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**Employment Security and Workers' Moonlighting Behaviour
in Ghana**

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Employment Security and Workers' Moonlighting Behaviour in Ghana

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Abstract

Purpose - This study sets out to determine the effect of employment security on moonlighting in Ghana as a means to inform policy on enforcing issues of employment security.

Design/methodology/approach – The paper follows the work of Shishko and Rostker (1976) in using the GLSS6 data by applying the ordered logit estimation technique. An employment security index is created using four variables.

Findings - The findings indicated that as a person with a single job becomes more secure with employment, the likelihood of moonlighting is decreased by 0.03 while increasing levels of employment security for people with two and three or more jobs, on the contrary, increases the likelihood of moonlighting by 0.0297 and 0.0008 respectively. This implies that workers can be made to stick to single jobs by providing them with higher levels of employment security but once they take on two or more jobs, providing them with employment security pushes them to even want to moonlight the more.

Originality/value - With current harsh economic conditions in the country and the urgent need for multiple jobs (moonlighting) as a risk coping mechanism, little has been done on the role employment security plays as a catalyst or otherwise. This paper fills the gap by employing a comprehensive index on employment security in the case of Ghana.

JEL Classification: D01, E24, J01, J08, J51

Keywords - moonlighting, employment security, job security, trade union, employment contract, Ghana

Paper type - Research paper

Introduction

Nations in the developing world have been striving for decades to raise the living standards of their populace with fluctuating successes. One cardinal feature of these developing countries has been the high incidences of poverty (Asongu, 2013, 2015a). For instance, Ghana's poverty level is currently pegged at 24.2% (GSS, 2014) which represents an improvement over the previous figure of 28.5% (GSS, 2005). However, that figure is still high. This notwithstanding, the current economic challenges in Ghana in terms of energy crisis coupled with unfavourable prices for crude oil, gold and cocoa on the world market and government's attempt to deal with fiscal deficit challenges has led to a number of job losses in the country. For instance, about 3,000 workers were laid off in the local mining sector in Ghana in 2013 alone as a result of fluctuating Gold prices on the world market (Ghana Chamber of Mines, 2014) not to talk of those that were laid off in other sectors of the economy. The current situation has led to high cost of living which has resulted in the erosion of the real incomes of the populace, coupled with its attendant worsening living conditions. In a bid to have a decent life, most individuals do various kinds of jobs to provide better livelihood not only for themselves but also for their households. The situation of holding two or more jobs at the same time is referred to as moonlighting.

The current situation bears resemblance to the difficult days in the late 1970s and early 1980s when government encouraged Ghanaian workers to take up secondary occupations in agriculture in the operation-feed-yourself program to serve as a coping mechanism against the falling living standards at the time (Baahet *al.*, 2011). In addition, Ghana's economic reforms initiated in 1983 also left scores of changes in the Ghanaian labour market. Major elements of the reforms were restructuring of wages, privatization of state owned enterprises and retrenchment of public sector workforce. Most workers who suffered retrenchment and privatisation sought refuge in other sectors of the economy and had to resort to multiple job holdings to keep them at income levels closer to what existed prior to the reforms, since their earnings in the new primary job were lower than before (Boateng *et al.*, 2013). Available statistics indicate that 30% of Ghanaian workers were engaged in more than one job in 1998/1999, while 18% were engaged in same behavior

in 2005/2006 with 16% of workers engaged in more than one job in 2012/2013 (GSS, 1999; 2006; 2014).

Earlier theoretical and empirical studies on moonlighting were championed by Shishko and Rostker (1976), O'Connell (1979) and Krishnan (1990) to indicate that every rational worker who wants to maximize his/her utility would add on a second or third job if he/she is not satisfied with hours worked on the first job and especially when his/her income is less than the reservation wage. Guariglia and Kim (2004) also looked at the effect of financial constraints on moonlighting and found that workers who experience financial constraints are more likely to engage in multiple job holding in order to smoothen their consumption levels and improve their living standards. Regarding moonlighting studies in Ghana, Baah (2005) examined the relationship between unionism and the incidence of second job-holding. Other studies conducted by Boateng *et al* (2013), showed that personal and household characteristics as well as location and labour market characteristics such as individual earnings and hours spent in the main job significantly influenced an individual's desire to engage in more than one job. Apart from these studies, other studies have been done on moonlighting in Ghana (Owusu, 2001, and 2005; Maxwell *et al.*, 2000).

Considering the extant literature, it can be seen that they have largely looked at moonlighting by emphasizing more on time constraint and roping in other factors such as financial constraints and trade unionism and even the issue of savings. What is seemingly lacking is the issue of employment security which has since been considered as a push factor that drives people to take up second or more jobs. One of such assertions is that of Renna and Oaxaca (2006) who posited that people may take multiple jobs as an insurance against job insecurity. Once the possible effect of employment security has been established, this study sets out to determine the effect of employment security on moonlighting decision and to also update the literature on moonlighting in Ghana using the sixth round of the Ghana Living Standards Survey (2012/2013). The contribution of this paper analyze the various factors that influence moonlighting by adding on a composite measure of employment security which encompasses indicators such as sector

of employment (public), ownership of social security insurance package, existence of trade union and employment contract. The rest of the paper is organized as thus; the next section considers the operationalization of employment security, followed by the empirical literature. Section 4 discusses the methodology while section 5 presents the analysis and discussion of results. The last section concludes and provides recommendation.

Employment Security

Employment security is defined by the ILO as protection against loss of income-earning work. For salary and wage employment, surety can be seen as existing when there is a strong protection against unfair or arbitrary dismissal and where workers can redress unfair dismissal at the organization or country level. Enhancing employment security emphasizes protection against arbitrary dismissal, regulations on hiring and firing and imposition of costs on employers for failing to adhere to rules. For those who are self-employed, employment security deals with insulation against unexpected loss of independent work or business failure (WWR, 2007). Employment security is often used synonymously with job security but they are not entirely the same. Whereas employment security refers to the opportunity of a worker to continue working in an enterprise, job security refers to the worker's ability to pursue a line of work in conjunction with his or her interests, training and skills. In this paper, these terms are used interchangeably but the employment security index generated for the analysis solely uses indicators for employment security. According to Renna and Oaxaca (2006), people may also take multiple jobs as insurance against job insecurity while Asongu (2015b) also posited that high savings of savings indicate employment security.

Empirical Literature

Renna (2002) studied the impact of hour regulation in the prime job on the decision to moonlight, using data provided by Luxembourg Employment Survey (LES) for eight OECD countries and found that externally-imposed regulation on working time could lead some workers into a situation of underemployment which was expected to be responsible for moonlighting. Theisen (2006) examined the determinants of participation in informal production in Tanzania and saw that a vast majority of individuals have a

desire for working longer hours in their main job and they supplement earnings through participation in informal production. Besides, Alden and Saha (1980) found that multiple jobholding is closely related both to the 'needs' of those in the lowest income brackets and to the 'aspirations' of those at the highest income levels. Bell et al. (1997) also investigated if moonlighting acts as a "hedge" against unemployment, but little evidence was found to support this motive.

Using data from Florida Consumer Surveys, Abdukadir (1992) established that the presence of a financial constraint (current spending needs) increases the probability of moonlighting. He pointed out that workers employed permanently in a public sector job were more likely to moonlight, as their main job could allow them to find second jobs. Abdukadir (1992) further concluded that age, education and family size played significant roles in determining the decision to moonlight, while family income and marriage play less significant roles in determining the decision to moonlight.

Averett (2001) found that the factors that influence the decision to moonlight are similar for men and women. On the contrary, Krishnan (1990) investigated whether a husband's decision to moonlight was a result of a wife's decision to participate in the labour market and found a negative correlation between husband's decision to moonlight and wife's decision to work. Krishnan concluded that the husband's decision to hold a second job act as a substitute for the wife's work and also found that average family size and annual income of moonlighters, whose wives did not participate in the labour market, were higher than those moonlighters whose wives decided to work. Tansel (1995) studied the characteristics of urban male wage earners and their probability of Moonlighting in Turkey and found that the probability of moonlighting among urban male employed persons increases with education, low earnings in primary work, low income of other family members, larger land holdings, having a non-working wife and experience.

Methodology

The quantitative specification and estimation procedure involves the formulation and estimation of a model of moonlighting that links multiple jobholding with independent

variables that describe the worker's personal, location and labour market characteristics. The dependent variable is whether or not the individual worker is engaged in more than one job. It is measured in an ordered form and takes a value of 1 if the individual holds 1 job, 2 if the individual holds 2 jobs and 3 if the individual holds three or more jobs. The model is generally specified as:

$$Y = X'\beta + \varepsilon$$

Where Y is a vector of values representing the dependent variable; X is a vector of explanatory variables that affect the individual's decision to moonlight; β is a vector of parameters of the control variables and ε is the standard vector representing the stochastic error term.

Given the ordered nature of the dependent variable, we employed the Ordered Logit regression estimation technique to explore how each of the explanatory variables influences the probability of a worker engaging in moonlighting.

Estimation of the Logit Model

$$\Pr(y_i = j / X_i) = \begin{cases} F(\delta_i - X_i'\beta) & j = 1 \\ F(\delta_j - X_i'\beta) - F(\delta_{j-1} - X_i'\beta) & 1 < j \leq j-1 \\ 1 - F(\delta_{j-1} - X_i'\beta) & j = J \end{cases}$$

To estimate the equation, we need, apart from X_i , the values of the regressand, or logit, L_i . This depends on the type of data available for analysis. We distinguish two types of data: (1) data at the individual, or micro level, and (2) grouped or replicated data. This study uses data at the individual/household/micro level in which case OLS estimation of the equation above is infeasible.

Econometric Model

The econometric model specification is presented below:

$$\Pr(y = j / X_i) = \beta_0 + \beta_1 \text{Lincpry}_i + \beta_2 \text{Empsec}_i + \beta_3 \text{Age}_i + \beta_4 \text{Age}^2 + \beta_5 \text{Dep}_i + \beta_6 \text{Urb} + \beta_7 \text{Yrswrkpry}_i + \beta_8 \text{Male}_i + \beta_9 \text{Maleypry}_i + \beta_{10} \text{Married}_i + \beta_{11} \text{Hrswrk}_i + \beta_{12} \text{Edu}_i + \beta_{13} \text{Reg}_i + \varepsilon_i$$

Where; $j=1, \dots, 3$

Lincpry = Log of income from primary/main job

| | |
|------------------|--|
| Empsec | = Employment Security |
| Age | = Age of worker in years |
| Age ² | = Age square |
| Dependents | = Number of Dependents on the worker |
| Urban | = Worker located in the urban area |
| Yrswrk | = Years of working on primary/main job |
| Male | = Male worker |
| Maleexp | = Male worker and the number of years of working on primary/main job |
| Married | = Married worker |
| Lexp | = Log of worker's household expenditure |
| Hrswrk | = Hours spent on primary/main job |
| Edu | = Educational level of worker |
| Reg | = Regional dummies |

The dependent variable is the probability of engaging in one, two or three or more jobs. The explanatory variables are dependency, log of income, urban (dummy), male (dummy), age, age squared, education, hours worked on main job, work experience measured in years, belonging to a trade union, having social security and public sector (dummy).

Dependency is captured as a continuous variable to analyze the effect of dependency on one's decision to moonlight. Monthly earnings in the main job (in nominal terms) is measured in logs. This is to examine whether financial constraints also serve as a reason for moonlighting. Urban represents a vector of residential dummies categorised into urban and rural, with rural as the reference dummy. Monk and Hodge (1995) argued that the rural labour market structure differs from that of urban structures in terms of wage levels, transportation systems and the propensity for part-time work. Sex of the worker captures female-male differences regarding moonlighting decision and enters the model as male dummy with a value of 1 assigned for male workers and 0 for female workers. Age is measured in years and meant to capture the influence of one's age on the decision to moonlight while the age squared is introduced to capture the convexity or concavity in

respect of the relationship between age and multiple job-holding. The effect of the worker's educational status is introduced into the model in the form of a set of four categorical variables, that is, no education (reference dummy), junior high education, secondary education, teacher/nursing training and university education. Hours worked is a continuous variable, which is measured as the number of hours spent on the main job. The hours of work in the main job in the model captures the relevance of "hours-constraint" effect of moonlighting in Ghana. A higher probability for engaging in moonlighting in response to a decline in working hours could be used to measure time-related underemployment reflecting willingness and availability to work additional hours if the person had worked for less than the normal duration during the period. Work experience is a continuous variable, which is measured as the number of years a worker has been in the main job.

Data Source

The main data source for this analysis is the sixth round of the Ghana Living Standards Survey (GLSS 6) conducted in 2012/2013. This is a nationally representative household survey. The survey collected detailed information on demographic characteristics of the population, education, health, employment and time use, migration, housing conditions, household agriculture and household income and expenditure patterns to evaluate the poverty status of households. The GLSS 6 is the recent survey conducted by the GSS. The data collection instruments and methodology were based on the fifth round with slight modifications. The survey covered a nationally representative sample of 18,000 households in 1,200 enumeration areas. Of the 18,000 households, 16,772 were successfully enumerated leading to a response rate of 93.2 percent. A two-stage stratified sampling design was adopted. At the first stage, 1,200 enumeration areas (EAs) were selected to form the Primary Sampling Units (PSUs). The PSUs were allocated into the 10 regions using probability proportional to population size. The EAs were further divided into urban and rural localities of residence. A complete listing of households in the selected PSUs was undertaken to form the secondary sampling units (SSUs). At the second stage, 15 households from each PSU were selected systematically.

Employment Security Index

The employment security index was generated based on ILO's definition of employment security which considers conditions that insulate a worker against loss of income-earning work. Based on this, variables such as sector (public) of employment, ownership of social security insurance package, existence of trade union and employment contract were used in generating an additive index for employment security. The intuition behind the additive approach was because employment security indicators were all dummies and generating a principal component index would have had flaws emanating from the nonexistent weighting mechanism across indicators. Adding the indicators resulted in the index having a minimum score of zero (worker has no score for any of the indicators) and a maximum score of four (worker who has score for all indicators).

Results and Discussion

The presentation and discussion of results is done by first explaining the underlying post-estimation tests that were carried out. First, the Brant test of χ^2 (df =14) = 8.56, with a p-value=0.858, which is not significant indicates that the parallel lines assumption has not been violated. Again the link test with $\hat{P}>|z| = 0.016$ and $\hat{P}>|z| = 0.579$ also indicates that the null hypotheses of correct specification of the model has not been rejected. Once these two robust checks have been cleared, we continue with our presentation of results.

Table 1 displays the results for the marginal effect of employment security on moonlighting in addition to other covariates such as wage, age and the square of it, dependents, location and others. It can be seen that employment security negatively influences moonlighting for those with single jobs but positively influences moonlighting for those with two jobs and those with three or more jobs. Specifically, as a person with a single job becomes more secure with employment, the likelihood of moonlighting is decreased by 0.03 while increasing levels of employment security for people with two and three or more jobs, on the contrary, increases the likelihood of moonlighting by 0.0297 and 0.0008 respectively. This implies that workers can be made to stick to single jobs by their being provided with higher levels of employment security. However, once

they take on two and three or more jobs, providing them with employment security pushes them to even moonlight the more. This study confirms the findings of Zangelidis (2014) for people with single jobs and their having to moonlight less with increasing levels of employment security but when it comes to those with two and three or more jobs, the findings differ. On the contrary, the situation of employment security motivating employees to moonlight the more when they have two or three or more jobs is supported by the works of Abdukadir (1992) because being employed permanently is an indicator of employment security which also grants employees the flexibility to find second jobs.

Again, there is a significant positive and negative effects of earnings in the worker's main job on the probability of moonlighting. With a single job, the probability of moonlighting is increased by 0.013 with increases in incomes from main job while with two and three or more jobs, the probability of moonlighting is decreased by 0.012 and 0.0003 respectively. This is an indication of the evidence that financial motivation plays an important role in moonlighting decision of workers. Once workers with single jobs earn less on their main jobs, they are encouraged to moonlight to make more income but for those with two and three or more jobs, higher incomes reduces their likelihood to moonlight as they would be comfortable with the number of jobs they might have been engaged in. This, on a whole, indicates that workers with jobs that pay less are more likely to moonlight. This observation duly confirms the works of Allen (1998), and Krishnan (1990), who all found primary job earnings to negatively impact on the probability of moonlighting. This also corroborates studies conducted by Boateng *et al.*, (2013).

Age also significantly affects moonlighting decisions. With people with single jobs, age initially reduces the likelihood of moonlighting while it has a decreasing effect in the future. On the other hand, people with two and three or more jobs are more likely to moonlight as they grow but at very extreme ages, they reduce their likelihood of moonlighting. For people with single jobs, initial conditions do not support Abdukadir (1992) but latter conditions do while the situation is the other way around for those with two and three or more jobs.

Workers with single jobs who reside in the urban areas are more likely to moonlight than their counterparts in the rural areas. This is likely so because there are more job opportunities in the urban areas than in the rural areas, hence those who wish to add more jobs to existing ones are likely to find one. As in the case of the income effect, higher levels of expenditure are associated with lower probabilities of moonlighting but for those with two and three or more jobs, higher levels of expenditure are associated with higher likelihoods of moonlighting. Once people have more expenditure obligations and have two or more jobs, they are motivated to add more so as to mitigate the difficulties they go through at home.

Males with single jobs are 5.6 percent more likely to moonlight than their female counterparts. For males with two and three or more jobs, they are 5.5 percent and 0.1 percent, respectively, less likely to moonlight side by side their female counterparts with similar number of jobs. While the single job situation supports the findings of Tinsel (1995), the two and three or more jobs situation does not support it. The results also show a significant and negative relationship between hours worked in main job and moonlighting, across all levels. The results generally confirm the ‘hours constraint’ motive of moonlighting. This indicates that working less hours in the main job increases the probability of engaging in more than one job and vice versa. This observation is confirmed by a number of studies including Shishko and Rostker (1976); Paxson and Sicherman (1996); Baah *et al.*, (2011) and Boateng *et al.*, (2013), who all found primary job hours as negatively impacting on moonlighting probabilities.

The educational level of a worker has a significant relationship with moonlighting decisions. It can be seen from Table 1 that compared to workers with no education, workers with higher levels of education are associated with higher probabilities of moonlighting and this is evident in the magnitude of the marginal effects across higher levels of education for workers with single jobs. For Workers with two and three or more jobs, higher levels of education are related with lower likelihoods of moonlighting. Besides, the increasing likelihood of moonlighting for workers with single jobs is

supported by the works of Abdukadir (1992) and Tansel (1995) while it does not corroborate these same studies for workers with two and three and more jobs.

Table 1: Ordered Logit Regression Model for Effect of Employment Security on Moonlighting

| Moonlighting (Number of Jobs) | Marginal Effect (1 Job) | Marginal Effect (2 Jobs) | Marginal Effect (2 or more jobs) |
|--|--------------------------------|---------------------------------|---|
| Log (wage from main job) | 0.0131*** (0.007) | -0.0128*** (0.007) | -0.0003** (0.027) |
| Employment security | -0.0305*** (0.000) | 0.0297*** (0.000) | 0.0008*** (0.001) |
| Age | -0.0079*** (0.012) | 0.0077*** (0.012) | 0.0002*** (0.033) |
| Age square | 0.0008** (0.018) | -0.0008** (0.018) | -0.0002** (0.042) |
| Dependents | -0.0035 (0.253) | 0.0035 (0.253) | 0.0001 (0.270) |
| Urban (Location) | 0.0965*** (0.000) | -0.0939*** (0.000) | -0.0026*** (0.001) |
| Experience (years of working) | -0.0022* (0.055) | 0.0022* (0.055) | 0.0005* (0.090) |
| Male (sex) | -0.0567*** (0.000) | 0.0553*** (0.000) | 0.0014*** (0.004) |
| MaleXexperience | 0.0027** (0.029) | -0.0027** (0.029) | -0.0006* (0.062) |
| Married | -0.0044 (0.712) | 0.0043 (0.712) | 0.0001 (0.714) |
| Log (Expenditure) | -0.0298*** (0.000) | 0.0290*** (0.000) | 0.0008** (0.013) |
| Hours of work (main job) | 0.0010*** (0.000) | -0.0010*** (0.000) | -0.0002*** (0.009) |
| Educational level (base=no education) | | | |
| BECE/MSLC | 0.0322** (0.016) | -0.0314** (0.016) | -0.0008** (0.045) |
| Secondary/Voc/Teacher training | 0.0545*** (0.000) | -0.0531*** (0.000) | -0.0014*** (0.006) |
| Tertiary | 0.0644*** | -0.0628*** | -0.0016*** |

| | | | |
|------------------------------|-----------------------|-----------------------|-----------------------|
| | (0.000) | (0.000) | (0.002) |
| Region (base=Western) | | | |
| Central | 0.0240 (0.191) | -0.0234 (0.191) | -0.0006 (0.218) |
| Greater Accra | 0.0957*** (0.000) | -0.0933*** (0.000) | -0.0024*** (0.001) |
| Volta | -0.0818*** (0.007) | 0.0796*** (0.007) | 0.0023** (0.029) |
| Eastern | -0.0978*** (0.001) | 0.0951*** (0.001) | 0.0027*** (0.014) |
| Ashanti | -0.0162 (0.400) | 0.0158 (0.400) | 0.0004 (0.414) |
| BrongAhafo | -0.1615*** (0.000) | 0.1566*** (0.000) | 0.0049** (0.010) |
| Northern | 0.0330 (0.206) | -0.0322 (0.206) | -0.0008 (0.222) |
| Upper East | -0.0428 (0.192) | 0.0416 (0.192) | 0.0011 (0.239) |
| Upper West | -0.0544 (0.128) | 0.0530 (0.127) | 0.0015 (0.183) |

Brant test χ^2 (df=14) = 8.56 $p > \chi^2 = 0.858$
Number of Obs. = 2965
Pseudo R^2 = 0.1779
Linktest $\hat{P} > |z| = 0.016$ $\hat{P} > |z| = 0.579$
P-values in parenthesis

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' computation using GLSS6 data

Summary and Conclusion

Multiple job holding is an important labour market issue in Ghana. The sixth round of the GLSS (2012/2013) data shows that about 16 percent of the Ghanaian workforce are engaged in more than one job. This is generally high compared to developed countries such as the United Kingdom, the United States, and Russia and emerging economies such as Brazil. A number of factors have been empirically identified to influence moonlighting in Ghana; key amongst these are the number of working hours, earnings and type of employment in the main job but that of employment security has been seemingly left out.

This study employed a composite derivation of an employment security index by combining four indicators of employment security.

The findings showed that employment security negatively influences moonlighting for those with single jobs but positively influences moonlighting for those with two jobs and those with three or more jobs. This implies that making people with single jobs more employment-secured is likely to reduce their tendency to moonlight while on the reverse, showed that increasing levels of employment security, for those with two and three or more jobs is likely to increase their propensity to moonlight. This implies that workers can be made to stick to single jobs by providing them with higher levels of employment security but once they take on two and three or more jobs, providing them with employment security pushes them to even moonlight the more. Moreover, the analysis showed that workers who spend less hours on their main job are more likely to engage in multiple jobs. In addition, workers who earn less income are more likely to moonlight. Workers who have employment security are less likely to engage in multiple job holding. Furthermore, workers who belong to a trade union are also less likely to engage in moonlighting.

We thus recommend that any institution that wishes to promote singular job holdings must provide mechanisms that promote more employment security for those who already have single jobs. The reason is that if employees move on to add one or two jobs to their existing jobs, it will be difficult to make them go back to singular jobs regardless of the levels of employment security that is given to them. Similarly, policies aimed at promoting singular job holdings should also target increasing wages for main/primary jobs. This is because increasing wages to realistic levels for primary jobs has been found to reduce the tendency of moonlighting for people with two and three or more jobs.

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Appendices

Appendix A: Summary Statistics Variables used in the regression model

| Variable | Observation | Mean | Std. Dev. | Minimum | Maximum |
|-------------------------------|--------------------|-------------|----------------------|----------------|----------------|
| Moonlighting (Number of jobs) | 2965 | 1.1531 | 0.3730 | 1 | 3 |
| Log (wage from main job) | 2965 | 5.3790 | 1.4042 | 0 | 9.9988 |
| Employment security | 2965 | 1.8651 | 1.3395 | 0 | 4 |
| Age | 2965 | 38.5791 | 11.5073 | 15 | 89 |
| Age square | 2965 | 1620.72 | 990.07 | 225 | 7921 |
| Dependents | 2965 | 1.5538 | 1.6345 | 0 | 11 |
| Urban (Location) | 2965 | 0.7245 | 0.4469 | 0 | 1 |
| Experience (years of working) | 2965 | 9.1973 | 8.7748 | 0 | 85 |
| Male (sex) | 2965 | 0.8499 | 0.3572 | 0 | 1 |
| MaleXexperience | 2965 | 7.8513 | 8.4815 | 0 | 85 |
| Married | 2965 | 0.5717 | 0.4949 | 0 | 1 |
| Log (Expenditure) | 2965 | 9.0249 | 0.7307 | 6.2254 | 11.6673 |
| Hours of work (main job) | 2965 | 48.6236 | 19.8921 | 0 | 120 |
| Educational Level | | | | | |
| BECE/MSLC | 2965 | 0.3818 | 0.4859 | 0 | 1 |
| Secondary~r | 2965 | 0.2793 | 0.4487 | 0 | 1 |
| Tertiary | 2965 | 0.1912 | 0.3933 | 0 | 1 |
| Region | | | | | |
| Central | 2965 | 0.0766 | 0.2659 | 0 | 1 |
| Greater Accra | 2965 | 0.2843 | 0.4512 | 0 | 1 |
| Volta | 2965 | 0.0702 | 0.2554 | 0 | 1 |
| Eastern | 2965 | 0.1123 | 0.3158 | 0 | 1 |
| Ashanti | 2965 | 0.1656 | 0.3718 | 0 | 1 |
| BrongAhafo | 2965 | 0.0594 | 0.2363 | 0 | 1 |
| Northern | 2965 | 0.0236 | 0.1519 | 0 | 1 |
| Upper East | 2965 | 0.0391 | 0.1939 | 0 | 1 |
| Upper West | 2965 | 0.0371 | 0.1890 | 0 | 1 |

Source: Authors' computation using GLSS6 data

Appendix B: Ordered Logit Regression for

| Moonlighting (Number of Jobs) | Coef. | Robust Std. Err. | z | P>z | [95% Conf. Interval] | |
|--|--------------|-------------------------|----------|---------------|-----------------------------|--|
| Log (wage from main job) | -0.1576 | 0.0584 | -2.7 | 0.007 | -0.2721 -0.0431 | |
| Employment security | 0.3669 | 0.0569 | 6.45 | 0.000 | 0.2554 0.478412 | |
| Age | 0.0953 | 0.0380 | 2.51 | 0.012 | 0.0208 0.169695 | |
| Age square | -0.0010 | 0.0004 | -2.34 | 0.019 | -0.0018 -0.00016 | |
| Dependents | 0.0426 | 0.0374 | 1.14 | 0.254 | -0.0307 0.115856 | |
| Urban (Location) | -0.9625 | 0.1253 | -7.68 | 0.000 | -1.2081 -0.71683 | |
| Experience (years of working) | 0.0269 | 0.0141 | 1.92 | 0.055 | -0.0006 0.05448 | |
| Male (sex) | 0.8626 | 0.2560 | 3.37 | 0.001 | 0.3608 1.364404 | |
| MaleXexperience | -0.0328 | 0.0150 | -2.19 | 0.029 | -0.0621 -0.00339 | |
| Married | 0.0534 | 0.1454 | 0.37 | 0.714 | -0.2316 0.338295 | |
| Log (Expenditure) | 0.3580 | 0.0975 | 3.67 | 0.000 | 0.1668 0.549122 | |
| Hours of work (main job) | -0.0124 | 0.0032 | -3.83 | 0.000 | -0.0187 -0.00603 | |
| Educational level (base=no education) | | | | | | |
| BECE/MSLC | -0.4018 | 0.1718 | -2.34 | 0.019 | -0.7385 -0.06499 | |
| Secondary/Voc/Teacher training | -0.7410 | 0.2042 | -3.63 | 0.000 | -1.1413 -0.34069 | |
| Tertiary | -0.9743 | 0.2347 | -4.15 | 0.000 | -1.4344 -0.51426 | |
| Region (base=Western) | | | | | | |
| Central | -0.3230 | 0.2780 | -1.16 | 0.245 | -0.8679 0.221845 | |
| Greater Accra | -1.4165 | 0.2700 | -5.25 | 0.000 | -1.9457 -0.88731 | |
| Volta | 0.7560 | 0.2216 | 3.41 | 0.001 | 0.3217 1.190246 | |
| Eastern | 0.8880 | 0.2055 | 4.32 | 0.000 | 0.4853 1.290657 | |
| Ashanti | 0.1853 | 0.2097 | 0.88 | 0.377 | -0.2256 0.596286 | |
| BrongAhafo | 1.2550 | 0.2280 | 5.51 | 0.000 | 0.8082 1.701811 | |
| Northern | -0.4781 | 0.4636 | -1.03 | 0.302 | -1.3868 0.43055 | |
| Upper East | 0.4364 | 0.2866 | 1.52 | 0.128 | -0.1252 0.998106 | |
| Upper West | 0.5353 | 0.2925 | 1.83 | 0.067 | -0.0380 1.10873 | |
| Number of obs | 2965 | | | | | |
| Wald chi2(24) | 329.91 | | | | | |
| Prob> chi2 | 0.000 | | | | | |
| Log pseudo likelihood | -1074.56 | | | | | |
| Pseudo R2 | 0.1779 | | | | | |
| /cut1 | 6.2451 | 1.0503 | | | 4.1865 8.3036 | |
| /cut2 | 10.1053 | 1.0835 | | | 7.9816 12.2290 | |

Source: Authors' computation using GLSS6 data

Appendix C: work security index

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|----------------------------------|-------------|---------------|---------------|----------|----------|
| Sector (public) | 3722 | 0.3235 | 0.4679 | 0 | 1 |
| Social Security | 3743 | 0.3855 | 0.4868 | 0 | 1 |
| Trade Union | 3742 | 0.3688 | 0.4825 | 0 | 1 |
| Employment Contract | 3740 | 0.7987 | 0.4011 | 0 | 1 |
| Employment Security Index | 3754 | 1.8684 | 1.3625 | 0 | 4 |

Source: Authors' computation using GLSS6 data