Government as Employer of Last Resort: A Tentative Proposal for Solving Youth Unemployment in Ethiopia

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Abstract

Despite having a favorable Gross Domestic Product (GDP) for more than fifteen years, Ethiopia is currently faced with exceptional challenging youth unemployment. The youth unemployment and idleness in Ethiopia has contributed to massive social unrest in several Ethiopian urban areas. ***.*** *To calm down the massive instability in the country that were precipitated mainly by the unemployed youth, the Ethiopian government has allocated 0.72 percent of its GDP to resolve the youth unemployment in the country. Realizing that the actions taken by the government will not have a substantial impact, this study has proposed that using the Employer of Last Resort (ELR) economic model in collaboration with Ethiopia's Technical, Vocational Education and Technical (TVET) institutions, so that the ELR could be used as a road map to create pathways for a smooth transition between classrooms and office or factory jobs. To make the ELR proposal a reality, the study further suggests that the teachers and the curricular of the TVET institution need to be overhauled and reoriented. Local and municipal governments must administer the ELR program in the TVET institutions because they are most familiar with the economic needs of their communities. Based on the assumption that $2.00 USD per day would fulfill basic needs and meets the internationally set poverty line for developing countries, the budget for the 23 million ELR voluntary job seekers was estimated to cost $11.29 billion USD or 18.35 percent (i.e., 11.29/61.54) of Ethiopia's GDP. Some policy makers in Ethiopia might argue that Ethiopia can't spend 18 percent of its GDP to resolve the youth unemployment. The argument on the other hand rests that if the Ethiopian government genuinely accepts that employment is a basic right, then, it would be a rational choice to use domestic birr that doesn't flare up inflation rather than waiting for the inevitable spark of uncontrivable social instability or depend on foreign dominated loans to mitigate youth unemployment in Ethiopia.*

Keywords: Unemployment, employer of last resort, multiplier, price stability, TVET

Introduction

In general, the economic health of a nation can be gauged using gross domestic product (GDP), rate of inflation and unemployment, and the current account balance. Based on these indicators, except the slowed down of GDP to 8 percent in 2015-16 due to the *Il Nino* drought effect of 2014-15, Ethiopia has been witnessing a favorable macroeconomic environment. Its GDP has grown at a double-digit growth rate for the last decade and half. Despite the country being negatively affected by drought, its recent rate of inflation has been kept below the single digit level. However, Ethiopia's exports level in 2016 had recorded the worst performance in the last decade. In addition to an increase in its external indebtedness, Ethiopia's current account balance has been in a very distressful deficit situation.

Yet despite economic growth and a significant increase in educational attainment, Ethiopia had not been revealing any significant impact on youth employment (i.e., ages 15-24). As estimated by the Ethiopian Government, since 2013, more than 50 percent of the Ethiopian youth with primary, secondary, and higher education have been actively looking for jobs (Andualem Sisay, 2013). Due to rural push and urban pull factors, and skills mismatch, youth unemployment in Ethiopia has been very visible in urban centers. Unemployment causes an erosion of skills. Employers regard hiring an applicant who has been jobless for a long period as risk venture. In addition, as stated by Tcherneva (2011a), a person who is unemployed could put another one out of work due to the loss of purchasing power.

Therefore, if the youth unemployment that has been mushrooming in Ethiopia is not addressed properly and systematic strategically designs are not put in place to prepare the next generation for successful future economic opportunities, from talent-centric perspective, it is possible that youth unemployment can contribute to the underutilization and waste of human capital. As rightly put by Wary (2007), with a high rate of depreciation of idle human capital, "the productivity of workers falls quickly when they are unemployed, and beyond some point they would become unemployable (due, for example, to loss of the 'work habit' or due to crime and imprisonment)."

From a socio-political perspective point of view, youth unemployment would spark uncontrivable social instability and political upheavals. In addition, from a psychological point of view, lingering of youth unemployment could be entrenched and the affected could face resilient causes of depression, violence, low level of self-esteem, and poor social adaptation (Kabaklarli, E, Er. H.P, and Bulus, A. 2011).

As persuasively put by the Manpower Group (2012), youth unemployment "extends beyond the impact of temporary labor market fluctuations. The experience leaves a permanent imprint on both individual life outcomes and national development trajectories." Because "affected young people start out with weaker early career credentials, and show lower confidence, resilience in dealing with labor market opportunities and may lack the ability to thrive in a dynamic and demanding labor market over the course of their working lives" (Manpower Group, 2012). That is, "Without opportunities for young people to earn a living, intergenerational cycles of poverty will persist, further affecting societies already made vulnerable by HIV/AIDS, food insecurity, and violence" (Guarcello, L. and Rosati, F. March 2007).

As admitted by the Ethiopian Government, the massive rate of youth unemployment has sprouted social unrest in some of the regions of the country. Thereby, to challenge the outlandish social unrest, the Federal Democratic Republic of Ethiopia has already allocated 0.79 percent (i.e., 10 billion / 1271 billion *birr)* of its Gross Domestic Product *(GDP)* to tackle the problem faced by hardcore job seekers. More specifically, the federal government has attempted to target urban safety nets and tentatively allocated financial support to unemployed youth to enable their job search; and tailored the use of information communication and technology (ICT) to provide information on job vacancies throughout the city and reduce the cost of job search (World Bank, 2016).

The purpose of this paper is to investigate the conceptual and theoretical framework of the economic model, known as “Employer of Last Resort” (ELR) and verify the possibility of integrating with environmentally sustainable development to solve involuntary youth unemployment in Ethiopia. The study resonates with Harvey’s (2000) argument that employment is a human right. In addition, the ELR economic model is premised on the assumption that if the government funds environmentally related projects and employs voluntary youth job seekers at base wage rate, both cyclical and structural unemployment would be mitigated without the precipitation of inflationary pressure on the economy.

The paper proceeds as follows. In the second portion, the study attempts to provide a review of the ELR theoretical and empirical work and assesses the impact of the unemployed youth who are ready, willing, and able to work at a minimum wage level in public programs and their contribution to sustainable public service employment sectors. Part three of the paper attempts to map out some strategies of how the ELR program in the Ethiopian Technical Vocational Education and Training (TVET) institutions could be used to retrain the unemployed youth and expose them across a wide range of institutional and work settings. After generating effective youth employment intervention strategies using the sustainable ELR strategies, finally, in the conclusions and recommendation section, the paper draws some policy implications. It is hoped that the paper will inspire greater discussions and debates among readers and policy makers that the proposed sustainable ELR programs could be better designed to contribute to the accrual of secondary effects such as, social cohesion, empowerment, political participation, and gender equality.

Appling Sustainable Employer of Last Resort (ELR) Programs to Solve Involuntary Unemployment

Giving less emphasis to demand-pull and cost-push inflation that are generally regarded as factors that place pressure on wages and costs of factors of production at full-employment and in contradiction to Keynesian school of thought’s argument that capitalist system fuels inflationary pressure at full employment, and its wage rigidity concepts; the Austrian school economists have been bold enough to argue that non-inflationary full employment is possible if governments act as the employer of last resort (ELR) by establishing a horizontal supply of jobs at basic wages level (Palley, 2001). More profoundly, the proponents of the Austrian school of thought “claim that ELR will handle both the price (low wages) and quantity (unemployment) problems that have historically afflicted decentralized labor markets” (Palley, 2001). That is, the Austrian ELR school of thought argument rests on the premise that government can solve involuntary unemployment if it has the desire to offer public sector jobs to job seekers who are ready, willing, and able to work at a socially-established basic wage (Wray, 2007; Harvey, P. 2000; Palley, 2001; Kaboub, 2007; Tcherneva, 2012).

Stated differently, the Keynesian school of thought vehemently argues that an increase in prices of goods and product at full employment would generate inflationary pressures. However, unemployment can be mitigated by stimulus packaged or active government intervention (pump priming or using stimulus package), using fiscal (deficit spending) and monetary policy (lower interest rates) to stimulate aggregate demand. However, a scholar from the Austrian school of thought, Forstater (2004) argues that "even if Keynesian demand management could achieve full employment, it is environmentally destructive. Because competition compels firms to base their decisions on private cost estimation, there are considerable obstacles to producing green products, utilizing cleaner technologies and developing and implementing alternative energy." In short, by negating the post-Keynesian school of thought that argues that full employment induces inflationary pressure, the Austrian school of thought forcefully reverses the post-Keynesian argument by stating that a comprehensive sustainability program is necessary to shift modern capitalist economies to a sustainable employer of last resort path (Forstater, 2004).

Given this argument, the Austrian economists claim that deficit financing to create jobs by ELR programs is not inflationary. More particularly, the Neo-Chartalism logic argues that money injected by the government into the economy would come back in the form of tax receipts to the government coffers. Also, the stimulation of the economy would precipitate multiplier effects and further stimulate the economy (Palley, 2001). According to Tcherneva, (2012), among other factors, the ELR School of thought: 1) offers an infinitely elastic demand of labor; 2) operates as a buffer stock; 3) stabilizes inflationary situation; 4) operates with loose labor markets; 5) creates a stable financial stability; 6) contributes to the stability of socio-political and health conditions; 7) enhances and activities human capital; 8) harbors social capital; 9) is not affected by international trade deficit and foreign exchange depreciation; and 10) its cost ranges from 1 to 5 percent of GDP to the government.

Table 1: The Effects of Employer of Last Resort (ELR) on Involuntary Unemployment

Institutional Characteristics	Theoretical Underpinning	Practical Experience
1. Maintain infinitely an elastic demand for labor at a fixed living wage	**ELR is tailored to help the unemployed and underemployed who are willing to work at basic (minimum) wage level regardless of the performance of the economy. Unlike pro-growth and pro-investment aggregate demand policies that are geared to solve the highly skilled, the ELR program has no term limits and attempts to close the demand gap for labor by guaranteeing a job at a base wage (Teherneva, 2012). The ELR program acts as a strong counter-cyclical fiscal stabilizer as the economy turns downward and during economic expansion.**	**The government of Argentina provided a perfectly elastic demand for labor, hiring everyone. It implemented its *Jefes* program that paid the same compensation of 150 pesos per month (though the poverty line was 300 pesos per month) for four months to all employees who were willing to work. Though the compensation paid to the ELR employees was below the official poverty line, the program was targeted to achieve the intended goal. As stated by Wray and Teherneva (2000), since the *Jefes* failed to eliminate unemployment, it cannot be regarded as a true employer of last resort.**
2.Buffer stocks	**As a countercyclical measure, the government uses the ELR method as a counter-cyclical measure to hire unemployed workers during economic slowdown. But, as the economy recovers, those who were hired under the ELR program could move to work in private sectors, resulting a reduction of public expenditures. As stated by Tcherervia and Wray (2000), the ELR wage allocation resembles a commodity buffer stock scheme. Labor is used as the bench stock to stabilize the currency**.	**As expected, Argentina's wage level was earmarked to put a floor on wages in both the private and public sectors. The Argentina's *Jefes* was an exogenous wage and was below the poverty line, it hardly met the effective minimum wage in the economy (Tcherervia and Wray, 2000). Nonetheless, the *Jefes* program was a very powerful countercyclical buffer stock.**

3. Stables inflationary situation	**ELR is a minimum wage. Being equivalent to the living wage level, the ELR wages are a cost in every producible commodity in the economy. Thus, since ELR would not contribute to demand-pull (too much money in the economy), instead it would act as a very fruitful strategy to stabilize prices of goods and minimize the cost of inputs used for productive purposes. This being the case, the ELR program would help to stabilize the economy or act as a buffer stock. Therefore, because ELR program offers a stable anchor to wages and a countercyclical spending mechanism, the program acts as a buffer zone or contributes to mitigate inflationary pressures.**	**India's Maharashtra Employment Guarantee Scheme was created because of the National Rural Employment Guaranteed Act. To keep down inflation, the workers were paid per local lawful minimum wage, and only one member of each poor, rural household could work for only 100 days per year.**
4. Labor Market	**As stated by Tcherneva (2011b) and Forstater (1999a), with the Keynesian pro-investment pump priming policies, economists never exactly know how much demand stimulus (investment, portfolio allocation) will be needed to produce as genuine full employment. The decision is rather subjective and is very difficult to calculate the multiplier effect. In the ELR program, on the other hand, government spending expenditure will be more or less equal to the workers necessary to hire all who wish to work (Wray and Michell 2005).**	**Similar to other ELR programs, South Africa attempted to directly deal with its massive unemployment and to engage the poorest and most vulnerable individuals within South Africa in 2004. The program was a direct job creation and was known as the Expanded Public Works Program. Employee of the ELR program were engaged in fill the deficits in infrastructure and social and environmental programs (Lieuw-Kie-Song, 2009).**

5. Financial stability or minimize budget deficit	**ERL as a countercyclical tool assumes that countries with freely floating currencies face no solvency problems or technical constraints in funding ELR programs in perpetuity (Wray, 1998). Thus, ELR programs cannot face financial fragility because their programs are meant to improve wage and income distribution, and lower poverty in the labor market. In short, ELR improves full employment and brings stability without inflation and is not likely to have an effect on countries with adequately floating currencies. That is, a modern money system or the national fiat (chartalist) money is not fixed to a commodity or pegged to gold or another currency (Forstater, 2004). Therefore, as argued by Wray and Tcherneva (2000) and the operation of the ELR program ensures that the budget deficit was never to be too large or too small.**	**Dantas and Rezende (2010) argue that ELR is affordable in Brazil because "Brazil is a sovereign country. The Brazilian government could issue its own non-convertible liability." Furthermore, they argue that ELR program was designed to ensure that the deficit spending is at the right level to ensure and maintain full employment.**
6. Social and local empowerment	**ELR programs allow local needs to be met by local people employment. The local people manage it because it is very expensive to be managed remotely. As stated by Mastromatteo and Esposito (2015), ELR needs to include the active control of the local community that have the unique capacity to ensure the input to the ELR workers and to receive the social services. The active participation from below and the expertise and coordination from the center can ensure that the ELR program is effective and efficient**	

	and gives value to work (Mastromatteo and Esposito, 2015).	
Human capital	**Unlike cash transfers, ELR as a safety-net does not waste human potential. It was designed to keep those who want to work engaged in productive jobs. As stated by Tcherneva (2012) ELR could be designed the unemployed "to find decent work that provides both on-the-job training, and other educational opportunities that prepare them for post-ELR work." Thus, training and retraining was made to be an important component of every ELR job.**	**Argentina's ELR program was implemented for 4 months. Thus, its effect on unemployment was not encouraging. Nonetheless, *Jefes* program enhanced human capital. For instance, a large influx of women participated in the program. According to Wray (2007) the participation rate of women in Argentina increased from 60 to 75 percent.**
8. Provide community sustainability	**ELR could be designed to provide social capital or perform valuable work, or address new types of community-based projects. Some examples of this could be related to projects that involve environmentally sustainability, such as public infrastructure (roads, street cleaning, public utilities, health services, recycling efforts, urban landscaping, and community-based environmental awareness education, etc.).**	**Argentina's *Jefes* program allowed state and local government to design and actively participate in several programs. For example, some projects in Argentina produced goods and services that were provided free of charge to poor neighborhoods and still others produced goods for formal markets and broadened the meaning of work by helping and caring for the community. Because the Argentina's *Jefes* program allowed four hours of work per day, the workers were encouraged to form co-ops so that they could work during their extra hours.**

9. Trade and Foreign Exchange	**Unlike the Keynesian school of thought that claims that the part of income earned by ELR workers could be spent on import products and services and could contribute to trade deficit and might cause the depreciation of the domestic currency and trigger a domestic prices and wages spiral; the ELR school of thought argues that ELR is based on floating currencies. Under ELR policy, the government has the degree of freedom to spend without worrying the increased in ELR employment.**	
10. ELR's cost of budget	**Given that the ELR program reduces unemployment and generates economic and social multiplier effects, Wray forcefully argues that in the long run ELR program can "pay for itself" (2007).**	**Studies indicate that ELR is self-financing. The ELR program generally costs between 1.0 to 1.35 percent of the GDP at its peak, with benefits at least double in terms of GDP. While the full scale of Greece's ELR cost 1.5 to 5.4 percent of GDP (Mastromatteo and Esposito 2015), India's Maharashtra program cost about 0.6 percent of India's GDP. Argentina's *Jefes* program cost about 1 percent of Argentina's GDP (Wray, 2007). South Africa's Expanded Public Works Programme (EPWP) cost about 0.7% of the GDP.**

11. Possible drawbacks	**a) ELR could crowd out private sectors;** **b) ELR employees are stigmatization in unsustainable and are employed in unproductive jobs;** **c) the ELR offers 'low paying' 'dead-end jobs' and denigrates the unemployed (Tcherneva, 2012);** **d) training targets and objectives set by the ELR projects are difficult and ambitious (Lieuw-Kie-Song, 2009).**

Theoretical Framework for Employer of Last Resort

Given the above theoretical framework and empirical analysis, the hallmarks of the Employer of Last Resort (ELR) program, the seven key types of ELRs state that ELR:

1. Promotes human rights, meets basic human basic, and reduces the level of poverty. ELR ensures that jobs offered by the government to involuntary jobseekers, who are ready, willing and able to be engaged in productive jobs at minimum wage, will be able to find public jobs;
2. Wages are exogenously set by the government rather than paying a market-determined wage, therefore ELR could be used as a perfectly stable benchmark price or anchor, for labor. ELR faces no financial constraint to implement job guarantee and income security. Thus, unlike neo-classical economists who fear that high levels of employment can introduce wage-price spirals, ELR enhances price stability by counter balancing inflationary and deflationary pressures;
3. Does not waste human potential. It helps the involuntary job seekers to receive on-the-job training and be retrained in important component of every ELR job opportunities that may prepare them for post-ELR work opportunities;
4. Assumes that countries with freely floating currencies face no solvency problems of funding. ELR programs cannot face currency depreciation and external trade deficits. Therefore, ELR is expected to provide as an important anchor for the value of currency;
5. Has very effective counter-cyclical measures, and ELR is a very powerful stabilizer of business cycles. The government uses the ELR strategy to hire unemployed workers during economic slowdown. During economic recovery period, however, those who were hired under the ELR could move to work in private sectors, resulting a reduction of public expenditures.

6. Produces an economic multiplier and contributes to social multiplier associated with job creation, decrease crime and drug use and enhances family and community cohesion; and
7. Unlike capitalism that fails to provide full employment and adequately address sustainability, ELR encourages local needs to be met by local employment and contributes to the minimization of corruption. Given this, ELR provides social capital or improves or addresses environmentally related community-based projects such as public infrastructure.

The Case of Employer of Last Resort for Mitigating Youth Unemployment in Ethiopia

As discussed above, Ethiopia seems to be resting in paradox. Despite having a favorable GDP for more than fifteen years, currently, Ethiopia is faced with exceptionally challenging youth unemployment. The youth unemployment and idleness in Ethiopia has contributed to massive social unrest in several urban areas. Rejecting the Keynesian rubric that focuses on demand management that has failed to either contribute to full employment or enhance ecological sustainability, the empirical studies reviewed above indicate that if employer of last resort (ELR) is applied systematically, it can substantially contribute to full employment and price stability. Thus, as a basic tenet that espouses human rights, ELR accords full employment to involuntary job seekers who are willing to undergo retraining, be involved in learning-by-doing activities, and work at the minimum wage in environmentally sustainable projects that might contribute to improving workplace communities.

The World Bank (2016) estimates that youth unemployment in Ethiopia is more than 23,506,005 (that is, 50 percent of the 47,012,009 labor force) and the mean duration of unemployment is about four years. Interestingly enough, of the 150,000 graduates from colleges every year, almost half of them are unemployed for the first year. To calm down the massive instability in the country that were precipitated mainly by the unemployed youth, the Ethiopian government has attempted to channel the skilled labor into the massive-scale construction projects such as hydropower, railways lines, roads, housing, water supply and irrigation.

Realizing that the above measures were insufficient, more recently, the government has allocated about 10 billion *birr* ($444,139,700 USD/61.54 billion) or 0.72 percent of the GDP to resolve the youth unemployment in the country. The preponderance of unemployment in Ethiopia is due to the existence of mismatch between the skills required by employers and those that prospective employees provide and the growing number of high school and college graduates; achieving full employment in Ethiopia has become dramatic and very challenging. However, Ethiopia could manage the current rate of youth unemployment if it takes its fate in its own hands rather than pursuing irrelevant economic blueprints and attempting to abide by the rules of international markets. Put differently, if Ethiopia wants the youth unemployment not to be a burden on society, Ethiopia must reclaim sovereignty over its domestic economy.

The prime purpose of this job guarantee proposal is to initiate how the ELR program could be applied to solve youth unemployment (both structural and cyclical types) in Ethiopia. To fully appreciate and address Ethiopia's ELR program, the initiated proposal is meant to be guided by the following vital questions: 1) What are the objectives of Ethiopia's ELR program? 2) What strategic roles do the Ethiopia's Technical, Vocational Education, and Technical (TVET) programs need to play to fill the skill gap for new jobs as proposed by the ELR program? 3) Who should administer the ELR program? and 4) Can the proposed ELR program be affordable and stimulate Ethiopia's economy? Finally, the paper will address the prospective lessons that could be drawn on in the future to solve prospective youth unemployment using a well-articulated and designed on ELR economic model.

Objectives of Ethiopia's ELR Program: As it relates to ELR, Ethiopia's Technical, Vocational Education and Technical (TVET) programs has to be designed to further serve as a roadmap to match up TVET schools and businesses. That is, if the ELR program is submerged in to the TVET institutions, it is possible to assume that TVET institutions would create a smooth pathway from the TVET classrooms to office or factory jobs. Thereby, to serve the ELR programs and facilitate jobs the ELR jobseekers, the TVET institutions have to:

1. Redesign their curriculum (achieve cognitive objectives);
2. Retrain involuntary job-seekers who are willing and able to work at a living (minimum) wage (cognitive objective);
3. Facilitate ELR job-seekers to work in community-based environmentally sensitive public services projects (behavioral objective), thereby minimize the poverty level; and
4. Enhance dignified human existence (behavioral objective).

The Currency of Technical, Vocational Education, and Training (TVET) as the Retraining Centers for Unemployed Youth: Starting in 2002**,** Ethiopia has established more than fifty full-fledged Technical, Vocational Education, and Technical (TVET) programs. The prime purposes of the TVET institutions was to: a) enhance competitiveness in the world market, b) tackle the urban youth unemployment, c) resolve the bottlenecks of producing competent workforce, d) create pathways to providing the necessary labor market information, and e) connect the TVET students with the skills required by the economy and allow them to start their own businesses. In addition, the TVET's in Ethiopia's schools were expected to serve as regional centers for technological transfer, provide competent workers to MSEs (medium-sized enterprises), and to offer management consultancy services to business within their communities.

Given these objectives, it could be said that the TVET schools had a noble cause. Nonetheless, because the TVET systems are not technologically and practically grounded, they have been short on adding new values related to skill development to their students. Because of the inconsistency between the demand for and supply of workers, it is pertinent that the existing TVET programs in Ethiopia need to be substantially overhauled and reoriented.

Given the trend in sustainable development is the agenda for the twenty-first century, the TVET programs in Ethiopia need to accommodate the third wave of industrialization. In short, to undergo through the industrial process, the TVET institutions in Ethiopia need to be tailored to provide to their learners a broad overview of the intersection between economics, ecology, and social development. TVET institutions must make their learners develop environmental awareness and the graduates must be skilled enough to use green sustainable technology in their prospective workplace (Desta, 2015).

Consequently, to respond to the resulting updated requirements of sustainable development, the TVET curriculum needs to be shifted to address new forms of instructional and delivery strategy. To make this a reality, the existing teachers need to be retrained and the new teachers need to be talented in environmental sustainability that addresses and provides high-quality alternative routes to teaching. Using market needs assessment and techniques, the curricula need to be redesigned and grounded to integrate both well-coordinated knowledge-based and competencies-based contents so that they are applicable to ELR programs.

Furthermore, the contents of the TVET systems in Ethiopia need to be decentralized with local industries being involved in setting the curricula. The themes of the curricula for ELR programs may include global awareness, business and entrepreneurial literacy, creativity and innovation, information, communications and technology (ITC), civic literacy, health literacy, and environmental literacy (Krishnakumar, 2015). As suggested by Wray (2007), a robust clinical experience or services that could addresses the needs of developing countries may include: 1) public school classroom assistant, 2) companion for senior citizens, 3) neighborhood cleanup/ highway cleanup, restoration of public infrastructure, 4) low income housing restoration, 5) day care assistants for children of ELR workers, 6) library assistants, 7) environmental safety monitors, and 8) community or cultural historian. In short, to fill the skill gap for new jobs in the labor market and fulfill the ELR programs, TVET institutions in Ethiopia need to encourage and help their ELR learners be active participants and undertake innovative work in their localities (Mouzakitis, 2010).

These types of programs can help employers rapidly address skills shortages. Learners could efficiently expand access to work opportunities. As articulated by the International Labour Office (2009), young people who go through combined classrooms and workplace training are 30 percent more likely to get a job than those have only a classroom education. Similarly, the Manpower Group (2012) states that success of ELR training-to-employment have to go beyond mastery of the core subjects and mastery of technological literacy to: a) be demand-driven and the learners are prepared for specific jobs, b) be based on a firm employer commitment to articulate the skills of the trainee to the needs of the job, 3) articulate post-employment counseling and mentoring support for the trainee, and 4) allow the ELR employees repeat engagement with other experienced workers needed for coaching and ensure retention on the job.

In short, before navigating through the world of work**,** the ELR candidates at the TVET institutions must be given fast-track retraining modules that offer both theoretical and practical information.

Administration of the ELR Program: As proposed before, in collaboration with the TVET personnel, the ELR programs needs to be administered by local and municipal governments who are most familiar with the economic needs of their communities (Tcheerneva and Wray, 2000). To be effectively run, the ELR program needs to be administered by committee members that are primarily chosen from the community. Also, the administrative structure mode needs to be decentralized or adhere to devolution. To increase transparency and lower corruption that is very rampant in Ethiopia, all involuntary job seekers or beneficiaries must carefully verified before they are registered at the TVET centers. As rightly stated put by Tcheerneva and Wray (2000), the ELR program needs to handle the administration and run the program at a grass roots level, because in addition to offering jobs to unemployed youth, the ELR projects are supposed to offer social services that were geared to enhance civic participation.

Budget and Macrocosmic Effects of Ethiopia' ELR Program: Before outlining the budget needed for the proposed ELR program, let us assume that the ELR workers are likely to spend their entire wages on consumption, leaving nothing to savings. Given this assumption, the propensity to save by the ELR workers would be zero. Thus, the changes in income to changes in consumption in Ethiopia would roughly (*mpc*) be 1.0. Similarly, the propensity to import is assumed to be zero. However, since the Value-Added Tax (VAT) on consumption in Ethiopia is 15 percent, the marginal tax on buying goods and services is would be 0.15. The tax on income is 35 percent; the marginal propensity of tax is 0.35. Therefore, the economic multiplier would (1/0+.0.35+0.15+0.0) approximately be 2.0. That is, the 10 billion *birr* that has been allocated by the Ethiopian Government to mitigate the rate of youth unemployment would further increase the original investment of 10 billion by 20 million *birr*.

Because there is no a legislated minimum wage level in Ethiopia, adjusted for the purchasing power parity, or PPP (that assumes that exchange rates between currencies are in equilibrium), in line with the international poverty index, Ethiopia's poverty line is assumed to be $2.00 USD per day. Therefore, an Ethiopian ELR employee would be getting $480 USD per year (i.e., $2 per day times 20 days per month times 12 months). Therefore, the 23 million ELR workers would be getting, $11.29 billion USD. This would represent approximately about 18.35 percent of GDP (i.e., 11.29/61.54).

It is worth pointing that some policy makers would be horrified and might feel that the calculation is exurbanite and rests beyond the capacity of the government budget. However, put in context, if the Ethiopia government believes that employment is one of the basic rights, it wouldn't tolerate and rest in peace when 50 percent of Ethiopian youth are unemployed. Given that the policy makers in Ethiopia have the empathy for the unemployed, they would have no choice but to use ELR program at any cost to address the youth unemployment problem in Ethiopia. After all, if the Ethiopian government decides to use the ELR economic model, it could easily finance it out of the Ethiopian *birr* and not undergo through the conditions required to borrow dollar denominated loans.

Given the Ethiopian government has shown a political will and commitment to partially solve the massive unemployment that has been the fundamental cause for the social unrest in some parts of the country, then it makes sense for Ethiopia's policy makers to secure prosperity and high growth provided they use ELR at a base wage to solve the erupting youth unemployment in the country. As stated by Mastromatteo and Esposito (2015), "Public money used to contain the crisis in 2009 amounted to about $23 trillion already. To save US and EU banks their government used $14 trillion, which could have funded 20 worth of ELR program in these economies. At the end of the day, an ELR will always be cheaper than a lender of last resort program."

Conclusion and A Way Forward

Despite economic growth and a significant increase in educational attainment for the last fifteen years, Ethiopia had not revealed any significant positive impact on youth employment (i.e., ages 15-24). Since 2013, more than 50 percent of the Ethiopian youth with primary, secondary, and higher education have been actively looking for work. Due to rural push and urban pull factors, and skills mismatch between the demand and supply of labor, youth unemployment in Ethiopia has been very visible in urban centers. In the perception of employers, hiring someone who has been jobless for a long period is risky. Given this trend, unemployment is expected to increase erosion of skills.

Therefore, to prepare the next generation for successful future economic opportunities, the youth unemployment that has been mushrooming in Ethiopia needs to be addressed properly and strategically. The purpose of this paper was to investigate the relevance of conceptual and theoretical framework of the economic model, known as "Employer of Last Resort" (ELR) and verify its possibility of integrating with environmentally sustainable development to solve involuntary youth unemployment in Ethiopia. Resonating that employment is a human right, the study assumes that if the government funds environmentally-related projects to employ involuntary youth job seekers at base wage rate, it would mitigate both cyclical and structural unemployment without causing inflationary pressure on the economy.

To calm down the massive instability in the country that were precipitated mainly by the unemployed youth, recently, the Ethiopian government has allocated about 10 billion *birr* ($444,139,700 USD/61.54 billion) or 0.72 percent of the GPD to resolve the youth unemployment in the country. Arriving at a conclusion that the actions taken by the government were insufficient, the study has addressed that youth unemployment problems in Ethiopia could be addressed using the economic model known as Employer of Last Resort (ELR). In other words, the study has proposed that if the Ethiopia's Technical, Vocational Education and Technical (TVET) institutions were overhauled and reoriented to accommodate the ELR program, they could pave the way and create pathways for smooth transition between classrooms and offices or factories. In addition, to maintaining the existing TVET administrators, it was suggested that the ELR programs has to include local and municipal governments because they were most familiar with the economic needs of their communities. Furthermore, to address the ELR program, the contents of the TVET systems in Ethiopia were required to be decentralized with local industries being involved in setting the curricula. Also, the TVET curriculum had to be shifted to address new forms of instructional and delivery strategy. But, to make this a reality, the existing teachers need to be retrained and the new teachers recruited for the TVET schools need to be talented in environmental sustainability that addresses and provide high-quality alternative routes to teaching.

More specifically, it was suggested that the themes of the curricula for ELR programs need to include global awareness, business and entrepreneurial literacy, creativity and innovation, information, communications and technology (ITC), civic literacy, health literacy, and environmental literacy. To help the ELR learners be active in undertaking innovative work in their work settings, it was suggested that the curricula need to be redesigned and grounded by integrating both well-coordinated knowledge-based and competencies-based contents.

The economic multiplier for Ethiopia is 2.0. It means that the 10 billion *birr* that the Ethiopian Government has allocated to mitigate the rate of youth unemployment would therefore increase by 20 million *birr*. However, what the government has currently allocated to mitigate the youth unemployment problem is inadequate, only 0.72 percent of Ethiopia's GDP. Even if we use the $2.00 USD per head per a day as the poverty line, which fulfills the basic needs of an individual, the 23 million ELR workers would have been entitled to $11.29 billion USD. This represents 18.35 percent of GDP (i.e., 11.29/61.54).

It is unfortunate that some alarmist and some conservative policy maker might be horrified to suggest that Ethiopia doesn't have the capability to assign about 18 percent of its GDP to solve the youth unemployment. However, if we put it in context more than 50 percent of the youth in Ethiopia are unemployed and some are undergoing under mental anguish, Eighteen percent is not an unreasonable amount. Given that the government would give value that employment is one of the basic rights, then, it would have no choice but to use the ELR program to mitigate the irrupting youth unemployment. After all, if Ethiopia abides by the ELR program, it does not need to depend on foreign dominated loans. It can run its ELR program out of its domestic *birr* without undergoing inflationary pressure.

Thus far, the Ethiopian government has shown a political will and has shown a partial commitment to solve the massive unemployment that has ignited political unrest in some parts of the country. It is feasible that Ethiopia can secure prosperity and high growth if it uses ELR at a base wage as the necessary steps to solve the erupting youth unemployment in the country. After all, as justified by Mastromatteo and Esposito (2015), at the end of the day, an ELR program will always be cheaper than a lender of last resort program. Ethiopia's experience with ELR economic model would signify that direct job creation that offers employment at a base wage would generate a unique capacity to empower and undermine prevailing structures that for generations has produced and reproduced poverty and gender disparities. Though left untouched, it would be very beneficial if further research could be explored to investigate the secondary effects of ELR on social cohesion, empowerment, and political participation. Therefore, it is my modest hope that the suggested ELR proposal would entice and inspire greater discussions and debates.

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