



UGANDA

SELECTED ISSUES

May 2019

This Selected Issues paper on Uganda was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on April 16, 2019.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: <http://www.imf.org>
Price: \$18.00 per printed copy

International Monetary Fund
Washington, D.C.



UGANDA

SELECTED ISSUES

April 16, 2019

Approved By
**The African
Department**

Prepared by a team led by Axel Schimmelpfennig, with the chapter authored by Arina Viseth (AFR) and Ke Wang (SPR).

CONTENTS

ADDRESSING EMPLOYMENT CHALLENGES IN UGANDA	2
A. Introduction	2
B. Literature Review	2
C. Stylized Facts	3
D. Policy Discussions	10
BOX	
1. Summary of Major Employment Social Programs in Uganda	10
References	12
APPENDIX	
I. Empirical Approach and Findings	13

ADDRESSING EMPLOYMENT CHALLENGES IN UGANDA¹

A. Introduction

1. **One of key challenges to Uganda is to create enough employment opportunities to cope with rapid population growth, while ensuring a strong and inclusive growth.**

Uganda's economy has performed well over the past two and a half decades. Successful stabilization policies undertaken in the 1990s restored macroeconomic stability and increased investor confidence in the economy, resulting in strong economic performance and social improvements. With one of the youngest and fast-growing population in the world, promoting employment is crucial for economic development and inclusive growth in Uganda.

2. **This paper tries to answer the question of how to promote employment in Uganda.**

The sections are organized as following: section B provides a short literature review; section C discusses key stylized facts including labor market challenges, an overview of the labor market, and employment characteristics; and section D concludes with policy recommendations.

B. Literature Review

3. **While issues relating to the determinants of employment are gaining momentum in Uganda, the literature is largely based on economic reports and qualitative studies.**

Key reports include Kiranda, Walter and Mugisha (2017) and Uganda Bureau of Statistics (UBOS, 2015) which report on labor market transition of young people. UBOS (2018) report on the manpower survey looks at the results of the national labor force surveys, and Merotto, Weber, and Reyes (2018) present findings from analysis conducted by the World Bank jobs diagnostics group. Except for Merotto, Weber and Reyes (2018), these reports tend to argue that employment issues in Uganda stem from labor supply side. The 2014 Global Monitor Entrepreneurship (GME) report and the World Bank 2013 enterprise survey report discuss the labor demand side problems, by emphasizing the need to improve the business environment and the private sector. The lack of information on the labor demand side reflects lack of data on enterprises.

4. **Some earlier research papers focus on entrepreneurship and labor force participation.**

Bbale and Mpuga (2011) examined the impact of female education on labor force participation and occupational choice in Uganda. They found that female education increased the likelihood of women participating in the labor force and being wage employed, emphasizing the importance of female education for poverty reduction. Eijdenberg and Masurel (2013) looked at entrepreneurial

¹ Prepared by Arina Viseth (AFR) and Ke Wang (SPR). We are grateful to Yanki Kalfa for data support and Joanna Delcambre for administrative assistance. The paper benefits from helpful comments by Annalisa Fedelino, Axel Schimmelpfennig (AFR), Sidra Rehman (RES), and Dino Leonardo Merotto (World Bank). The paper also benefits from discussions with the Ugandan authorities.

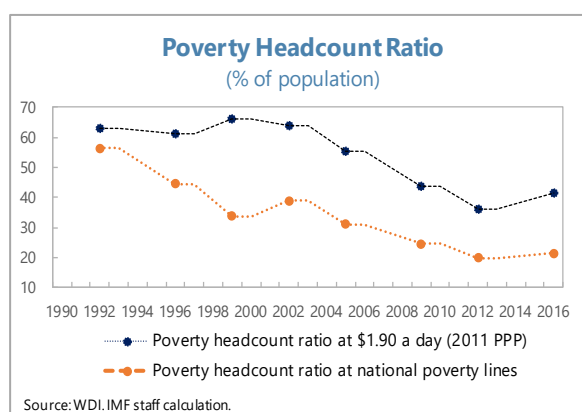
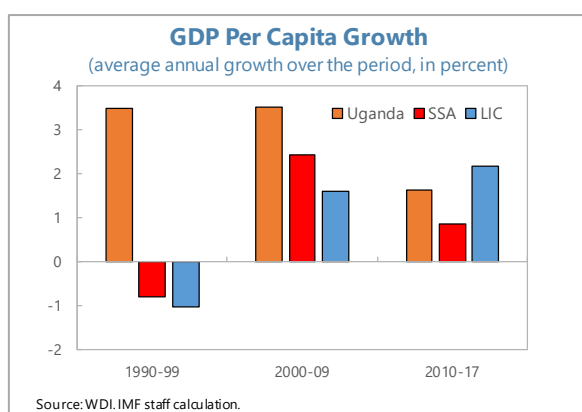
motivation in Uganda and found that push and pull factors (necessity-driven versus opportunity-driven) were not mutually exclusive and that pull factors were even more important than push factors. Guma (2015) examined women entrepreneurship in Uganda's urban informal economy. Her results showed that barriers to entrepreneurship include limited access to finance, bureaucracy and cost of licenses, lack of education and training, and transportation cost. Olivier, Namirembe and Richard (2015) examined the differences in private marginal returns to education between wage-employees and the self-employed in Uganda and found that there was a wider gender gap among wage-employees than the self-employed, associated with low levels of education among females, who tend to be self-employed. The paper suggested investing in education can reduce income inequality. Ackah, Bofah and Asuman (2017) examined the characteristics of entrepreneurs in Uganda and found that entrepreneurs were motivated by career and survival considerations and faced problems related to institutional weaknesses.

C. Stylized Facts

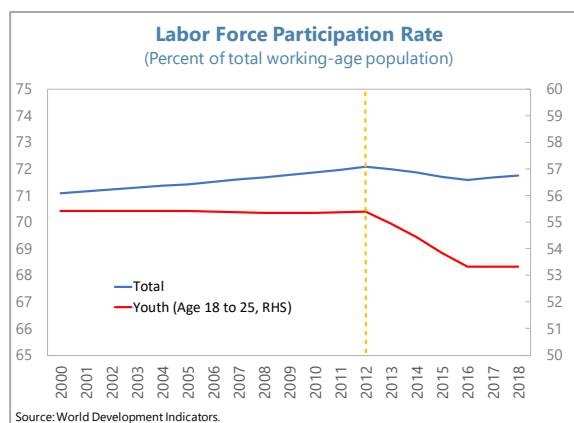
Labor Market Challenges

5. The slowdown in economic growth that started in 2011 has deeply affected Uganda.

- **GDP per capita has slowed and poverty gains have stalled.** GDP per capita was strong in the 1990s and 2000s with higher growth rates than Sub-Saharan Africa (SSA) countries and Low-Income Countries (LIC). But since 2011, the GDP per capita growth has slowed along with other SSA countries, resulting in Uganda (and SSA) falling behind the LIC average. Similarly, there was substantial progress in poverty reduction from 1990 to 2012, but poverty reduction stalled in the five years to 2016.

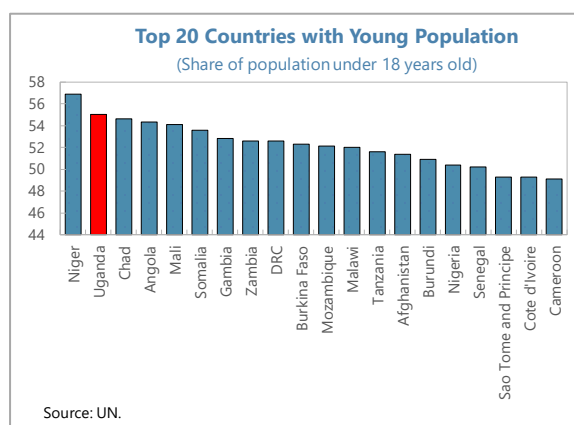
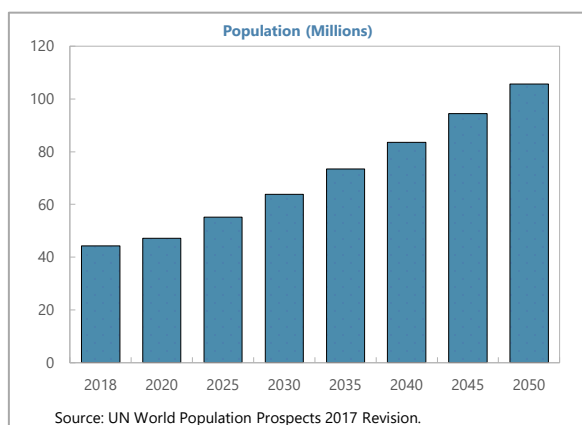


- Labor force participation has significantly dropped, especially for the youth.** The decline in labor force participation follows the slowdown in trend growth since 2011. Employment has not kept up with population growth, particularly for the youth. While labor force participation has shown some recovery starting in 2016, the youth participation rate has remained flat.



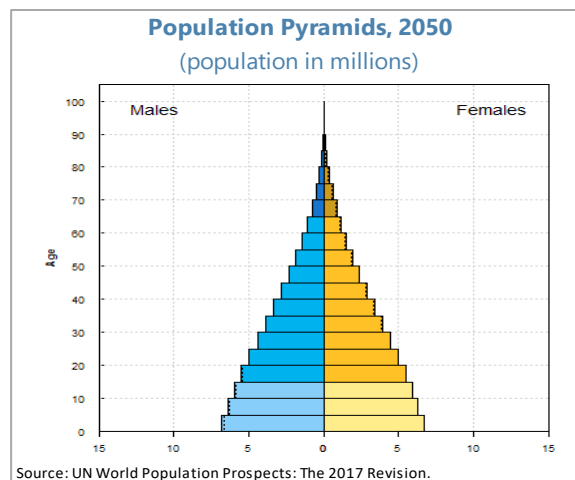
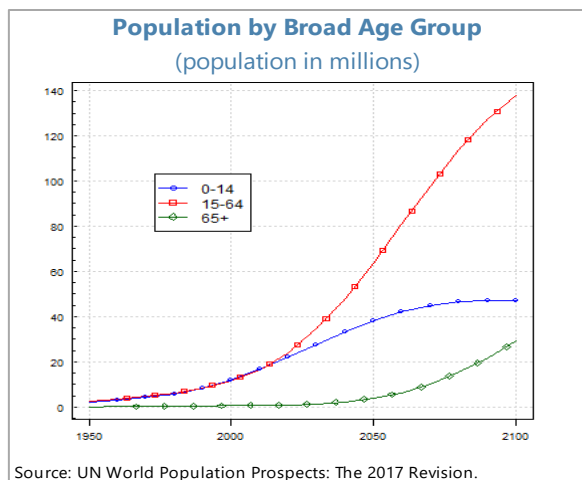
6. Uganda has one of the fastest growing and youngest population in the world.

Uganda’s population reached 38.8 million in 2018, growing at a rate of around 3 percent, making Uganda one of the top ten countries in the world in terms of population growth. Its population is expected to almost triple by 2050 according to the UN projections. In addition, Uganda has one of the youngest populations in the world.



7. Therefore, employment and job creation are essential to Uganda’s development.

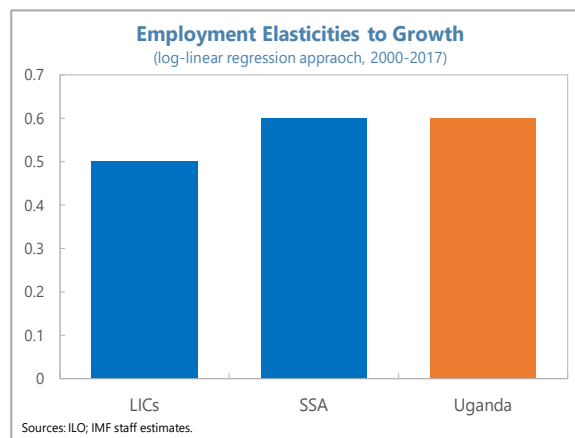
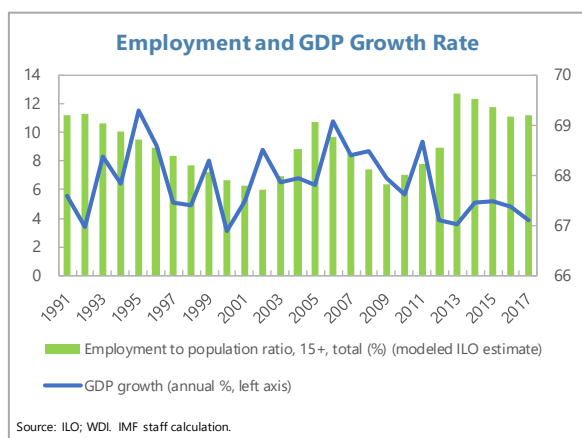
According to World Bank (2018), Uganda will need to create more than 600,000 jobs per year before 2030 and create more than 1 million jobs per year by 2040 to keep up with the pace of labor force entrants. As shown by the population pyramids charts, the work force population will increase for both males and females, underlining the importance of creating jobs for both gender groups.



Labor Market Overview

8. In Uganda, economic growth leads to job creation at a similar rate as observed in SSA.

Periods of high employment rates are associated with periods of GDP expansion and vice versa, though the recent growth declines seem to lead to weaker effects on employment. We estimate the employment elasticity to growth using the log-linear regression approach² over the 2000–2017 period. We find a point elasticity of 0.6, indicating that for 1 percentage point increase in economic growth is associated with 0.6 percentage change in employment, similar to SSA and LICs.

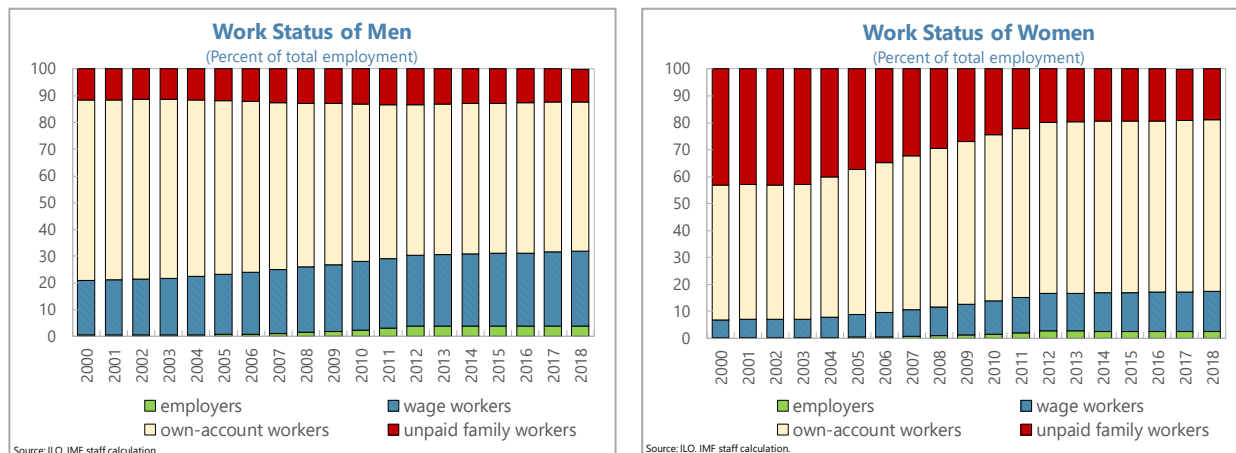


9. The share of wage workers has increased since 2000, but vulnerable employment still dominates, especially for women.

Vulnerable employment is defined by the ILO as the sum of own-account workers and unpaid family workers. Vulnerable employment has seen some declines

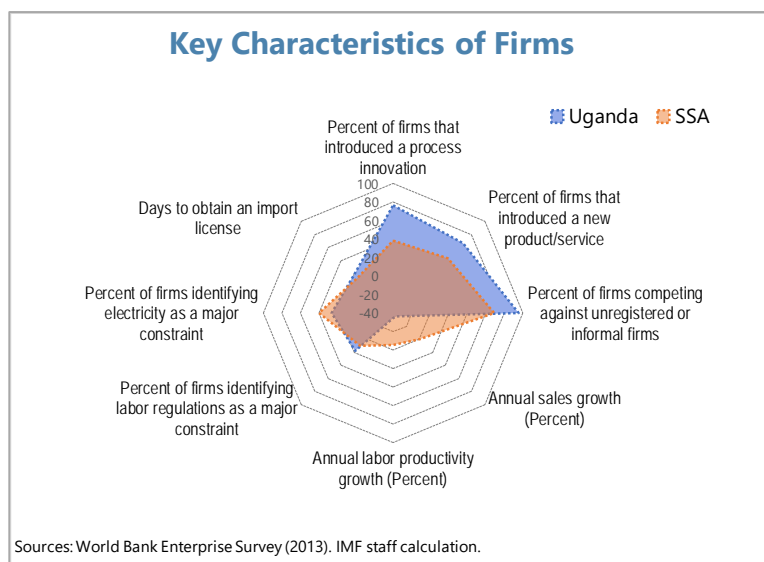
² We follow the standard approach and include the lagged dependent variable, see for example Abdih et al (2012).

for both men and women. Within the vulnerable category, more women have become own-account workers instead of unpaid family workers in recent years.



10. Reflecting the sizeable proportion of own-account workers, Uganda’s youth workers are among the most entrepreneurial in the world. GEM (2014) finds that 70 percent of the youth perceive there were good opportunities for business and believe that they have the capability to start and run a business. The potential to yield a demographic dividend is therefore significant.³

11. Ugandan firms are very small on average, as firms face challenges to expand within the business environment. Ugandan firms are very small compared with regional peers, reflecting the large share of own-account workers in the economy. The World Bank enterprise survey (2013) indicates that infrastructure especially electricity, competition with informal firms, access to finance, tax rates, labor regulation and trade are among the key issues that Uganda firms face. At the same time, Uganda firms have made more progress on innovation than SSA firms on average, with higher shares of firms introducing process innovation and new product and services.

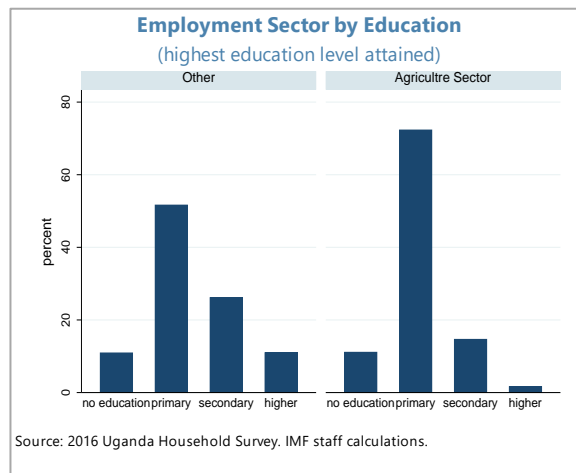
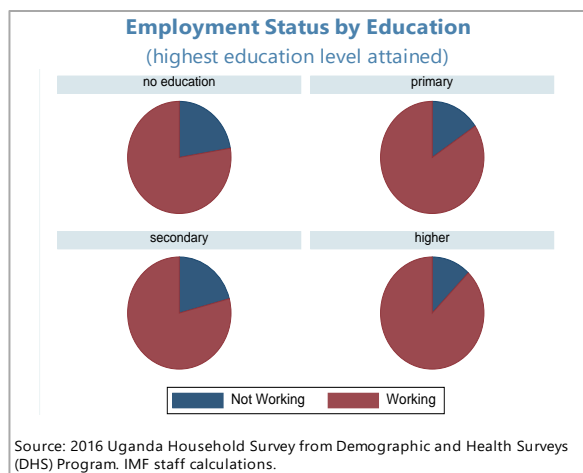


³ For estimates of demographic dividends for Sub-Saharan Africa, see Thakoor and Yu (2014).

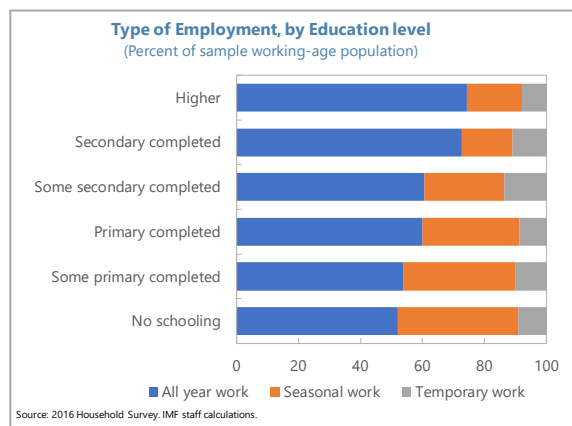
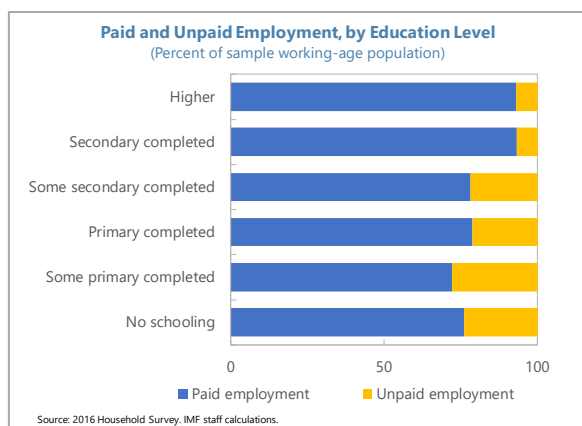
Characteristics of the Employed

12. Education level matters for the chance of getting a job and the employment sector.

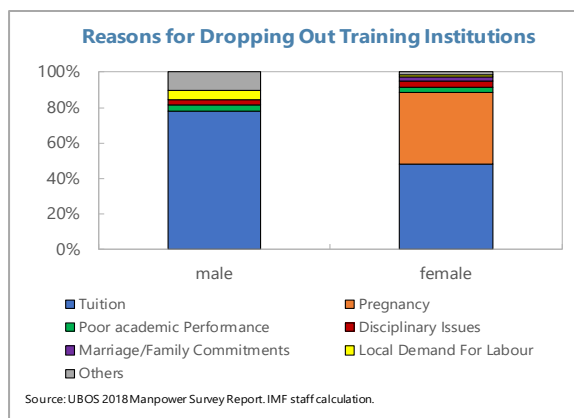
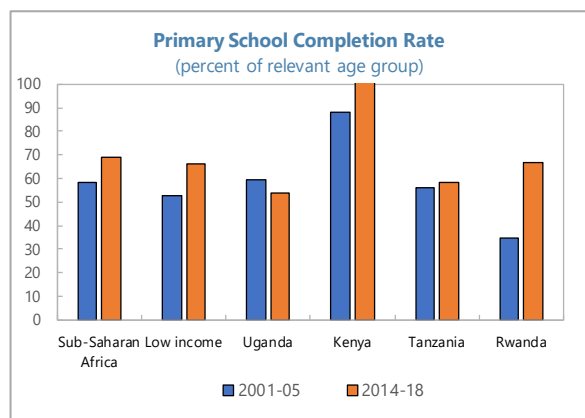
There is higher chance of being employed with higher education levels based on the 2016 household survey data. While primary education matters more for agriculture employment, secondary and higher education are more important for non-agriculture employment. Regression results confirm the effects of education on the probability of finding a job and the sector of employment (see Appendix I. Empirical Approach and Findings).



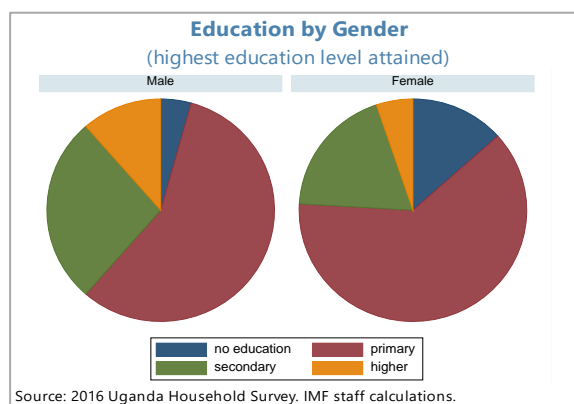
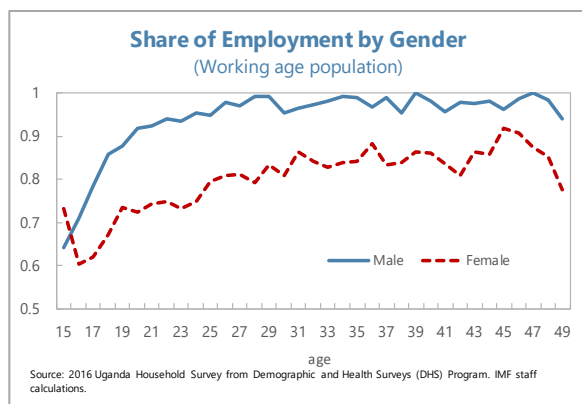
13. Education also matters for the chance of getting a paid job and a full-time job. The survey data indicates that paid employment increases with higher education levels, especially for people who have completed secondary education or have higher education. Our regression results also confirm the significant effects of education on the probability of having paid jobs (Appendix I). Education also impacts the type of employment, as half of the people with no education could only find seasonal and temporary jobs while around 75 percent of employed people with higher education have a more stable all-year job.



14. However, education outcomes have deteriorated, driven by a decline in lower school completion rates—contrary to trends in comparator countries. Primary school completion rate has dropped in recent years against improvements in neighboring countries, SSA and LICs.⁴ The situation in higher education also needs attention. Based on the data from the manpower survey, the main reasons why students dropped out of training institutions (universities, colleges, technical schools) are: failure to afford tuition (78 percent) followed by high local demand for labor (5 percent) for male students; and failure to afford tuition (48 percent) followed by pregnancy (40 percent) for female students.

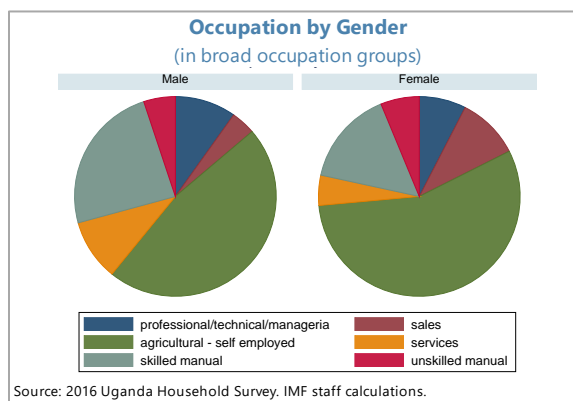
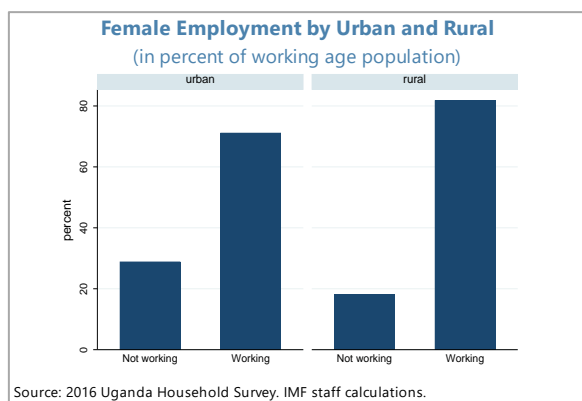


15. Uganda has a gender gap in employment opportunities, which may partly be explained by the gender gaps in education. The share of employment increases with age for both men and women. However, the overall level of female employment is lower among working age population compared to male employment, as confirmed by regressions. The lower average education level of women may be one of the underlying reasons. There is a larger share of women with no education, and larger shares of men with secondary and higher education. Other reasons could include the fact that women have more household work burdens and less access to financing, to inputs and technology, and to market information and marketing networks (UNDP 2015).

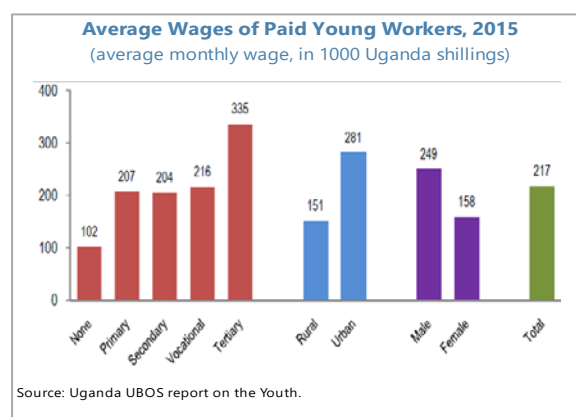
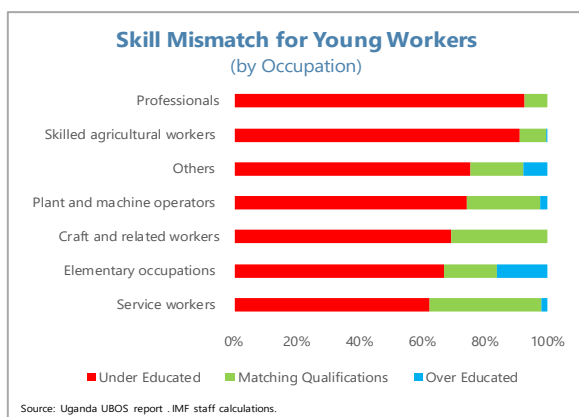


⁴ This is mainly due to low teachers' ability and high school absence rate (see UNICEF Uganda 2018 Education Budget Issues Paper).

16. Getting a job is especially difficult for women in urban areas, and gender plays a role on occupation and earnings. There is higher share of unemployed women in urban areas than in rural areas, while many women employed in rural areas are seasonal and temporary workers. Men and women play different roles in the Ugandan economy. Men and women have approximately the same share of their workforce in agriculture. While women have greater shares in unskilled manual and sales, they are under-represented among skilled manual, professionals, and executives. The average earnings of women are substantially lower than the earnings of men.



17. Finally, youth matters for employment. Youth unemployment remains a serious policy challenge in many sub-Saharan African countries, including Uganda. Young age decreases the probability of getting employed as shown by charts and regression results. According to ILO data, the share of youth not in education, employment or training (NEET) was 34 percent of the total youth population in 2017, which is higher than regional peers (such as 15 percent in Tanzania, 21 percent in Nigeria and 26 percent in Ghana). Skill mismatch is a big issue for youth employment. On average 80 percent of working young people were under-educated for their occupations, and the skill mismatch is particularly high for professional and skilled agricultural young workers based on the 2015 UBOS report. Under-education has an impact on the workers' productivity, as well as on their levels of confidence and well-being. Average wages of paid young workers are low, especially for those with lower education levels, in rural area, and young women. The low wages may also reflect the fact of higher concentration of youth employment in the informal sector and less skilled jobs.



D. Policy Discussions

18. Uganda has implemented some social programs aimed at creating employment specifically for youth and women, though coverage is limited. These programs aim at providing an enabling environment for the private sector to create jobs and build the skills and requisite knowledge to make youth and women more employable (Box 1). The existing social programs are good initiatives to address some of the labor market issues, though their coverage remains limited with funding constraints identified as one of the main challenges.

Box 1. Summary of Major Employment Social Programs in Uganda

The government has long promoted the culture of self-employment and encouraged young people to establish business through microfinance, though results have been mixed, especially in early years.

- In 1995, the government introduced the Youth Entrepreneurial Scheme (YES) program, designed as a loan scheme for youth who wished to venture into business. The scheme did not perform as anticipated with low recovery rate.
- In 2011, the government introduced the Youth Venture Capital Fund (YVCF) to create jobs and expand business. The fund offered fixed subsidized interest loans and depends on both public funds as well as funds offered by commercial banks. The program results were also mixed.
- The Young Livelihood Programme (YLP) was introduced in 2013, targeting the unemployed and poor youth. The program provides revolving funds to groups of 10 to 15 persons with access of up to US\$7000 to be repaid after 3 years. There are currently 18,063 projects of youth projects financed. The recovery rate of funds has increased over the year, with a 70 percent estimated projected repayment rate for FY18/19. There are some positive impacts from the program including employment creation of more than 200,000 direct jobs and 500,000 indirect jobs, increased financial inclusion, and positive impacts on economy (2018 impact evaluation). The challenges of the program include inadequate funds, low technical capacity in some local governments, improper usage of the funds, and some project failures due to disease outbreaks and other project issues.
- In 2015, the government initiated the Uganda Women Entrepreneurship Programme (UWEP) targeting unemployed women with similar structure as the YLP. Most projects of women groups are in agriculture (34 percent), wholesale and retail trade (43 percent) and services (11 percent). The repayment of the revolving fund represents 68 percent of the total amount due to date by the end of December 2018. The benefits of the program include women empowerment and women engagement in the economy. To improve the rate of funds recovery, measures have been undertaken to enhance local government capacity, and more active involvement and participation of women councils. Other challenges include inadequate funds which are much lower than the demand, access to financing, and some project failures.

19. Creating quality jobs will require comprehensive policies to promote headline growth and ensure inclusive growth, including measures to improve education and address challenges in gender and youth.

- **Raise growth.** Comprehensive policies first call for measures to maintain macroeconomic stability (low inflation and output volatility) and promote headline growth. Those measures, largely in line with the authorities' plans, include: (i) developing and maintaining strategic infrastructure (related to electricity, water, transportation); and (ii) improving the general business environment, good governance and service delivery.
- **Invest in education.** Our study highlights the benefits of education for employment and earnings. The data also suggests that the level of education required differs across economic sectors and job categories. This calls for measures to improve education outcomes through better quality and alignment with the needs of the growth sectors of the education curriculum.
- **Reduce gender gap.** Women face more difficulties than men in terms of accessing education and getting a job. Studies⁵ have shown that reducing barriers to women in the workplace significantly boost welfare and growth. Policy measures should aim at reducing the education gap for women and promoting women labor force participation, including policies on education on child care.
- **Facilitate youth labor market entrance.** Stylized facts show that young Ugandans have difficulties finding jobs, especially in sectors and occupations outside agriculture. While investing in education would help labor market entrants find jobs, active labor market policy (ALMP) could also help, including vocational trainings and search and matching assistance through employment services.
- **Support firms to expand.** Ugandans have proved to be very entrepreneurial, as demonstrated by the large share of own-account workers among women and the youth in recent years. Policy measures that help firms to expand businesses would support job creation, including improved access to financing for entrepreneurs – by reducing the high cost of financial services, improving credit information and increasing public confidence in formal financial institutions- and more enabling government policies.⁶

⁵ See for example "Economic Gains from Gender Inclusion: New Mechanism, New Evidence" IMF Staff Discussion Note No. 18/06.

⁶ See Sebudde, Rachel K.; Goffe, Valeriya; Daka, Dorothy; Safavian, Mehnaz S.. 2017. Step by step: let's solve the finance puzzle to accelerate growth and shared prosperity (English). Uganda economic update; no. 8. Washington, D.C. : World Bank Group.

References

- Ackah, Charles, Bofah, Richard Osei, and Asuman, Derek. 2017. "Who are the Africa's Entrepreneurs? Comparative Evidence from Ghana and Uganda." *Journal of Developmental Entrepreneurship*, 22(4), pp. 1-23.
- Bbaale, Edward, Mpuga, Paul, 2011. "Female Education, Labour Force Participation and Choice of the Employment Type: Evidence from Uganda." *International Journal of Economics and Business Modeling*, 2(1), pp. 29-41.
- Eijdenberg, Emiel L, and Masurel, Enno, March 2013. "Entrepreneurial Motivation in a Least Developed Country: Push Factors and Pull Factors among MSEs in Uganda." *Journal of Enterprising Culture*, 21(1), pp. 19-43.
- Global Monitor Entrepreneurship Report. 2014. GEM Global Entrepreneurship Monitor _ Global Reports, <https://www.gemconsortium.org/>.
- Guma, Prince Karakire 2015 "Business in the Urban Informal Economy: Barriers to Women's Entrepreneurship in Uganda." *Journal of African Business*, 16(1-3), pp. 305-21.
- ILO. 2018. Women and Men in the Informal Economy: A Statistical Picture (third edition). International Labour Office, Geneva.
- IMF. 2018. "Economic Gains from Gender Inclusion: New Mechanism, New Evidence" IMF Staff Discussion Note No. 18/06.
- Oliver, Morrissey, Namierembe, Kavuma Susan, and Richard, Upward, 2015. "Private Returns to Education for Wage-employees and the Self-employed in Uganda." UNU-WIDER Research Paper wp2015-021.
- Kiranda, Yusuf, Walter, Max, Mugisha, Michael, 2017. "Employment, Entrepreneurship and Education in Uganda" Centre for Development Alternatives.
- Merotto, Dino, Weber, Michael, and Aterido, Reyes, 2018. "Pathways to Better Jobs in IDA Countries." Findings from Jobs Diagnostics. World Bank.
- The International Bank for Reconstruction and Development / The World Bank. "Uganda Country Profile 2013: Enterprise Survey." Washington, USA: World Bank 2013.
- Uganda Bureau of Statistics. 2015. Labour Market Transition of Young People in Uganda – Highlights of the School to Work Transition Survey 2015. Uganda Bureau of Statistics. Kampala, Uganda.
- Uganda Bureau of Statistics. 2018. Manpower Survey Uganda (MAPU) 2016/17. Uganda Bureau of Statistics. Kampala, Uganda.
- UNICEF 2018. "Uganda 2018 Education Budget Issues Paper".

Appendix I. Empirical Approach and Findings

- 1. We use Probit model to estimate the determinants of the probability of being employed.** The dependent variable for the main regressions is a dummy variable of employment status, which equals one if an individual is employed and zero if the individual is unemployed. We also test the probability of employment in agriculture sector; employment in non-agriculture sectors; full-time jobs; and paid jobs. Our individual level data is based on the 2016 Uganda Demographic and Health Survey (2016 UDHS) conducted by UBOS.
- 2. Our regression results confirm the significant effects of education, age, and gender on the probability of finding jobs (Table A1).** The probability of employment is significantly influenced by age, marriage status, head of household dummy, and education levels in the baseline regressions. The probability of employment increases if a person is married or acting as the head of household. Higher education levels are associated with higher probability of being employed including primary education, secondary education, and higher education. Wealth index matters as the richer the individual is, the less likelihood of being employed, which may be due to lack of incentives to work. The results show that the probability of employment is significantly lower for women, especially for a woman with children under 5 years old or more than one child. The probability of employment increases with age, which implies the youth have lower chance of getting employed due to their young age. Our results also suggest that young women are the most vulnerable group as affected both by age and gender.
- 3. Different education levels have diverse effects on categories of employment (Table A2).** The probability of getting a full-time job significantly increases with all levels of education. The probability of employment in agriculture is positively associated with primary education, while the probability of employment in non-agriculture sector is positively associated with secondary education and higher education. Similarly, secondary and higher education are more important for getting a paid job. Regression results also suggest age is positively associated with the probability of getting non-agriculture, full-time, and paid jobs.
- 4. For robustness checks, we have done several sets of regressions.** First, we run Logit model instead of Probit model, and the results are similar. Second, we test estimations separately for female employment and male employment given the characteristics of the survey databases. For the male survey database, information is not available on where the person lives (urban or rural area), presence of young children, and self-employment status. For the female employment regressions, the urban dummy is significant with negative coefficient, suggesting a higher chance of employment in rural areas. Finally, another set of robustness check regressions are performed for youth employment, confirming the general findings of the main regressions.

Table A1. Probit Regressions for Determinants of Employment, 2016

Variables	Employment Status (dummy variable, working=1, not working=0)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Age	0.0385*** (4.28)	0.150*** (11.03)	0.134*** (9.67)	0.135*** (9.72)	0.138*** (9.88)	0.137*** (9.83)	0.139*** (9.91)	0.116*** (6.84)	0.0589** (3.16)	0.0622*** (3.34)
Age, square	-0.000134 (-0.91)	-0.00190*** (-9.44)	-0.00172*** (-8.39)	-0.00173*** (-8.45)	-0.00175*** (-8.51)	-0.00176*** (-8.57)	-0.00172*** (-8.39)	-0.00141*** (-5.60)	-0.000670* (-2.38)	-0.000729** (-2.59)
Primary education	0.403*** (12.15)	0.361*** (10.77)	0.368*** (10.94)	0.353*** (10.46)	0.453*** (13.20)	0.367*** (10.90)	0.367*** (10.92)	0.543*** (13.05)	0.343*** (9.80)	0.325*** (9.30)
Secondary education	0.246*** (6.55)	0.129*** (3.36)	0.134*** (3.50)	0.118** (3.06)	0.349*** (8.36)	0.157*** (4.01)	0.121** (3.12)	0.450*** (9.53)	0.184*** (4.41)	0.0822* (2.00)
Higher education	0.479*** (9.07)	0.278*** (5.12)	0.264*** (4.84)	0.249*** (4.55)	0.561*** (9.50)	0.345*** (5.74)	0.232*** (4.12)	1.162*** (18.23)	0.435*** (6.87)	0.237*** (3.87)
Married, dummy	0.0789*** (3.51)	0.108*** (4.74)	0.115*** (4.99)	0.112*** (4.88)	0.0924*** (3.99)	0.113*** (4.91)	0.120*** (5.21)	0.138*** (4.98)	0.0768** (3.17)	0.0962*** (3.99)
Female		-0.772*** (-23.30)	-0.684*** (-19.54)	-0.689*** (-19.62)	-0.701*** (-19.92)	-0.714*** (-19.68)	-0.667*** (-18.64)	-0.423*** (-9.94)	0 (.)	0 (.)
Youth		0.0523 (1.27)	0.0361 (0.87)	0.0366 (0.88)	0.0324 (0.78)	0.0422 (1.02)	0.0348 (0.84)	-0.0390 (-0.78)	-0.112* (-2.41)	-0.112* (-2.40)
Household Head			0.262*** (8.69)	0.262*** (8.67)	0.247*** (8.13)	0.261*** (8.65)	0.260*** (8.60)	0.208*** (5.71)	0.201*** (5.97)	0.175*** (5.21)
Ethnicity				-0.000381* (-5.91)						
Wealth group					-0.115*** (-13.47)					
Internet usage, dummy						-0.144** (-3.29)				
Number of children							-0.0189* (-2.44)			
Occupation group								0.415*** (66.75)		
Urban									-0.357*** (-11.68)	
Child under 5 years old										-0.0411*** (-3.43)
Constant	-0.367** (-2.70)	-1.345*** (-6.11)	-1.177*** (-5.29)	-1.150*** (-5.17)	-1.008*** (-4.51)	-1.185*** (-5.33)	-1.255*** (-5.59)	-2.674*** (-9.75)	-0.485 (-1.58)	-0.483 (-1.57)
N	20858	20858	20858	20858	20858	20858	20858	20802	15522	15522

t statistics in parentheses

*** p<0.05

** p<0.01

*** p<0.001"

Table A2. Probit Regressions for Different Employment Categories, 2016

Variables	Employed in agriculture		Employed in non-agriculture		Fulltime Jobs		Paid Jobs	
	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Age	-0.00102 (-0.13)	0.00232 (0.21)	0.0654*** (8.31)	0.0670*** (6.07)	0.0761*** (9.28)	0.0887*** (7.61)	0.0745*** (8.43)	0.0994*** (7.96)
Age, square	0.000219 (1.80)	0.000177 (1.13)	-0.00108*** (-8.76)	-0.00110*** (-6.98)	-0.000934*** (-7.34)	-0.00109*** (-6.64)	-0.00104*** (-7.57)	-0.00135*** (-7.66)
Primary education	0.253*** (8.67)	0.253*** (8.66)	-0.107*** (-3.60)	-0.107*** (-3.60)	0.278*** (8.74)	0.278*** (8.73)	0.0641 (1.85)	0.0634 (1.83)
Secondary education	-0.284*** (-8.36)	-0.284*** (-8.37)	0.334*** (9.86)	0.334*** (9.86)	0.475*** (12.87)	0.474*** (12.84)	0.274*** (6.73)	0.271*** (6.67)
Higher education	-1.110*** (-21.31)	-1.110*** (-21.30)	1.092*** (23.15)	1.092*** (23.15)	0.727*** (15.02)	0.727*** (15.04)	0.906*** (14.19)	0.906*** (14.21)
Married, dummy	0.257*** (13.54)	0.257*** (13.52)	-0.206*** (-10.71)	-0.206*** (-10.71)	-0.0671*** (-3.34)	-0.0680*** (-3.38)	-0.140*** (-6.27)	-0.142*** (-6.37)
Female	-0.0848*** (-3.35)	-0.0861*** (-3.38)	-0.212*** (-8.50)	-0.213*** (-8.46)	0.110*** (4.20)	0.106*** (4.03)	0.204*** (7.01)	0.194*** (6.65)
Youth		0.0157 (0.43)		0.00731 (0.20)		0.0589 (1.52)		0.120** (2.82)
Household Head	-0.152*** (-6.30)	-0.152*** (-6.31)	0.254*** (10.63)	0.254*** (10.61)	0.181*** (7.23)	0.180*** (7.17)	0.276*** (9.65)	0.273*** (9.52)
Constant	-0.320** (-2.79)	-0.382* (-2.07)	-1.057*** (-9.07)	-1.086*** (-5.84)	-1.603*** (-12.98)	-1.840*** (-9.25)	-0.790*** (-6.01)	-1.260*** (-5.93)
N	20858	20858	20858	20858	18043	18043	18043	18043

t statistics in parentheses
 =* p<0.05 ** p<0.01 *** p<0.001"