

Determinants of Urban Growth in Sub Saharan Africa Developing Countries in the 21st century

Ali KABASAKAL

Prof. Dr., Sakarya University, SBF-Iktisat, kabasakal@sakarya.edu.tr

Nadege Clemence Sourou Yabo AGOSSOU

Sakarya University

ARTICLE INFO

Article History:

Received 10 September 2020

Received in revised form 23

November 2020

Accepted 27 November 2020

Keywords:

Determinants of Urban Growth; Sub Saharan Africa; Panel Data; Pooled Ordinary Least Squares; 21st century.

ABSTRACT

Debates over the relationship between development and urbanization have gained ground over the last decades and lead to controversial results, especially in developing nations. In this perspective, this study investigates the role of some variables (economic, demographic, political) in the process of urbanization in the 21st century in selected Sub Saharan Africa (SSA) countries. Data from the World Development Indicators and some specialized institutions related to 29 SSA countries from 2008 to 2015 are employed to test the hypothesis that demographical and political factors are the main drivers of urban growth in less developed countries. We assumed that economic variables are insignificant in the explanation of urbanization in the area. Results from panel data analysis using Pooled Ordinary Least Squares regressions are used to test the hypothesized relationships. We found that fertility, Human Development Index, and government policies have accelerated the pace of urbanization, which later seems to have been ultimately brought to rest due to increased unemployment trends. There is evidence that many Africans have left the cities in Africa discouraged by higher levels of unemployment.

INTRODUCTION

The developing world is currently experiencing an unprecedented increase in urbanization, especially in Africa (UN Habitat, 2001). Between 1995 and 2015, the highest rate of urban rate has been recorded in the least developed areas, with Africa being the most rapidly urbanizing continent (UNDESA, 2014). However, the phenomenon is accompanied with socio-economic and environmental problems and many challenges in the spatial distribution of people, land and natural resources in most developing countries (Bloom et al., 2008; Alexandratos & Bruinsma, 2012; Jennings et al., 2014; Engineers Ireland, 2016).

Surprisingly, while the percentage of the urban population in the developing countries is getting closer to that of the more developed countries, urbanization seems to not being generating sustainable development in the case of SSA countries (Fox, 2012). It is considered that Africa is experiencing over-urbanization that refers to urbanization without industrialization, or population growth without employment creation (Fox, 2012). That is, SSA is becoming more urbanized without a structural transformation or a substantial increase in income. In 1950, for instance, most of the world's largest cities were located in rich countries, but mostly all of them were located in low or middle-income countries in Asia and Africa by 2015. In other words, urbanization in Africa is not accompanied by significant economic and social transformations as in developed countries (Fox, 2012; UNDESA, 2014; Fox, 2017).

In an attempt to make some clarifications about the effect of growth on urbanization, Fay & Opal (2000) found that urbanization levels are positively correlated with the levels of income in SSA. However, the authors contend that the changes in income fail to explain the differences in urbanization. According to Henderson et al. (2013), this absence of correlation may be attributable to substantial error in the measurement of GDP in developing countries. According to Namasaka & Kamaru (2017), there are good reasons to think of a correlation between urbanization and growth or development, but this not to be confounded with a causality link. Still, this correlation seems weak in SSA. The urban population has increased nearly below 16 % in Africa and Asia between 1960 and 2000; however, the income per capita has risen only by 50% in Africa but by 340% in Asia (Bloom et al., 2008). Besides, urbanization in SSA has continued even during the periods of negative growth, primarily carried by the previous level of urbanization (Fox, 2012).

Therefore, dealing with urbanization in the traditional way with simple extrapolations of strategies from developed to developing countries may appear non-effective. African countries have their characteristics and features that need to be taken into account. Moreover, the literature also lacks a comprehensive explanation of the driver of urbanization (Malik et al., 2017), and there is still a limited understanding of the concept of a city in Africa where national urban policies are still rare (Turok, 2015). This is even more challenging in a context where the countries in the area are already facing many problems (low income, poverty, weak institutions, high unemployment rates) that makes it the worst of times to develop urban policies (Turok, 2015).

This paper aims at examining the significant drivers of urban growth and urbanization in the 21st century. The article is organized as follows: the following section presents the literature review. Section 2 explains the methodology and the data employed in this study. Section 3 presents the analysis and discusses the results. Section 4 concludes.

1. Literature Review

1.1. Toward a Historical Explanation of Urbanization in SSA

Historical evidence indicates the presence of urbanization in SSA over the past 2000 years (Fox, 2012). However, early urban settlements in the region remain mostly ephemeral, relatively few, small, and dispersed compared to the other areas of the world (Fox, 2012). The absence of surplus in agricultural production necessary to sustain human life in cities coupled with the emergence of epidemic diseases that decimate the region's population in the urban areas were the main constraints to early urban growth in SSA (Fox, 2012). The region's

urban transition truly begins around the middle of the 20th century, and urban populations in SSA has continued increasing after that.

Before the 19th century, many countries in SSA have consistently experienced some of the highest mortality rates in the world due to the emergence of infectious and parasitic diseases in cities (Fox, 2012). Consequently, negative rates of natural increase that turn cities into dangerous places to live (Lowry, 1990; Iliffe, 2007; Dyson, 2011; Fox, 2012). On the other hand, Africa's natural endowments, such as climate and topography, represented a considerable impediment to a surplus increase in agriculture (Diamond, 1997; Bloom & Sachs, 1999). The lack of adequate transport infrastructure and barriers to trade made every effort to fill the food deficit through trade vain (Bloom & Sachs, 1999). This perpetuated famine-related mortality in urban areas and caused people to prefer staying in rural areas with easy access to food, rather than facing the hardships of living in cities.

The food shortage and the decline of mortality rates in the pre-colonial period were soon reversed owing to the colonial government's massive investments in agriculture, infrastructure and health until after World War I (Fox, 2012). These efforts have translated into the increase in primary commodities production, the introduction of new agricultural technologies and cultigens, and the promotion of viable transport infrastructures. However, despite these substantial improvements, colonial powers' controls on mobility in African cities (Iliffe, 2007), poor urban housing conditions, and limited job opportunities in cities have restricted urbanization (Fox, 2012).

Thus, the independence era witnessed an exceptionally high rate of urbanization and urban growth between 1960 and 1975 (Fox, 2012; Fox, 2017). As the political, demographic, and economic factors of the late colonial period proved extremely favorable, urban growth continued to increase. However, the post-colonial apparent economic performance had rapidly vanished after a few years, causing urban wages and urban employment opportunities to decline (Potts, 1995; Becker & Morrison, 1995). Yet the growth rates of the urban population primarily stimulated by the decline in mortality and a steady food surplus continued to increase. Imports and foreign aid (rather than productivity growth) generally remained high in Africa and have supported urban growth trends (Fox, 2012). The most historical and notable exception include Zambia in 1970, which experienced malnutrition, rising mortality rates that generated in de-urbanization (Fox, 2012). This example showed that in most cases, the urban population continued to grow as a natural increase in the population increased, but an increase in mortality automatically curbed urbanization.

Therefore, whether before, during, or even after the colonial era, any factor that promoted mortality decline and ensured the availability of food in SSA's cities, be it economical, technological, or institutional, is likely to always contribute to the expansion of urban population growth in SSA. But economic growth appears not to represent a necessary condition for urbanization in the region. That's why urbanization without growth is not really mysterious in Africa: urbanization did not start with economic growth and can increase independently of that; though it can catch up with it as the factors driving sustain mortality decline and the availability of food in cities are strongly correlated with economic growth.

1.2. Empirical Evidence on Urbanization in SSA

Urbanization has traditionally been considered a result of industrialization and economic growth, thus a byproduct of development (Fox, 2012; Fox, 2017; Namasaka & Kamaru, 2017). This suggestion stems from the historical experience of Europe during the 19th century and the recent urbanization trends in China, where urbanization and industrialization have occurred concomitantly (Fox, 2012; Fox, 2017; Namasaka & Kamaru, 2017). The shift from an agrarian economy to an industrial society is supposed to generate better living conditions and structural changes that encourage people to migrate to cities.

Neither green revolution nor industrial revolution has yet occurred in SSA that is urbanizing very fast almost to the same level as Asia (Gollin et al., 2013). SSA is also recording instances of urbanization without sustain growth (Fay & Opal, 2000; Barrios et al., 2010; Gollin et al.,

2013). At the same time, their peers of South East Asia, which equally recorded excessive urbanization rates are displaying better economic performance (Ellis & Roberts, 2015). For example, food yields have remained quite low in SSA over the past decades (Evenson & Gollin, 2003; Gollin et al., 2013) and even lower compared to Asian counterparts.

There has been no industrial revolution in Africa as its manufacturing and service sectors have remained relatively small and unproductive. In 2017, Asian employment shares in the manufacturing were comparatively as high as double that of Africa. This was similarly observed in the service sector. Employment shares in manufacturing and services were 11.01 and 34.13 % for Africa, as compared to 23.17% and 50.27% respectively for East Asia and Pacific (World Bank, 2017). Consequently, informal work in the non-agricultural sector rose (nearly 78% in 2004) in Africa at the detriment of the formal industry that has progressively declined and failed to absorb urban labor (Becker, 2004).

Another reason for which urban transition is occurring with a retard in economic growth stems from the fact that SSA economies heavily rely on their export revenues in natural resources to support and sustain their economic growth (Potts, 2012; Jedwab et al., 2014). Jedwab (2011) evokes the examples of the case of Ghana and Côte d'Ivoire, whose cities grew by solely relying on spending from cocoa production. This usually generates low-productivity and informal or service-sector jobs. Casual employment is increasing in many parts of Africa, and few workers in the sector have managed to land into formal jobs (Annez & Buckley, 2008). Annez & Buckley (2008) also indicate that urban informal employment is more productive than agricultural labor in Africa. For example, the difference in the gap between informal labor in Ghanaian cities and the agrarian job was 2:1 in 2009 (World Bank, 2009).

Commodity production rents in SSA, fundamentally based on agricultural and natural resource exports, have consistently increased the demand for non-tradable urban goods and services (Gollin et al., 2013). That's why it is argued that the consumption of non-traded products and services is heavily driving the growth of cities. Moreover, purchasing power and currency exchange rates appreciate as natural resources provide more revenues to many people (Jedwab, 2011; Gollin et al., 2013).

Many authors argue that the natural increase of urban population is the missing factor in the explanations of the causes of urbanization (Preston, 1979; Bloom and al., 2008; Namasaka & Kamaru, 2017; Fox, 2017). Dyson (2011) argued that the progressive transformation of a rural society into an industrial one is mainly attributable to the combination of demographic factors such as mortality, fertility, and migration. The situation looks more critical when we figure out that SSA, home for a very young population, is projected to double in the overall population by 2050 (UNDESA, 2014). Primarily, a rapid decline in mortality accompanied by an increasing fertility rate gave rise to an unprecedented increase in population that propels urban growth rates in the region (Namasaka & Kamaru, 2017). In agreement with this view, Fox (2012) denotes that the institutional and various technological changes (intended to reduce epidemics and infectious diseases constrained mortality) have historically caused a massive population flight towards cities in Africa. This dynamic continues as many of the SSA countries remain dependent on foreign assistance and are still benefiting from the western countries' expertise for a decline in mortality rates and food supplies.

Some authors have related African urbanization to governments and political institutions as they can easily influence economic growth in Africa. In the region, civil conflicts (UNEP, 2002; Bloom et al., 2008), changing political regimes (Satterthwaite, 2007), as well as ethnic tensions (Fay & Opal, 2000) has induced significant population flows toward the cities in search of safety. Political instability has led many rural inhabitants to flow to cities in Kinshasa, the Democratic Republic of the Congo (Bloom et al., 2008). The literature presents the effects of the institutions that have existed in the pre-colonial period as potential threats to their modern counterparts in the long run. This perpetuates weak institutions in Africa and a dictatorship, thus, compromising democracy in many countries (Acemoglu & Robinson, 2010). As such, leaders can influence and manipulate rural and spatial clustering as well as migrants' votes (Raleigh, 2014). Further, these political actions exacerbate the spatial inequalities and urban poverty across states (Raleigh, 2014).

Natural disasters (droughts and floods) in Ethiopia, Angola, and Mauritania have pushed many people to cities (UN, 2007). However, the expectation of higher and better conditions usually vanishes as urban poverty grows. For example, in Moroni, the capital city of volcanic Comoros, approximately 45 % of urban households are obliged to look for supplement revenues to survive in cities (by growing crops or raise livestock in urban environments) (UNDP, 1996). However, Potts (2009) emphasizes that urbanization has started declining in many SSA countries because of urban poverty, livelihood insecurity, and the lack of economic opportunities for migrants. As a result, rural migrants that struggle and are unable to survive usually go back to the countryside. Therefore, the availability of economic opportunities in cities and towns is critical for the expansion of urban areas.

2. Methodology

We employ a panel dataset covering the period 2008 to 2015 using the World Development Indicators database of the World Bank to retrieve the economic and demographic variables. Human Development Index (HDI) and the total inflows of foreign population variables are respectively retrieved from the United Nations Development Program database and the Migration database of the Organization for Economic Co-operation and Development. Government Effectiveness and Political Stability and Absence of Violence/Terrorism, the political factors are derived from the World Governance Indicators database of the World Bank.

The panel dataset has the merit to control the effect of individual heterogeneity or the results of the variables that are not observed in the model (Baltagi, 2008). It allows the identification of the impact of the omitted variables that are not found in the model (Reyna, 2007; Anna et al., 2014). It displays less collinearity among the variables and produces more efficient and precise parameters as they contain more information and more variability (Anna et al., 2014).

We regress urban growth on a set of economic variables (Per-capita income, manufacturing productivity), demographic factors (fertility, life expectancy, international migration) and political factors (political stability, government effectiveness index).

In this study, urban growth refers to the increase (the relative or absolute) in the size of the population living in towns and cities over a period of time, which is expressed in a number. It is the actual increase in the number of people in cities. Precisely, the following equation is estimated

$$Urban\ growth_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 G_{it} + v_i + u_{it}$$

Where:

- X_{it} is a set of explanatory variables
- G_{it} is a vector of year dummies
- The error term is decomposed into time-invariant component v_i and time-variant component u_{it} .

The independent is described in the following table:

Table 1. Expected signs in the SSA countries

Variables		
Dependent variables	Meanings	Expected Signs
Independent variables		
Economic variables		
Unemployment	the share of the workforce that is currently without work but available for and seeking employment.	No effect
HDI	measures the average achievement in three basic dimensions of human development in a given country: a long and healthy life, knowledge, and a decent standard of living in a given country.	+
FDI	effect of the expansion of the manufacturing sector	+
Agriculture, value added (% of GDP)	the measure of agricultural productivity	+

Demographic variables		
Fertility	the number of years that a newborn infant could expect to live if the patterns of infant mortality rates at the time of birth remain the same throughout the infant's life.	No effect
Political factors		
Political stability	We use political stability to account for the absence of conflicts and violence in a given country	-
Government effectiveness	We use this factor as a proxy for government actions and policies in a given country.	+

Source: By the authors

2.1. The Estimation Process

We can employ fixed effects, random effects model, or pooled ordinary least squares estimations to analyze a panel dataset. In fixed-effects models, the parameters α_i are deterministic constants, whereas the parameters α_i are considered realizations of a random variable of expectation and finite variance in random-effects models (Reyna, 2007). The Hausman specification H-test (1978) is generally used to discriminate between fixed effects and random-effects models. It probes the null hypothesis that the coefficients estimated by the dynamic random effects estimator are the same as the ones determined by the consistent fixed effects estimator. If the null hypothesis is accepted, then random effects should be considered.

If the Hausman test results suggest the use of a random effects model, the LM test helps to decide between the Pooled Ordinary Least Squares estimation and the random-effects model. If the null hypothesis that there is no variation among units is rejected, thus pooled ordinary least squares estimation is appropriate. If the results of the Hausman test indicate the use of a fixed-effects model, it is crucial to see if time fixed effects are needed when running a fixed-effects model. To do this, we create a series of time dummy variables and then execute the test. If Prob F = <.05, then the null hypothesis that all year coefficients are jointly equal to zero is rejected. If so, the time fixed-effects are needed.

2.2. Urban growth and Urban share in Sub Saharan Africa (SSA)

Table 2. Estimation of Urban growth in SSA

VARIABLES	OLS
Unemployment	-0.0654*** (0.0225)
HDI	0.954*** (0.173)
FDI	0.00534 (0.0183)
Agriculture, value added (% of GDP)	-0.0177 (0.0191)
Government effectiveness	0.402*** (0.0525)
Fertility	1.724*** (0.142)
Political stability and absence of terror	-0.0232 (0.0321)
Constant	-0.171 (0.266)
R-squared	0.560

Source: By the authors

The results show that HDI, unemployment rates, government effectiveness, and fertility are the main drivers of urban growth in SSA. HDI, government effectiveness, and fertility favor rapid urban growth while the increasing levels of unemployment slow the pace of urbanization in SSA. Curiously, FDI, agricultural productivity, and political stability fail to explain the changes in urban growth in the region.

A unit increase of HDI causes urban growth to appreciate by 0.954%. More importantly, the coefficient value is statistically significant and robust at the 0.01 level (two-tailed), suggesting that this finding is not the result of a chance occurrence. The improvement in the educational sector, per capita income and standard of living (that represent the main components of the HDI), has pulled many people to cities and accelerated the pace of urbanization. The cities play a significant role as industrial centers with high productivity and are places to generate

income where one can have access to better opportunities (UNEP, 2002). That's why urban areas development usually contributes to massive investment in factories, schools building, improvements in infrastructure access, public goods, etc. that foster economic prosperity in developing countries (UNCHS, 2001)

The disparities of opportunities and income between urban and rural areas usually translate into a higher standard of living for urban residents and attract anyone in search of a better life (Bradshaw, 1987). Many people are ready to move to the economic centers regardless of the risks and difficulties they could encounter there. Considerations from Malik et al. (2017) shed light on how people can deliberately relocate and prefer to live in seacoast areas and other regions close to the mouths of the great rivers, frequently affected by floods, only for their natural resources and trading opportunities. Even afflicted by natural disasters, they resist by disposing of all their liquid assets for subsistence till they cannot cope with the situation anymore before they decide to migrate to cities for better and secured livelihood (Rayhan & Grote, 2007), which shows that people can attach too much price to the opportunities in the towns above all else.

Therefore, to enjoy cities' facilities and amenities and to overcome the persistent poverty prevailing in rural areas, many people flock to cities. As development proceeds, higher productivity of the urban sector generates more job opportunities with higher wages (Royuela & Castells-Quintana, 2014). The expanding labor demand increases the need for labor to relocate to centers and necessitates the movement of people from rural to urban areas to take up the available jobs. Rural inhabitants are, therefore, pulled to urban areas and concentrated there to take advantage of higher high industrial wages, broader markets, and improved amenities (Royuela & Castells-Quintana, 2014).

The positive impact of HDI on urban growth can also be interpreted as the effect of a decline in mortality rates on urbanization. Relating to mortality, the situation in SSA is similar to the one described by Fox (2012; 2017). After noticing that death, coupled with poor hygienic and sanitary conditions were representing a hindrance to migration for many years during the colonial period, Fox (2012; 2017) suggests that the improvements in health and hygienic methods have propelled urbanization in SSA after that. Interestingly, our results confirm that trend and show that an increase in the decline of the mortality rate translates into a rise in population growth over the long run, thus accelerating the pace of urbanization in SSA. Therefore, the unlimited urban increase in some parts of SSA may be attributable to improvements in the decline of the mortality rate, thanks to the efforts being made to reduce mortality.

However, as many people find themselves in towns in search of a better life, they end up facing harsh conditions where cities are unfortunately not likely to sustain the basic needs of all the migrants. As such, the great ideas and hope the migrants had about cities rapidly vanished, and high unemployment or uncertainty of employment contributed to the widespread of slums, urban poverty, and other social problems. Moreover, it has also been noticed that the municipal growth rates in West Africa have exceeded the capacities of municipalities to provide adequate housing and services (water, sanitation, communications and transport infrastructures, health services and education, etc.) in many countries. For instance, approximately 12% of Nouakchott, the capital city of Mauritania, is made up of slums (UNEP, 2002).

On the other hand, our study reveals that one-point rise has decreased urban growth typically by 0.6% within SSA from 2008 to 2014. This result is corroborated by the evidence of slowing in urbanization recorded in many parts of SSA due to the increasing income inequality and youth unemployment during the last decades (Potts, 2009). Considering the most recent inter-census period in SSA, Potts (2009) confirms that many countries in the area are now stagnating or urbanizing very slowly, especially as regards to large and medium-sized towns in Benin, Mozambique, Senegal, Zimbabwe, Mauritania, Burkina Faso, and Niger. The author finds that these trends largely stem from the declining economic opportunities in many urban areas, reflecting the crises in urban poverty and livelihood

insecurity. As employment opportunities become limited in cities that struggle to absorb the increasing number of rural migrants, many migrants are left with low-paying jobs; consequently, urban employment tends to expand the service and informal sectors that constrain economic development (Timberlake & Kentor, 1983; Bradshaw, 1985). After a certain period of endurance without improvement in living conditions, cities appear as dangerous places to live, thus causing urban growth to decrease progressively. As the good opportunities available in towns were the main motives behind people's movement to cities in SSA when these opportunities are limited or nonexistent, many of them change their mind according to the following African proverb:

« When you do not know where you are going, look where you are from »

The motto means that when we do not have a clear idea of the future in the actual circumstances, we must always refer and identify ourselves to our starting point because the latter is known. We can never get lost because our starting point is still known. Even if we decided to take a steep path before and realized that we could not complete it to the end, we can always go back to the starting point and start everything from scratch, by learning from our past mistakes.

Another important accelerator of urbanization in SSA is the fertility levels that display a higher effect on urban growth. An increase of fertility by one unit has appeared to propel the urban growth by 1.724% within eight years. These results show that natural processes are a critical component of urban growth, as supported by Preston (1979), Fox (2017), and Dyson (2011). In a context of declining mortality, reflected by higher values of HDI, and the increasing levels of fertility, population growth accelerates in both rural and urban areas and contribute to the expansion of urbanization. Empirically, Preston (1977) agrees that urban natural increase significantly contributes to urban growth and that urban growth rate is determined by overall population growth.

Government effectiveness also influences urbanization in SSA. An increase of one unit of government effectiveness index has resulted in an increase of urban growth by 0.4%. This finding confirms the urban bias theory that considers urbanization as a result of gross injustice (Njoh, 2003). The theory stipulates that governments tend to prioritize the certain type of urban projects and policies at the expense of agricultural projects that could have increased rural incomes and thereby slow town-ward migration (Linn, 1982; Timberlake & Kentor, 1983; Bradshaw, 1987). This situation creates enormous disparities between urban and rural areas concerning consumption, wages, productivity, and standard of living and causes many people to migrate to urban areas, where they are sometimes unable to adapt (Bradshaw, 1987). Therefore, as long as government policies promote the development of cities and accelerating urbanization, the agricultural sector is prone to decline and is progressively deprived of its labor. That's why Lipton (1977) suggests that governments can help alleviate this situation by increasing incentives in agriculture that generate more revenue for rural peasants. All it takes is government effectiveness and willingness.

CONCLUSION

The forces that shape urbanization in developing countries and the historical patterns of urbanization observed for today's developed economies significantly differ. That's why appropriate national urban policies need to be implemented by taking into account each country's specific features. Yet, in general, the overall causes and engines of urbanization in the 21st century have remained less investigated and understood. Thus it has been overlooked in the elaboration of sound urban planning.

In this perspective, this paper determines the factors that explain urbanization and urban growth when countries are developing (SSA countries) By adopting the panel data analysis, and using Ordinary Least Squares regressions, data of 29 SSA countries from 2008 to 2015 and the G7 states from 1995 to 2014, we investigated the hypothesized relationships. We found that the speed of urbanization has been propelled by high fertility rates, HDI, and

government policies that have perpetuated the pace of urbanization. At the same time, urban growth has been brought to rest due to increased unemployment trends.

We suggest that the countries in the region make significant progress on political stability in the coming years and support it with good quality institutions. This will alleviate the harm caused to people located in risky areas and create an overall peaceful environment that will stimulate investment and sustained growth. Therefore, the displacement of people to cities for safety will be limited, which, in turn, would reduce distress to towns with their limited ability to cater to the basic needs of the new migrants. We also advocate for fairer government policies in SSA and more particular attention to the agricultural sector to boost the rural economy. African countries should define and take up sustainable sound methods and practices in agriculture that take into account climate hazards and environmental sustainability. This would prevent poverty, starvation, etc. and promote long-run economic growth and help farmers to achieve economies of scale in agriculture.

Development practitioners and governments should take into account existing disparities between the rural and urban areas to formulate policies and strategies towards realizing more equitable growth. Otherwise, rural areas will continue to trail behind as far as development is concerned, whereas urban areas will be growing up. Africa's youth need to acquire new and better skills for job opportunities and entrepreneurship to curb increasing unemployment and then urbanization. Entrepreneurship skills need to be instilled in African youth from an early age so that they go beyond the technical knowledge acquired in schools or training centers. National educational policies should be tailored according to that. Moreover, African youth need to gain new and better skills for job opportunities.

We encourage the use of planning methods in SSA to moderate fertility and allow for easy control of urbanization. This would keep the growing young workforce of the region healthy, as the youth labor force participation rate is globally the highest in Sub-Saharan Africa (ILO, 2016).

The literature on urbanization can be expanded by examining the mechanisms and channels through which channels of demographic factors in developing countries and international migration in developed countries contribute to urbanization. The impact of selected microeconomic, cultural factors, economic structures can be included for further analysis.

REFERENCES

- ACEMOGLU, D., JOHNSON, S., & ROBINSON, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American economic review*, 91(5), 1369-1401.
- ALEXANDRATOS, N., & BRUINSMA, J. (2012). *World agriculture towards 2030/2050: the 2012 revision* (Vol. 12, No. 3). FAO, Rome: ESA Working paper.
- ANNA, C., & ANGELO, P. (2014). A Panel data approach to evaluate the Passenger Satisfaction of a Public Transport Service. *Procedia Economics and Finance*, 17, 231-237.
- ANNEZ, P. C., & BUCKLEY, R. M. (2009). Urbanization and growth: Setting the context. *Urbanization and growth*, 1, 1-45.
- AROURI, M. E. H., YOUSSEF, A. B., NGUYEN-VIET, C., & SOUCAT, A. (2014). Effects of urbanization on economic growth and human capital formation in Africa.
- BALTAGI, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
- BECKER, C. M., & MORRISON, A. R. (1995). The growth of African cities: theory and estimates.
- BLOOM, D. E., CANNING, D., & FINK, G. (2008). Urbanization and the wealth of Nations. *Science*, 319(5864), 772-775.

- BLOOM, D. E., SACHS, J. D. 1999. "Geography, demography, and economic growth in Africa," in William C. Brainard and George I. Perry (eds.), *Brookings Paper on Economic Activity 2: 1998*. Washington, DC: the Brookings Institution, pp. 207–295.
- BRADSHAW, Y. W. (1987). Urbanization and underdevelopment: A global study of modernization, urban bias, and economic dependency. *American Sociological Review*, 224-239.
- DIAMOND, J., & RENFREW, C. (1997). Guns, germs, and steel: the fates of human societies. *Nature*, 386(6623), 339-339.
- DYSON, T. (2011). The role of the demographic transition in the process of urbanization. *Population and development review*, 37(s1), 34-54.
- ELLIS, P., & ROBERTS, M. (2015). *Leveraging urbanization in South Asia: Managing spatial transformation for prosperity and livability*. World Bank Publications.
- EVENSON, R. E., & GOLLIN, D. (2003). Assessing the impact of the Green Revolution, 1960 to 2000. *science*, 300(5620), 758-762.
- FAY, M., & OPAL, C. (2000). *Urbanization without growth: A not so uncommon phenomenon* (Vol. 2412). World Bank Publications.
- GLAESER, E. L., & SHAPIRO, J. M. (2002). Cities and warfare: The impact of terrorism on urban form. *Journal of Urban Economics*, 51(2), 205-224.
- GOLLIN, D., JEDWAB, R., & VOLLRATH, D. (2016). Urbanization with and without Industrialization. *Journal of Economic Growth*, 21(1), 35-70.
- HAUSMAN, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the econometric society*, 1251-1271.
- HENDERSON, V., STOREYGARD, A., & DEICHMANN, U. (2013). Has Climate Change Promoted Urbanization in Sub-Saharan Africa? *Unpublished manuscript, Department of Economics, Brown University*.
- ILIFFE, J. (2017). *Africans: the history of a continent* (Vol. 137). Cambridge University Press.
- JEDWAB, R. (2011). Why is African urbanization different? Evidence from resource exports in Ghana and Ivory Coast. *Unpublished, Paris School of Economics*.
- JEDWAB, R. (2013). Urbanization without industrialization: Evidence from consumption cities in Africa. *Unpublished manuscript, Department of Economics, George Washington University*.
- JEDWAB, R., Christiaensen, L., & Gindelsky, M. (2014). Rural push, urban pull and... urban push? New historical evidence from developing countries. *Institute for International Economic Policy. The George Washington University. Working Papers*, 4.
- JENNINGS, K. & WELLINGTON-MOORE, C. & BOUWMAN, H. (2014). *Proliferation of Urban Centres, their Impact on the World's Environment and the Potential Role of the GEF*. In the Sustainable Urbanization Policy Brief Report to the 5th GEF Assembly, Mexico.
- LINN, J. (1982). The Costs of Urbanization in Developing Countries. *Economic Development and Cultural Change*.
- LIPTON, M. (1977). *Why poor people stay poor: a study of urban bias in world development*. London: Canberra: Temple Smith; Australian National University Press.
- LOWRY, I. S. (1990). World urbanization in perspective. *Population and Development Review*, 16, 148-176.

- MADDISON, A. (2007). *Contours of the world economy 1-2030 AD: Essays in macro-economic history*. Oxford University Press.
- MALIK, N., ASMI, F., ALI, M., & RAHMAN, M. M. (2017). Major Factors Leading Rapid Urbanization in China and Pakistan: A Comparative Study. *Journal of Social Science Studies*, 5(1), 148.
- NAMASAKA, M., & KAMARU, C. (2015). Is urbanization in sub-Saharan Africa divorced from economic growth?. *Africa at LSE*.
- NJOH, A. J. (2003). Urbanization and development in sub-Saharan Africa. *Cities*, 20(3), 167-174.
- POTTS, D. (1995). Shall we go home? Increasing urban poverty in African cities and migration processes. *Geographical Journal*, 245-264.
- POTTS, D. (2009). The slowing of sub-Saharan Africa's urbanization: evidence and implications for urban livelihoods. *Environment and Urbanization*, 21(1), 253-259.
- PRESTON, S. H. (1979). Urban growth in developing countries: A demographic reappraisal. *Population and Development Review*, 195-215.
- ROYUELA, V., & Castells-Quintana, D. (2014). International migrations and urbanisation: 1960–2010. *International Journal of Global Environmental Issues*, 13(2-4), 150-169.
- SATTERTHWAITE, D. (2007). The transition to a predominantly urban world and its underpinnings. IIED Human Settlements Discussion Paper.
- TACOLI, C., MCGRANAHAN, G., & SATTERTHWAITE, D. (2014). Urbanization, Rural–urban Migration and Urban Poverty.
- TIMBERLAKE, M., & Kentor, J. (1983). Economic dependence, over urbanization, and economic growth: a study of less developed countries. *The Sociological Quarterly*, 24(4), 489-507.
- TORRES-REYNA, O. (2007). Panel data analysis fixed and random effects using Stata (v. 4.2). Data & Statistical Services, Princeton University.
- TUOK, I. (2015). Turning the tide? The emergence of national urban policies in Africa. *Journal of Contemporary African Studies*, 33(3), 348–369
- UNITED NATIONS CENTRE FOR HUMAN SETTLEMENTS. (2001). *The State of the World's Cities, 2001* (Vol. 27). UN Habitat.
- UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, POPULATION DIVISION. (2013). *World Population Policies 2013*. Population Division, United Nations Department of Economic and Social Affairs, New York.
- UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, POPULATION DIVISION. (2014). *World Urbanization Prospects: The 2014 Revision, Highlights* (ST/ESA/SER.A/352).
- VELKOFF, V. A., & KOWAL, P. R. (2007). *Population aging in Sub-Saharan Africa: demographic dimensions 2006* (Vol. 7, No. 1). US Dept. of Commerce, Economics and Statistics Administration, US Census Bureau.
- WORLD BANK. (2017). *World Development Indicators 2017*. Washington, DC. World Bank.