23.

Kochanski, J. 1996. Introduction to special issue on human resource competencies. H*uman Resource Managemen*t 35: 3-6.

Krishnan, P. and Shaorshadze, I. 2013. Technical and Vocational Education and Training in Ethiopia. International Growth Centre, Working Paper. https://www.theigc.org/wp-content/uploads/2014/09/Krishnan-Shaorshadze-2013-Working-Paper.pdf

Krueger, B. A. and Lindahl, M. 2001. Education for growth: why and for whom?" *Journal of Economic Literature* 39 (4): 1101–1136. DOI: 10.1257/jel.39.4.1101

Lado, A. A. and Wilson, C. M. 1994. Human resource systems and sustained competitive advantage: a competency-based perspective. *The Academy of Management Review* 19 (4): 699–727. Retrieved from http://www.jstor.org/stable/258742

Mankiw, N. G., Romer, D. and Weil, D. N. 1992. A contribution to the empirics of economic growth. *The Quarterly Journal of Economics* 107 (2) 407–437. https://doi.org/10.2307/2118477

Maclean, R., Jagannathan, S. aand Sarvi, J. 2013. Skills development issues: Challenges and strategies in Asia and the Pacific. pp. 3–28. In: Maclean, R., Jagannathan, S. and Sarvi, J. (Eds.), Skills development for inclusive and sustainable growth in developing Asia-Pacific . Dordrecht: Springer.

World Bank. 2017. Uganda Economic Update, 10th Edition, December 2017: Accelerating Uganda's Development, Ending Child Marriage, Educating Girls. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/29031

Stross, R. E. 1996. Microsoft's big advantage-hiring only the super smart. *Fortune* 134 (10),: 159–162.

Tilak J. B. G. 2003. Vocational Education and Training in Asia. pp. 673-689. In: Keeves J.P., Watanabe, R. (Eds.) International Handbook of Educational Research in the Asia-Pacific Region. Springer International Handbooks of Education, vol 11. Springer, Dordrecht