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Self-employment preferences among university graduates in Ghana: Does gender make a difference?

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Summary

Motivation: Youth employment has become an urgent policy issue in Africa. Half of the population is under 25 years old on a continent in which job creation lags behind economic growth. Consequently, policy-makers have increasingly proposed self-employment as a solution to the challenge of youth unemployment.

Purpose: This study examines self-employment preferences among university graduates in Ghana. We address two related questions: (1) Are there gender differences in young people's willingness to pursue self-employment; and (2) what are the predictors of preference for self-employment in male and female graduates?

Methods and approach: Our analysis draws on a sample of 1,180 university graduates interviewed during their compulsory year of national service, which follows graduation. We analyse gender and other sub-group differences using t-tests for statistical significance of differences in means. We then estimate multinomial logit regressions to analyse what factors predict employment preferences.

Findings: We find substantial gender differences in preferences for self-employment. Despite women having higher rates of self-employment in the economy, the female graduates in our sample are significantly less likely to prefer self-employment than men—12% of women and 16% of men report that their desired type of work would be self-employment. Moreover, while marital status and childbearing are the strongest predictors of self-employment preferences for women, self-employment experience and financial background are the strongest predictors for men.

Policy implications: This study suggests that gender differences in labour market outcomes are partly a function of differential preferences rooted in unequal constraints. Bridging these gendered inequalities will require policy interventions that both impact the preferences women form prior to entering the labour market and address their gender-specific concerns about family responsibilities.

KEYWORDS

gender, Ghana, self-employment, youth employment

1 | INTRODUCTION

Youth employment has become an urgent policy issue in Africa; half of the population is under 25 years old on a continent where job creation lags behind economic growth (African Development Bank, Organisation for Economic Co-operation and Development, and United Nations Development Programme, 2014; Filmer & Fox, 2014). Consequently, policy-makers have increasingly proposed self-employment as a solution to the lack of formal jobs for the many young people entering the African labour market each year (Anyidoho et al., 2012; Honeyman, 2016).

This article examines gender differences in the preference for self-employment among highly educated youth. We approach our analysis at the intersection of two areas of policy and research concern: youth employment and gender equality in employment outcomes. Our research site for this analysis is Ghana, a country whose economic growth in the past three decades has not resulted in a commensurate increase in formal employment opportunities. Thus, there are few salaried work opportunities for the many young people in Ghana who are taking advantage of expanding access to higher education (Baah-Boateng, 2015a). According to the prevailing policy narrative, the fact of a constrained labour market is both an imperative and an incentive for young people to become self-employed, creating work for themselves and others (Anyidoho et al., 2012; Gough et al., 2013).

We focus on the sub-population of young people with the highest levels of education. First, because young university graduates have higher unemployment rates than other youth in the economy—16.4% compared to 7.9%, based on the 2010 census (Ghana Statistical Service, Minnesota Population Center, 2010). This makes university graduates an important target sub-group for policy interventions on youth unemployment. Relative to the general youth population, university graduates are more likely to employ others. Almost 70% of labour force participants in Ghana are self-employed but largely in the informal sector, in which women are over-represented (ibid.). Moreover, only 5.5% of self-employed workers have any employees (ibid.). These figures suggest that most self-employed workers make little contribution to creating employment. University graduates could be a critical population to stimulate employment as the likelihood of employing workers increases with education: while only 7% of self-employed youth employ any workers, 39.6% of self-employed youth with a university degree have employees (Ghana Statistical Service, Minnesota Population Center, 2010). A final reason for our focus on university graduates is that highly educated individuals have higher earnings in self-employment. Indeed, Heintz and Pickbourn (2013) analyse the determinants of self-employment earnings in Ghana using the Ghana Living Standards Survey and establish that "the largest returns to education accrue to tertiary education" (Heintz & Pickbourn, 2013, p. 204). Their potential to earn higher income and generate employment give university graduates a relatively high potential of being successful in self-employment, making them an important test case, as it were, for the promotion of self-employment as a policy strategy to address underemployment and unemployment.

Our analysis draws on a sample of 1,180 university graduates interviewed during their compulsory year of national service after completion of their bachelor's degrees. We find substantial gender differences in preferences for self-employment. Despite women having higher rates of self-employment in the economy, female graduates are significantly less likely to prefer self-employment—12% of women and 16% of men report that their desired type of work would be self-employed. To explore the underlying factors shaping employment preferences, we examine the correlates of self-employment preferences and again find gender differences; while marital status and childbearing are the strongest predictors of self-employment preferences for women, financial background and work experience in self-employment are the strongest predictors for men. These results suggest that men and women face different constraints to their employment decisions and that these differences could influence the effectiveness of policies to promote youth self-employment among different social categories of youth.

The paper proceeds as follows. Section 2 provides background information on employment, self-employment, and policy discourse in Ghana. Section 3 outlines the conceptual framework underlying our analysis. Section 4 discusses our data and methodology. We present our results in Sections 5, 6, and 7. Section 8 concludes.

2 | BACKGROUND

2.1 | Employment in Ghana by age, gender, and education

Although unemployment in Ghana has decreased significantly—falling from 10% to 6% between 2000 and 2010 (Baah-Boateng & Ewusi, 2013)—the youth[1] unemployment rate remains higher than that for adults. In 2010, 7.9% of 19 to 35 year olds were unemployed, compared to 2.7% of adults aged 36 to 64 (authors' calculations using the 2010 census, the most recent census data available; Ghana Statistical Service, Minnesota Population Center, 2010). These figures, based on conventional definitions of unemployment, are likely underestimations of unemployment in both the youth and adult populations because of labour market features that limit data availability in Ghana and other lower-income countries.[2] Further, underemployment is as important a challenge for young people as unemployment but receives significantly less policy attention (Gough et al., 2013; Hiroyuki & Ranis, 2013). Thus, the situation of youth underemployment and unemployment is likely to be more dire than the official statistics would suggest.

This situation fuels policy concern about youth employment. However, as with many policies targeted towards youth in African countries, little differentiation is made between categories of young people (Anyidoho et al., 2012). For instance, rather than generalizing underemployment and unemployment as a "youth" problem, it may be more accurate to speak of a crisis of underemployment and unemployment among *educated urban youth* who seek employment outside the informal and agricultural sectors in which most young people do manage to find or create work (Fox et al., 2016). Young people with university education have higher unemployment rates than their less-educated counterparts, according to the most recent census data.[3] Findings such as these have inspired the "educated youth hypothesis" or "aspirations gap" theory that highly educated young people are more discriminating in their job preferences (Baah-Boateng & Turkson, 2005; Fox et al., 2016; UNECA, 2009).

When young people do find work, only a small proportion are employees. The 2010 census data indicates that 20% of 19 to 35 year olds are wageworkers. This proportion is twice as high for males (28%) as for females (14%). Thus, the prospects of securing formal wage employment are limited for young people, especially women.

2.2 | Self-employment in Ghana by age, gender, and education

Self-employment is prevalent in Ghana, particularly among female workers (Tsikata & Darkwah, 2013). It mostly occurs within informal household enterprises and subsumes a variety of industries, workers, motivations, and outcomes. The fifth round of the Ghana Living Standards Survey (GLSS 5) offers rare national-level statistics on enterprises. Conducted between 2005 and 2006, it included a special module on non-farm household enterprise that showed that 46% of all households in Ghana operated a non-farm enterprise (with about half involving trade) and that women run 72% of these businesses. The same survey indicated that 82% of all household enterprises

[1]The official age for 'youth' in government documents is 15 to 35 years. Our analysis of census data focuses on youth aged 19 to 35 years to allow for comparability by education level, since tertiary educated youth are generally older than 19. The age of tertiary graduates in our survey sample ranged from 19 to 55, with a median of 25.

[2]These features include a relative lack of employment centres, unemployment benefits, and other institutions and systems that could consistently generate data on jobless persons seeking work. People may not look for work because of inadequate information on the labour market or they may not seek work in ways that are recognized as work-seeking behaviour in the conventional definitions used by the International Labour Organization (Baah-Boateng, 2015b; World Bank, 2006).

[3]We used data from a 10% sample of the 2010 census (Ghana Statistical Service, Minnesota Population Center, 2010), which contains larger numbers of tertiary graduates than the more recent Ghana Living Standards Surveys, making it more suitable for analysing differences by educational attainment

were unregistered (Heintz & Pickbourn, 2012), signalling a high level of informality, which is linked to higher levels of precarity and poverty.

The factors that result in low female participation in formal wage employment—including historical discrimination against women's work in the formal economy, unequal access to education and its resultant social capital, restrictive gendered norms, and women's greater responsibility for care work—also drive women's higher participation in informal self-employment, which has lower barriers to entry (Chakravarty et al., 2017; Heintz & Pickbourn, 2012; Tsikata & Darkwah, 2013). Self-employed women tend to be segmented into less productive and less profitable sectors and jobs (Tsikata & Darkwah, 2013; World Bank, 2012). They have lower profits, lower sales, and less value-added to their services and products (Hardy & Kagy, 2018; Nix et al., 2016; World Bank, 2019).

While women are over-represented among the self-employed, self-employment appears to be rising in the general population in Ghana. Importantly, self-employed individuals have increasing levels of education (Falco & Haywood, 2016). Returns to education for self-employed workers rose between 2004 and 2011, suggesting a greater incentive for highly educated individuals to consider this form of employment. Nonetheless, wage employment remains relatively more attractive as it offers larger returns to education (Falco & Haywood, 2016). Thus, self-employment rates continue to be lower for individuals with university education than for those with lower levels of education (based on the 2010 census).

While young women without university education have higher unemployment rates than their male counterparts, there is a less consistent pattern for university-educated female youth (authors' analysis using 2010 census data), suggesting that it is important to examine the intersection of education *and* gender, among other factors, to better understand the gendered character of self-employment. Although across all age groups women, on average, have higher self-employment rates than men, university-educated women are less likely than their male counterparts to be engaged in self-employment in their 20s and 30s (Ghana Statistical Service, Minnesota Population Center, 2010).

2.3 | Policy discourse on self-employment

Self-employment has emerged as a commonly proposed policy solution to the challenge of youth unemployment and underemployment, despite indications that young people prefer formal wage employment. A critique of this policy discourse is its tendency to equate self-employment and entrepreneurship, with its deployment of terms such as "entrepreneurial self-employment" (see Gough & Langevang, 2016). While some self-employed individuals can also be entrepreneurs (Chakravarty et al., 2017; Startienė et al., 2010), not everyone can be an entrepreneur (Dolan, 2012) and, moreover, not everyone *should*, since the "typical" business start-up is "not innovative, creates few jobs, and generates little wealth" (Shane, 2009, p. 141). Second, the policy emphasis on youth self-employment can be seen as an attempt to shift the responsibility of job creation from the state to young people (Jeffrey & Dyson, 2013). For these and other reasons, it has been argued that the most tenable, long-term solution to the challenge of youth employment in Africa is the expansion of decent work in the formal sector for the mostly urban-based educated youth cohort (Sumberg et al., 2020) for whom self-employment in its current form—small-scale and informal—is only a last resort (Falco & Haywood, 2016). Nonetheless, in sub-Saharan Africa today, "wage employment, particularly in the formal sector, is the exception rather than the rule" (Chakravarty et al., 2017, p. 2). This means that self-employment is likely to continue to be advocated by policy-makers as an alternative or even preferred solution to youth underemployment and unemployment, hence the importance of understanding young people's orientation towards this form of work.

Another critique of both the policy discourse on self-employment and its consequent interventions is the underlying presumption of homogeneity in the category of youth (Anyidoho et al., 2012), despite evidence of differences in the nature and extent of employment-related opportunities and constraints experienced by different

sub-groups of young people (Chakravarty et al., 2017). For instance, there is evidence that male self-employed workers have higher earnings than their female counterparts, which is one dimension of the larger issue of persistent inequality in labour market outcomes, despite the narrowing gender gap in educational attainment (Hausman et al., 2014; World Bank, 2012). Again, while the policy narrative presents self-employment as an opportunity for "the youth," the literature suggests that, to the extent that young women show a preference for self-employment, it is because it gives them the flexibility to combine economic work with childbirth, care work, and other domestic and social obligations. Thus, for women in particular, it is often difficult to disentangle choice and necessity in self-employment (Falco & Haywood, 2016). Understanding differences in initial work preferences offers insights into what might motivate women to consider or reject self-employment.

3 | CONCEPTUAL FRAMEWORK

Figure 1 outlines the conceptual framework underlying our analysis of gender differences in self-employment. Drawing on Campos and Gassier (2017), Chakravarty et al. (2017), Cortes and Pan (2018), and World Bank (2019), we theorize that individuals make constrained choices about employment after considering their contexts, endowments, and preferences. These constrained choices then influence outcomes. Thus, gender-specific constraints will generate gender-specific preferences that drive male and female graduates to make systematically different choices, further leading to differences in employment and economic outcomes.

4 | DATA AND METHODOLODY

We use data from a targeted survey of university graduates to examine preference for self-employment. The survey was conducted during the graduates' national service, which follows graduation. Since 1973, all citizens under the age of forty completing an accredited tertiary degree or diploma in Ghana are required to work for one year under the National Service Scheme (NSS) either in public institutions to support the country's manpower needs in agriculture, education, and technology, or in private sector establishments that request personnel. The NSS deployed over 75,000 tertiary graduates in the 2015/2016 cohort that we surveyed.

Our survey targeted national service personnel posted to work at a random sample of establishments in three of Ghana's 10 administrative regions in 2015. We were unable to access administrative data from the NSS in 2015, so we used data from 2014 to construct the survey sample. We randomly selected 1,020 establishments that had requested national service personnel in 2014 in the Ashanti, Greater Accra, and Northern regions—three regions that together account for over 60% of national service postings.[4]

We invited up to 10 national service personnel at each establishment to complete a 45-minute survey administered by trained enumerators.[5] The resulting National Service and Beyond (NSB) Survey covers a sample of 2,036 tertiary graduates interviewed in 454 establishments between October and November 2015, at the beginning of their national service year, which runs from September to July of the following year. Our analysis in this article focuses on the 1,180 bachelor's degree graduates and excludes diploma graduates because differences in

[4]Based on NSS data, each establishment had received between one and 10 national service personnel in 2014, with an average of two per establishment, yielding a target sample of approximately 2,000 respondents if we had perfect response rates and if the numbers of National Service persons (NSPs) posted to selected establishments remained constant.

[5]The nature of the survey was identified to respondents beforehand through this description in the consent form: "The project will study tertiary graduates who are beginning their National Service this year. The goal is to collect information on the education, training, and work experience of young adults in Ghana in order to understand the employment issues facing today's youth. We are asking you to take part in this study because you are a tertiary graduate and we would greatly appreciate you completing the survey questions."

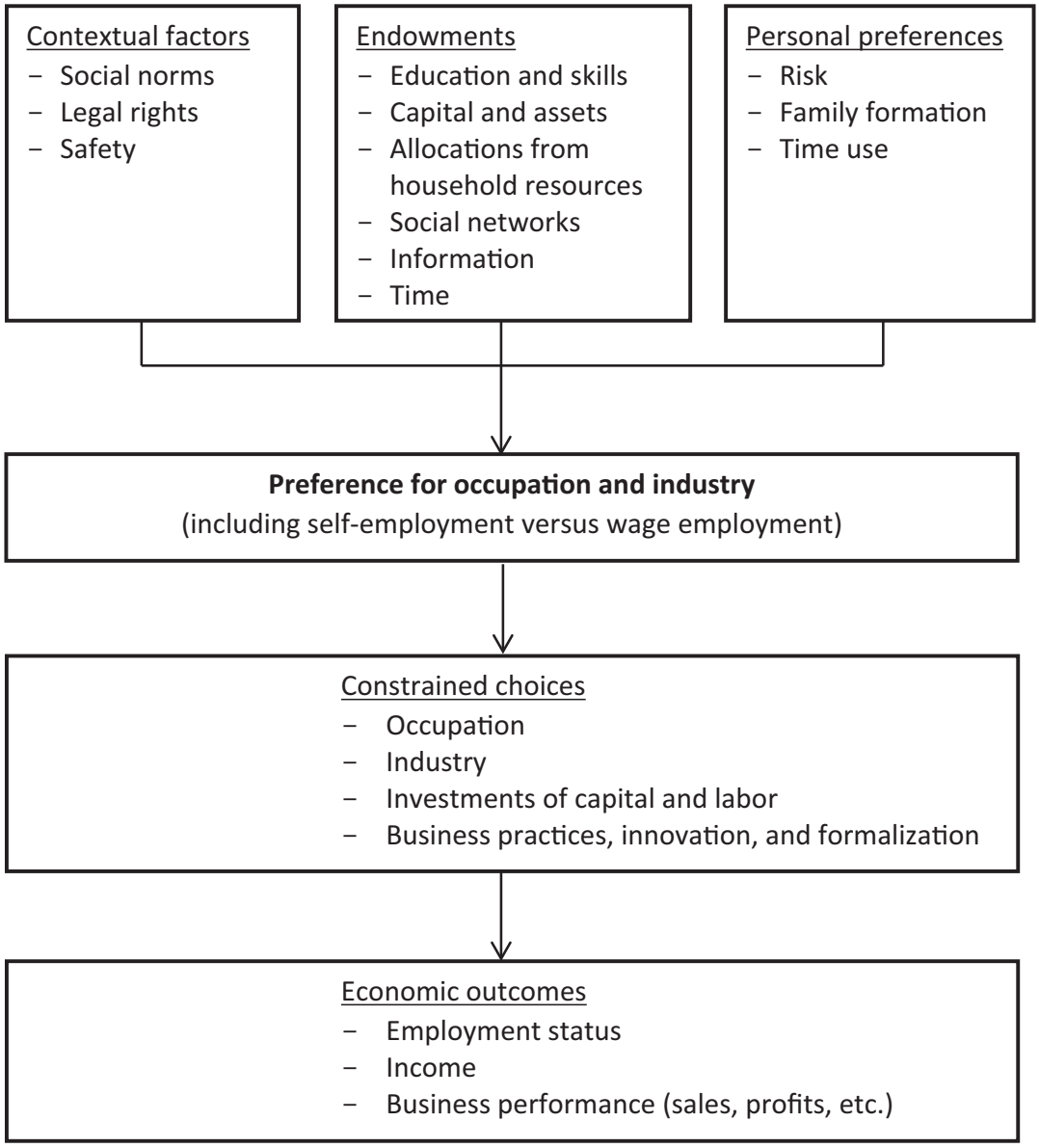

FIGURE 1 Conceptual framework for analysing gender differences in economic outcomes
Notes: Adapted from Campos and Gassier (2017), Chakravarty et al. (2017), Cortes and Pan (2018), and World Bank (2019). Bold text indicates the focus of this study.

diploma and degree receipt complicate the interpretation of our results for the pooled sample (see Ajayi & Anyidoho, 2017, for analysis using data from the full sample).

The final sample is biased towards establishments that could be located based on their name and contact information recorded in the administrative data and those that received personnel in 2015 (if the establishment had no NSPs in 2015 or could not be contacted, we supplemented the sample with additional establishments discovered during the fieldwork). At the individual level, the sample is biased towards individuals who were present on the day of the survey and those who agreed to participate.

We have incomplete documentation of individual-level response rates but comparison of the survey sample to the universe of NSPs in the previous year using administrative data suggests that female respondents and public institutions are over-represented: 43% of respondents in the NSB Survey are female, but administrative data from 2010 to 2014 indicate that 34% to 37% of national service personnel were female. Additionally, 92% of respondents in our survey were posted to public institutions, whereas 81% of NSPs were posted to public institutions in 2014. Private establishments were less likely to request NSPs in consecutive years, while public institutions were more likely to consistently receive personnel. Private establishments also tended to be smaller and more difficult to locate. We control for respondents' type of national service institution in our regression analysis to reduce any potential bias introduced by the sample selection.

The NSB Survey elicited responses about job preferences and expectations. To provide a comprehensive assessment of skills, the survey measured grit using the eight-item grit scale (Duckworth & Quinn, 2009), self-esteem using the Rosenberg self-esteem index (Rosenberg, 1965), and critical reasoning using 12 questions inspired by Raven's matrices (Raven, 1936).[6] Existing work has linked these skills to self-employment outcomes. Wolfe and Patel (2016) find that a three-item measure of grit is positively correlated with the likelihood of self-employment, especially for females, risk-takers, and younger individuals in a cross-country study using data from nine developing countries, including Ghana. Levine and Rubinstein (2017), using data from the National Longitudinal Study of Youth, find that "incorporated self-employed workers" (that is, business owners who had incorporated their businesses and could be considered more "entrepreneurial") had higher levels of self-esteem measured as teenagers than the teenage self-esteem levels of unincorporated self-employed workers and salaried workers. Unincorporated self-employed workers had the lowest levels of self-esteem, suggesting that self-esteem is related to employment outcomes in adulthood and may be a discriminating factor among different types of self-employed workers. LaFave and Thomas (2017), analysing longitudinal data on a sample of men from the Work and Iron Status Evaluation in Indonesia, find that individuals who work only in the self-employed sector have lower Raven's scores than those who work in the wage sector only or in both sectors. Moreover, Raven's scores are positively associated with earnings in both sectors. We therefore include these three skills in our analysis to examine the extent to which they predict self-employment preferences and mediate any gender differences.

We standardize self-reported grades on the nationwide Secondary School Certification Exam (SSCE) maths and English exams to construct a measure of exam performance. All students completing the national secondary school curriculum in Ghana must take the SSCE. It is the final standardized assessment students take in their academic careers and the basis of admission to a tertiary institution. SSCE scores provide a constructive indicator of educational background of university students since the West African Examination Council uniformly grades the exam, enabling a direct comparison of students across schools.

We analyse gender and other sub-group differences using *t*-tests for statistical significance of differences in means. We then estimate multinomial logit regressions to analyse what factors predict employment preferences.

5 | WHO WANTS TO BE SELF-EMPLOYED?

Most graduates prefer to be employed by someone else, as indicated by their response to the question: "If you were to start work after completing National Service, what type of employer would you want to work for?" Of respondents in our survey, 14% would prefer to be self-employed (i.e., to work for themselves). We begin our analysis by characterizing how people who prefer self-employment differ from those who do not, as an initial exploration into whether this group substantially differs from other university graduates. Table 1 presents differences in the individual characteristics of graduates with and without a self-employment preference. The rows report the mean for graduates who prefer to be self-employed (column 1), the mean for those who prefer to be

[6]We present the full set of measures in the Appendix and discuss evidence on their cross-cultural applicability.

TABLE 1 Self-employment preferences

	Preferred employer		
	Self	Other	Difference
	(1)	(2)	(3)
A: Socio-emotional and cognitive skills			
Grit score	3.847	3.827	0.020
			[0.047]
Self-esteem score	3.336	3.310	0.027
			[0.030]
Raven standardized score	0.168	0.155	0.014
			[0.082]
SSCE standardized score	0.529	0.381	0.148
			[0.073]**
Tertiary field of study = STEM	0.265	0.201	0.064
			[0.034]*
Tertiary field of study = Business	0.206	0.304	−0.098
			[0.038]***
B: Financial background			
Have a bank account	0.959	0.948	0.011
			[0.018]
Have stocks or bonds	0.253	0.181	0.072
			[0.033]**
Have insurance policies	0.382	0.422	−0.039
			[0.041]
Saved money in last year	0.588	0.615	−0.027
			[0.040]
Borrowed money in last year	0.159	0.168	−0.009
			[0.031]
Used mobile phone finance in last year	0.888	0.850	0.039
			[0.029]
C: Demographic characteristics			
Male	0.676	0.595	0.081
			[0.040]**
Age	24.576	25.011	−0.434
			[0.244]*
Marital status - single	0.982	0.931	0.052
			[0.020]***
Have biological children	0.029	0.063	−0.034
			[0.019]*
Family member in political office	0.082	0.081	0.001
			[0.023]

(Continues)

TABLE 1 (Continued)

	Preferred employer		
	Self	Other	Difference
	(1)	(2)	(3)
Father ever owned a business	0.524	0.531	−0.007 [0.041]
Father ever worked for government	0.518	0.537	−0.019 [0.041]
Mother ever owned a business	0.759	0.739	0.020 [0.036]
Mother ever worked for government	0.247	0.267	−0.020 [0.037]

Notes: We censor earnings at the 99th percentile response of 5,000 Ghanaian cedi (GHS) per month for minimum earnings and GHS10,000 per month for expected earnings, to lessen the impact of outliers (USD1,282.05 and USD2,564.10 respectively at the prevailing exchange rate of GHC3.9 to USD1 at the time of the survey in 2015). Standard errors reported in square brackets. Statistical significance levels: ***p < 0.01, **p < 0.05, *p < 0.1.

Source: authors, based on NSB Survey.

employed by someone else (column 2), the difference in means between the two groups, and standard errors from a *t*-test of this difference (column 3).

First, we examine differences in socio-emotional skills, cognitive skills, and educational backgrounds, in line with literature that suggests differences along these dimensions between people with the capacity or potential to create employment for themselves and those who lack it. We find no significant differences in grit, self-esteem, or Raven's scores. However, graduates who prefer self-employment have stronger educational backgrounds, with higher self-reported SSCE grades. Specializing in science, technology, engineering, or mathematics (STEM) is positively associated with self-employment preference, while the opposite is true for specializing in business.

This finding could reflect the fact that business majors specialize in a range of areas, including accounting and human resource management, that would correspond with a preference for work in the public sector (as indeed, 45% of business graduates in our sample indicated) or as employees in the private sector (as indicated by 35% of business graduates). This finding on business students coincides with results from a study in Nigeria, where only 12% of the random sample of final year graduates of business, management, and economics programmes aspired to own a business after graduation (Akpomi, 2008). On the other hand, STEM programmes, including engineering and computer science, are sites of innovation, especially in an age of technology, which may translate into an ability or the confidence to set up a business.

Second, we examine financial background since preferences for self-employment may depend on access to financial services and attitudes towards risk. Graduates who prefer self-employment are significantly more likely to have stocks or bonds, but we find no statistically significant differences in any other indicators of financial background. Stock market participation could reflect risk-taking preferences, which would be consistent with a preference for self-employment.

Finally, we examine personal and family background. Graduates who prefer self-employment are more likely to be male, relatively young, single, and childless. There are no significant differences in the likelihood of having a family member who has held political office, which we anticipated might signal the expectation of receiving preferential treatment from the government, such as securing government contracts or avoiding compliance with government regulations. Graduates who prefer self-employment are not significantly more likely to have a parent who has ever owned a business, despite findings that having self-employed parents predicts the likelihood of

self-employment in other parts of the world (Dunn & Holtz-Eakin, 2000; Hout & Rosen, 2000). Tellingly, the data reflect the broader trend of higher female representation in self-employment in Ghana—almost 75% of respondents have a mother who has owned a business, but under 55% have a father who has done so.

6 | GENDER DIFFERENCES IN PREFERENCE FOR SELF-EMPLOYMENT

We now discuss gender differences in preferences for self-employment. Columns 1 to 3 of Table 2 report survey responses for women and men, along with the difference between the two means for the full sample of university graduates.

For both genders, employment in a government ministry, department, or agency is the most preferred option, with 35% of women and 34% of men reporting this preference. Gender differences emerge with self-employment, with women significantly less likely to prefer self-employment (12% of women compared to 16% of men). Women are also significantly less likely to prefer working in a family business.

Although there are no gender differences in current employment prospects or beliefs about the likelihood of earning an income within six months, female university graduates expect to earn less than their male peers. Both male and female graduates with a self-employment preference expect to earn more than the average graduate, yet the gender gap in expected earnings is larger for graduates with a preference for self-employment.

Gender differences in self-employment preference also show up in graduates' reported intentions. While only 7% of women intend to start their own business after completing national service, 13% of men have this intention. Conversely, more women (about half of those in our sample) plan to start a new job after completing national service compared to 39% of men. These differences are statistically significant.

The literature suggests that one reason for these observed differences is the fact that the transition to work often coincides with marriage and childbearing decisions; 80% of women in Africa give birth by the age of 25 (Chakravarty et al., 2017), the period just around or after graduation. The gendered difference in the intended timing for starting a business may therefore reflect a choice between work and family for some women. It is also possible that women may perceive themselves as needing more experience, skills, and capital to set up a business. This would be consistent with research, mostly from outside the African continent, which suggests that female students feel less prepared than men when it comes to starting their own businesses in the near future (e.g., Jones, 2000). However, as we will later discuss, the finding from our sample that female graduates did not have lower levels of self-esteem or grit casts some doubt on this latter explanation.

Strikingly, only half of the 11% of graduates who intend to start their own business immediately after completing their national service would *prefer* to be self-employed (Figure 2); 16% of people who plan to start their own business would prefer to work for a government institution and 29% would prefer to work for a private Ghanaian institution or an international or multinational company. Altogether, only 5.5% of graduates (7% of males and 3% of females) both prefer to be self-employed *and* intend to start their own business after national service. Thus, it appears that establishing a business can also be a short-term form of employment for some graduates, rather than a preferred employment situation.

Why are there gender differences in preference for self-employment? Specifically, why are women less likely to want to be self-employed? We explore competing explanations in Tables 3 to 6. Each table compares gender differences in the full sample of university graduates (columns 1 to 3) and then within the sub-group of graduates with a preference for self-employment (columns 4 to 6). To begin with, we consider gender differences in socio-emotional skills and educational background. Table 3 shows that there are no significant differences in grit or self-esteem between men and women in the full sample, or among the subsample of graduates who prefer self-employment.[7] One might have expected higher self-esteem to indicate confidence to venture out on one's own, and to therefore explain preferences for self-employment. However, this is not borne out in our findings.

[7]Men typically have higher self-esteem than women (Bleidorn et al., 2016; Kling et al., 1999).

TABLE 2 Gender differences in employment preferences and expectations

	All university graduates (N=1180)			Prefer self-employment (N=170)		
	Female	Male	Difference	Female	Male	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
A: Preferred employer						
Self-employment	0.119	0.161	−0.042 [0.021]**			
Family business	0.000	0.008	−0.008 [0.004]**			
Government (ministries, depts, and agencies)	0.347	0.335	0.012 [0.028]			
Government school	0.050	0.066	−0.016 [0.014]			
Inter/Multinational company	0.220	0.184	0.035 [0.024]			
Large private Ghanaian company	0.192	0.190	0.002 [0.023]			
Non-profit/Charity/NGO	0.034	0.021	0.014 [0.010]			
Private school	0.009	0.020	−0.011 [0.007]			
Small private Ghanaian company	0.030	0.015	0.015 [0.009]*			
B: Employment expectations						
Already have job offer or employment prospect	0.108	0.095	0.013 [0.018]	0.109	0.174	−0.065 [0.059]
Chance of income within six months (out of 10)	6.892	6.800	0.092 [0.134]	7.564	7.452	0.111 [0.374]
Expected monthly earnings in first job (USD)	477.730	523.600	−45.870 [21.353]**	504.895	629.877	−124.982 [68.718]*
Minimum acceptable monthly earnings (USD)	311.975	334.831	−22.856 [11.071]**	341.259	361.427	−20.168 [34.216]
C: Main intentions after NSS						
Start business	0.071	0.128	−0.057 [0.018]***	0.273	0.435	−0.162 [0.079]**
Start new job	0.468	0.392	0.075 [0.029]**	0.327	0.174	0.153 [0.068]**
Continue old job	0.112	0.127	−0.015 [0.019]	0.091	0.035	0.056 [0.037]
Continue school	0.343	0.349	−0.006 [0.028]	0.309	0.357	−0.047 [0.078]
Neither work nor continue school	0.006	0.003	0.004 [0.004]	0.000	0.000	0.000 [0.000]

Notes: Standard errors reported in square brackets. Statistical significance levels: ***p < 0.01, **p < 0.05, *p < 0.1.

Source: authors, based on NSB Survey.

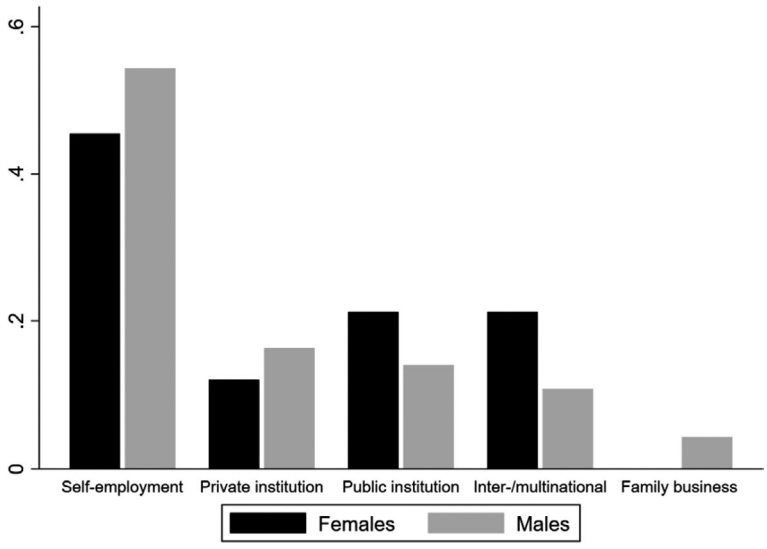

FIGURE 2 Preferred employment sector for graduates who plan to start a new business

On average, women do not perform significantly worse on the Raven's test of non-verbal reasoning, which we take as an indication of general cognitive ability (Raven & Raven, 2003). Yet, women who prefer self-employment have lower Raven's scores than men who prefer self-employment and than women who do not prefer self-employment.

Concerning educational background, the female university graduates in our sample do not report significantly lower SSCE scores than their male counterparts. They are, however, more likely to have studied general arts or home economics in secondary school. Women are also less likely to have specialized in STEM for their tertiary qualification, a field that is associated with a higher probability of having self-employment preferences, as previously discussed. These gender differences in field of study hold for graduates who prefer self-employment.

Next, we examine gender differences in employment backgrounds and explore the possibility that previous work experience (post-secondary school) might affect occupation preferences and expected earnings. As Table 4 indicates, although there are no significant differences in prior self-employment experience within the sample, women are more likely to have worked for a government ministry, department, or agency, and men are more likely to have experience working for the private sector, which could lead to the latter being more comfortable with pursuing self-employment in so far as the private sector is a site for the establishment and growth of enterprises. Among graduates who prefer self-employment, men are more likely than women to have had some employment experience.

We now turn to differences in financial background (Table 5). Previous research finds only modest differences between men and women in access to finances (Campos & Gassier, 2017). Women in our sample are significantly more likely to have a bank account and to have stocks or bonds, which could suggest gender differences in the risk aversion of university graduates. Women are also more likely to have saved in the last year. This female advantage in financial background suggests that female university graduates may be more financially prepared to pursue self-employment, making it even more remarkable that they have a weaker preference for doing so. When we restrict our attention to graduates who prefer self-employment, we find that, across both genders, graduates who prefer self-employment are more likely to have stocks or bonds than those who do not.

Comparing gender differences in family background (Table 6), we find that female graduates were more likely than male graduates to be married with children (columns 1 to 3). However, this pattern is reversed among graduates with preferences for self-employment (columns 4 to 6). None of the women who report preferring self-employment

TABLE 3 Gender differences in socio-emotional skills and educational background

	All university graduates			Prefer self-employment		
	Female	Male	Difference	Female	Male	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
A: Socio-emotional and cognitive skills						
Grit score	3.834	3.828	0.006 [0.034]	3.836	3.852	−0.016 [0.097]
Self-esteem score	3.331	3.302	0.030 [0.021]	3.353	3.329	0.024 [0.062]
Raven standardized score	0.128	0.175	−0.048 [0.059]	−0.001	0.249	−0.250 [0.149]*
B: Secondary education background						
SSCE standardized score	0.389	0.412	−0.024 [0.053]	0.532	0.528	0.003 [0.131]
SHS programme = Agriculture	0.013	0.031	−0.018 [0.009]**	0.000	0.052	−0.052 [0.030]*
SHS programme = Business	0.237	0.303	−0.066 [0.027]**	0.200	0.226	−0.026 [0.068]
SHS programme = General Arts	0.418	0.291	0.128 [0.028]***	0.455	0.226	0.228 [0.073]***
SHS programme = General Science	0.205	0.295	−0.090 [0.026]***	0.255	0.357	−0.102 [0.077]
SHS programme = Home Economics	0.060	0.003	0.058 [0.009]***	0.036	0.000	0.036 [0.018]**
SHS programme = Technical	0.000	0.015	−0.015 [0.006]***	0.000	0.017	−0.017 [0.018]
SHS programme = Visual Arts	0.045	0.043	0.002 [0.012]	0.055	0.104	−0.050 [0.047]
C: Tertiary education background						
Tertiary field of study = STEM	0.147	0.251	−0.105 [0.024]***	0.127	0.330	−0.203 [0.071]***
Tertiary field of study = Business	0.310	0.277	0.034 [0.027]	0.255	0.183	0.072 [0.066]
Tertiary field of study = Other	0.543	0.472	0.071 [0.030]**	0.618	0.487	0.131 [0.082]

Notes: Standard errors reported in square brackets. Statistical significance levels: ***p < 0.01, **p < 0.05, *p < 0.1.

Source: authors, based on NSB Survey.

are married or have children. Thus, the demographic profile of women who prefer self-employment is significantly different from the profile of other female graduates. This result is consistent with the possibility that considerations about family formation differentially constrain the economic choices of men and women.

TABLE 4 Gender differences in work experience

	All university graduates			Prefer self-employment		
	Female	Male	Difference	Female	Male	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
A: Prior work experience						
During tertiary - worked for pay	0.267	0.331	−0.064 [0.027]**	0.345	0.339	0.006 [0.078]
Any employment since secondary	0.343	0.434	−0.092 [0.029]***	0.327	0.470	−0.142 [0.081]*
Typical hours worked per week[a]	38.340	39.958	−1.619 [1.728]	47.778	41.167	6.611 [5.178]
Typical monthly income (USD)[a]	128.105	106.217	21.888 [15.547]	188.034	129.440	58.594 [59.901]
Still working at previous job	0.113	0.132	−0.019 [0.032]	0.222	0.185	0.037 [0.109]
B: Prior employment sector						
Self-employment	0.047	0.056	−0.008 [0.013]	0.036	0.104	−0.068 [0.045]
Government (MDA)	0.045	0.020	0.026 [0.010]**	0.018	0.017	0.001 [0.022]
Government (other)	0.019	0.021	−0.002 [0.008]	0.018	0.009	0.009 [0.018]
Private formal	0.170	0.237	−0.067 [0.024]***	0.200	0.209	−0.009 [0.067]
Private informal	0.047	0.078	−0.031 [0.015]**	0.018	0.078	−0.060 [0.039]
Non-profit	0.011	0.013	−0.002 [0.006]	0.036	0.035	0.002 [0.030]
International company	0.004	0.008	−0.004 [0.005]	0.000	0.017	−0.017 [0.018]
Other	0.000	0.003	−0.003 [0.002]	0.000	0.000	0.000 [0.000]

Notes: [a]These questions were asked only of respondents with prior work experience. Standard errors reported in square brackets. Statistical significance levels: ***p < 0.01, **p < 0.05, *p < 0.1.

Source: authors, based on NSB Survey.

There were no gender differences in the probability of having a political connection in the family. In terms of parental background, female graduates were more likely to have parents who had completed their secondary education and to have a mother who had worked for government, suggesting that they come from better-off families on average. These gender differences in parental background increase among graduates with a preference for self-employment, suggesting a stronger divergence in the socioeconomic backgrounds of men and women who prefer self-employment. Female graduates who would prefer to be self-employed have parents who are even

TABLE 5 Gender differences in financial background

	All university graduates			Prefer self-employment		
	Female	Male	Difference	Female	Male	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
Have a bank account	0.966	0.939	0.027 [0.013]**	0.945	0.965	−0.020 [0.033]
Have stocks or bonds	0.218	0.175	0.043 [0.023]*	0.255	0.252	0.002 [0.072]
Have insurance policies	0.440	0.401	0.039 [0.029]	0.382	0.383	−0.001 [0.080]
Saved money in last year	0.651	0.585	0.066 [0.029]**	0.618	0.574	0.044 [0.081]
Borrowed money in last year	0.149	0.179	−0.030 [0.022]	0.127	0.174	−0.047 [0.060]
Used mobile phone finance in last year	0.836	0.867	−0.031 [0.021]	0.836	0.913	−0.077 [0.052]

Notes: Standard errors reported in square brackets. Statistical significance levels: ***p < 0.01, **p < 0.05, *p < 0.1.

Source: authors, based on NSB Survey.

more highly educated than the parents of the average graduate, and than the parents of male graduates who would prefer to be self-employed. Thus, women with a preference for self-employment appear to come from more privileged backgrounds than men with a preference for self-employment.

7 | MULTIVARIATE ANALYSIS OF EMPLOYMENT PREFERENCES

To assess the role of different background factors in predicting preferences for self-employment, we estimate a set of multinomial logit regression models and report marginal effects (Table 7). This analysis allows us to distinguish between the correlates of alternative employment preferences. We control for the type of national service institution where the respondent was surveyed to address potential sampling bias introduced by the fact that government institutions are over-represented in our sample.

We begin by discussing the predictors of self-employment preferences for all university graduates (column 1). Holding all background factors equal, men have a higher likelihood than women of wanting to be self-employed. Having stocks or bonds (a rough proxy for risk tolerance) also increases the probability of preferring self-employment.

The male coefficient in our multinomial logit regression indicates the average gender difference in preferences for employment type, but there may also be differences in the predictors of employment preferences for men and women. To analyse this possibility, we estimate separate multinomial logit regressions for female and male respondents (we report these results in columns 2 and 3). We exclude marital status and fertility from these models because these variables perfectly predict employment preference since none of the women reporting a preference for self-employment are married or have children.

The gender-specific regressions have higher predictive power than the pooled regression. There are some notable differences between the two sets of estimates—self-employment experience is a significant predictor of self-employment preference for men but not for women. This is also true for having stocks or bonds. Working for

TABLE 6 Gender differences in personal and family background

	All university graduates			Prefer self-employment		
	Female	Male	Difference	Female	Male	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
A: Personal demographics						
Age	24.545	25.209	−0.664 [0.175]***	24.036	24.835	−0.798 [0.312]**
Marital status - single	0.903	0.961	−0.058 [0.014]***	1.000	0.974	0.026 [0.022]
Have biological children	0.080	0.045	0.035 [0.014]**	0.000	0.043	−0.043 [0.028]
Number of children expected	3.274	3.353	−0.080 [0.091]	3.182	3.174	0.008 [0.231]
Family member in political office	0.075	0.085	−0.010 [0.016]	0.109	0.070	0.040 [0.045]
Percent housework done by self	66.647	55.385	11.261 [2.046]***	62.564	54.270	8.294 [5.750]
B: Father's background						
Father ever owned a business	0.526	0.532	−0.006 [0.030]	0.600	0.487	0.113 [0.082]
Father ever worked for government	0.554	0.521	0.033 [0.030]	0.527	0.513	0.014 [0.082]
Father completed primary	0.832	0.825	0.006 [0.023]	0.800	0.774	0.026 [0.068]
Father completed secondary	0.713	0.633	0.081 [0.028]***	0.709	0.626	0.083 [0.078]
Father completed tertiary	0.427	0.380	0.047 [0.029]	0.545	0.330	0.215 [0.079]***
C: Mother's background						
Mother ever owned a business	0.759	0.730	0.028 [0.026]	0.782	0.748	0.034 [0.071]
Mother ever worked for government	0.304	0.239	0.065 [0.026]**	0.364	0.191	0.172 [0.070]**
Mother completed primary	0.806	0.781	0.025 [0.024]	0.764	0.748	0.016 [0.071]
Mother completed secondary	0.543	0.462	0.081 [0.030]***	0.582	0.417	0.164 [0.081]**
Mother completed tertiary	0.155	0.124	0.031 [0.020]	0.182	0.096	0.086 [0.054]

Notes: Standard errors reported in square brackets. Statistical significance levels: ***p < 0.01, **p < 0.05, *p < 0.1.

Source: authors, based on NSB Survey.

TABLE 7 Multinomial logit regressions for predictors of preferring self-employment

	All university graduates	Female university graduates	Male university graduates
	(1)	(2)	(3)
Male	0.040*	-	-
	[0.022]		
Grit score	0.009	−0.003	0.022
	[0.019]	[0.030]	[0.026]
Self-esteem score	0.001	0.012	0.006
	[0.031]	[0.046]	[0.041]
Raven standardized score	−0.010	−0.027*	−0.003
	[0.011]	[0.015]	[0.014]
SSCE standardized score	0.013	0.020	0.009
	[0.015]	[0.022]	[0.021]
Tertiary field of study = STEM	0.017	−0.032	0.043
	[0.023]	[0.045]	[0.029]
During tertiary - worked for pay	0.016	0.064*	−0.005
	[0.023]	[0.035]	[0.030]
Any employment since secondary	−0.003	−0.020	−0.000
	[0.023]	[0.036]	[0.030]
Self-employment experience	0.055	0.046	0.107**
	[0.041]	[5.930]	[0.052]
Have stocks or bonds	0.057**	0.021	0.095***
	[0.024]	[0.035]	[0.032]
Have insurance policies	−0.004	−0.005	−0.009
	[0.021]	[0.031]	[0.028]
Age	−0.002	−0.003	−0.006
	[0.005]	[0.007]	[0.006]
Marital status - single	0.102	-	-
	[0.082]		
Have biological children	0.021	-	-
	[0.066]		
Family member in political office	−0.009	0.057	−0.053
	[0.037]	[0.050]	[0.053]
Father ever owned a business	−0.008	0.021	−0.019
	[0.021]	[0.031]	[0.027]
Father ever worked for government	−0.008	−0.014	−0.002
	[0.021]	[0.032]	[0.028]
Father completed primary	−0.041	−0.016	−0.065*
	[0.028]	[0.044]	[0.037]

(Continues)

TABLE 7 (Continued)

	All university graduates	Female university graduates	Male university graduates
	(1)	(2)	(3)
Mother ever owned a business	0.026	0.041	0.016
	[0.025]	[0.040]	[0.033]
Mother ever worked for government	−0.003	0.055	−0.047
	[0.026]	[0.037]	[0.036]
Mother completed primary	−0.035	−0.064	−0.019
	[0.028]	[0.042]	[0.037]
Pseudo R-squared	0.095	0.135	0.114
Observations	1180	464	716

Notes: Each column reports marginal effects on the probability of choosing self-employment as an option in response to the question "If you were to start work after completing National Service, what type of employer would you want to work for?" All regressions also condition on the type of national service institution where the respondent was working. Standard errors reported in square brackets. Statistical significance levels: ***p < 0.01, **p < 0.05, *p < 0.1.

Source: authors, based on NSB Survey.

pay during one's tertiary studies is a marginally significant predictor of self-employment preference for women but not for men, and Raven's scores are negatively associated with women's preference for self-employment but not with men's. For both genders, age is not a significant predictor of self-employment preference. Altogether, this analysis indicates that the predictors of self-employment preference substantially differ for women and men.

8 | CONCLUSIONS

This article examines preferences for self-employment, an increasingly popular policy proposition for young people in economies with few opportunities for wage employment. We find gender differences in stated preferences for self-employment, with female university graduates being less inclined to work for themselves. Additionally, we find gender differences in the factors that predict employment preferences—marital status and childbearing were the strongest predictors of employment preferences for women, whereas self-employment experience and having stocks or bonds were the strongest predictors for men. These results imply that men and women perceive different constraints when making employment choices. Being married and not having children made it more likely for women to want to be self-employed (implying that marriage and children acted as a constraint) while for men, having self-employment experience and owning stocks and bonds was an opportunity.

There are other possible explanations, outside the scope of our study, for these gender differences in preferences for self-employment, including unobserved personality traits and socio-emotional skills such as risk aversion, optimism, and locus of control. These could have provided more insight into the reasons for the observed gender differences. The study also raises interesting questions about what young people understand by self-employment that could have provided an understanding of the underlying reasons for men and women's stated preferences. Our survey, moreover, did not elicit more specific information about preference for type of self-employment (whether as sole trader or with employees), the type of enterprise (single venture, joint venture, or co-operative), or the preferred industry in which these enterprises would be undertaken. Further, we did not give respondents the option of listing preferences for multiple types of employment since our goal was to capture each respondent's strongest preference. We recognize that this creates a false dichotomy because people could prefer to be simultaneously self-employed and employed by someone else. Despite these limitations, as an entry into an

area that has received little research attention, our study provides fresh insight into the early attitudes that may result in graduates' choices about self-employment.

This study has direct implications for policies on youth employment. Youth policies by African governments historically tend to be based on normative assumptions about the youth rather than on research (Anyidoho et al., 2012). The promotion of self-employment as a response to high and increasing youth underemployment and unemployment is illustrative of policy prescriptions that are taken up without adequate research into young people's present realities and imagined futures. The university graduates in our sample had a low preference for self-employment, suggesting that the policy push for youth self-employment is at odds with the preferences of university graduates for wage employment, as is true for other categories of youth (e.g., Sumberg et al., 2020). Again, a fundamental assumption underlying the policies to promote self-employment is that pursuing these activities is a long-term work option. This assumption also requires closer interrogation as we see in our study that some graduates with a preference for wage employment intend to work for themselves in the short-term. Thus, for some young people, self-employment might only be a stepping-stone to wage employment. Research that maps the path to (and from) self-employment, including the factors that support or constrain young people from translating preferences to actions, would offer important insights for policy-making that better aligns with young people's preferences and choices.

Another limitation of youth policies is the homogenization of "the youth," notably the ways in which the experiences of young women are made invisible by the imagining of youth as male (George, 2014; Waller, 2006). Our article acts as a corrective by presenting a gendered analysis that suggests that the relatively weak labour market outcomes for young female university graduates in Ghana are partly a function of differential preferences that may be rooted in unequal constraints such as gender-specific concerns about family responsibilities. This implies that bridging gendered inequalities in the labour market will require policy interventions that address the expectations that women set for themselves even before they enter the labour market. Effective youth employment policies would also need to integrate interventions related to care arrangements, the organization of work, and other strategies that tackle gender-specific constraints. More broadly, our findings about divergent predictors of youth preferences demonstrate the importance of maintaining an awareness of the diversity in the experience of youthhood in making, framing, and implementing youth-targeted policies.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in Harvard Dataverse at https://doi.org/10.7910/DVN/86FYW5, reference number UNF:6:s8nMsU/iU/wwpVrOTKCgwQ==.

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