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Determinants of Unemployment Duration in Nigeria: A Study of the Senatorial Districts in Anambra State.

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Abstract: *Rising and longer-term unemployment has remained a major source of concern in Nigeria for over two decades. Although a lot of research efforts have focused on understanding the drivers of unemployment rate, there is little or no research effort at understanding the determinants of unemployment duration in Nigeria. Given the huge macroeconomic and welfare effect of longer-term unemployment, this study focuses on ascertaining the drivers of unemployment duration in Anambra state of Nigeria. The study adopts a survey research design and quantitative research method, using a stratified multistage sampling technique for selecting local councils and random sampling procedure for selecting respondents, about 760 valid respondents were utilized for the study. The results obtained from logistic regression framework indicate that gender, education, spousal income and age are critical drivers of unemployment duration in Nigeria. Consequently, the study recommends that the state focuses on boosting economic growth, initiating gender-based workplace policies and engaging in workforce development program for the unemployed.*
Key Words: *Logistic Regression, Gender, Education, Age, Spousal Income, Unemployment Duration*

I. INTRODUCTION

The problem of unemployment has posed a great challenge to many countries (both developed and developing). In recent times, the incidence of unemployment in Nigeria has been deep and widespread, cutting across all facets of age groups, educational strata and geographical entities (Onah, 2010; Bakare, 2011). For instance, Table 1.1 shows that the national unemployment level stood at 13.1% in 2000. By 2010, it has risen to 21.4%. It further rose to 23.9% and 27.4% in 2011 and 2012 respectively. Following the revision of the methodology for the computation of unemployment in 2014, unemployment rate fell to 7.8% in 2014. It however rose to 9.9% and 18.8% in 2015 and 2017 respectively. In 2018, unemployment rate was estimated at 23.1%. Going by Goux, Maurin, and Petrongolo (2014) assertion, the high rate of unemployment may be indicative of the existence of long-term unemployment in Nigeria. However, Valletta (2015) noted that evidence obtained from the United States indicates that the assumption that the unemployment rate mirrors the unemployment duration cannot be valid. He observed that in the past three decades, it has been difficult to predict the unemployment duration from the unemployment rate.
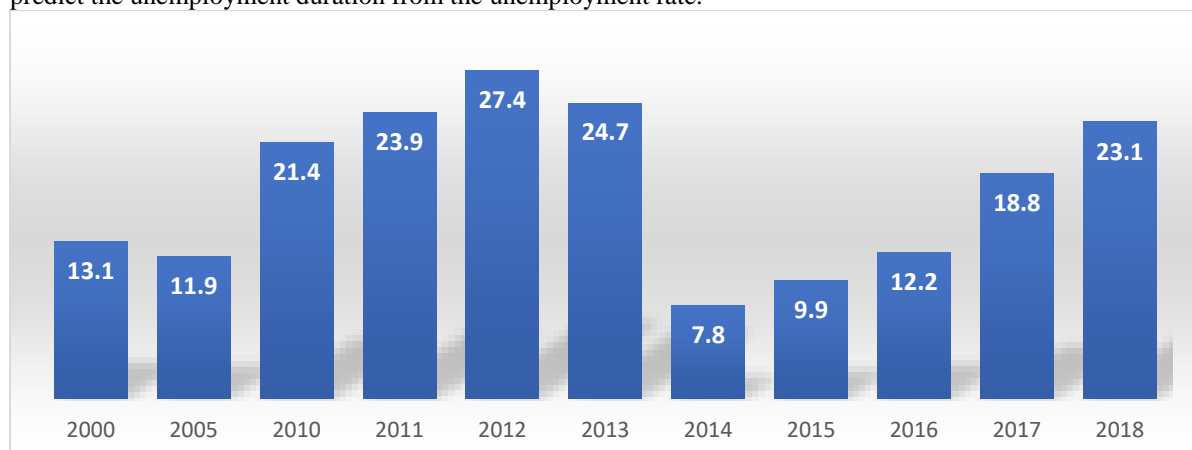

Figure 1.1 Nigerian Unemployment rate (2000-2018)
Source: NBS (2004, 2012, 2016, 2018)

Anambra state with its capital in Awka is one of the states in the southeastern zone of Nigeria. Ndi Anambra, as the people of Anambra state are commonly called, are known to be highly enterprising and could be found engaged in trading all over the country. Anambra is the second-most densely populated state in Nigeria

after Lagos State. The state is said to be rich in natural gas, crude oil, bauxite, and ceramic. Although Anambra state is reputed to be the commercial centre of the southeast, it is also known for agricultures.
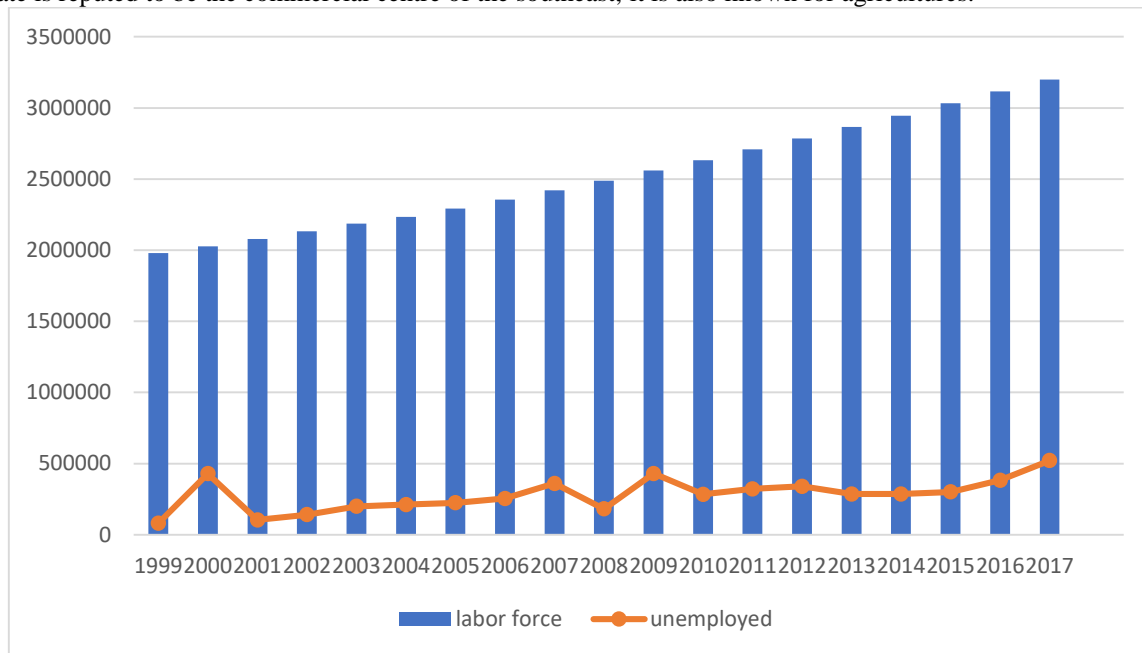

Figure 1.2 Labor Force and Unemployed Population in Anambra State

Note: *(a) the number of unemployed people for the period of 1999 to 2010 was estimated with unemployed rate sourced from Open Data for Africa (see : http://nigeria.opendataforafrica.org/iynrgrf/socioeconomic-statistics?tsId=1020000)*
(b) the number of unemployed for the period of 2011 to 2017 was estimated using national unemployment rate reported by NBS (2016, 2018).
(c) labour force was estimated from labour force participation rate reported by WDI (2017).

As shown in Figure 1.2, labour force in Anambra rose from 1.98 million in 1999 to 2.63 million and 3.20 million in 2010 and 2017 respectively. On average, the annual labour force population stood at 2.53 million between 1999 and 2017. In the same vein, the mean number of unemployed people in Anambra between 1999 and 2017 is 281 thousand people annually which represents 11.12% unemployment rate. The trend of unemployment shows that the number of unemployed people in Anambra increased from 81,000 in 1999 to 230,000 in 2000. It however fell sharply to 104,000 in 2001. The population of the unemployed increased slightly but consistently between 2001 and 2007. From 103,000 in 2001, the population of unemployed people rose to 200,000 in 2003, 225,000 in 2005 and 361,000 in 2007. In 2008, it declined to 182,000. This decline was not sustained as it rose sharply to 430,000 in 2009. The following year (i.e 2010) experienced a fall in the number of the unemployed as it recorded 284,000. It rose further to 322,000 in 2011 and fell to 286,000 in 2014. Since 2015, unemployment has been on the rise, moving from 300,000 in 2015 to 383,000 in 2016 and 521,000 in 2017. The average unemployment rate between 2015 and 2017 stood at 12.83%.

Duration of unemployment, *which is the length of time (through the current reference week) that persons classified as unemployed had been continuously looking for work,* has received limited attention in developing countries. However, as Valletta (2015) noted, duration of unemployment provides deeper insight as to the severity of unemployment. By looking at the duration of unemployment, we get an idea of whether unemployment is typically short term, with people moving quickly into and between jobs, and whether long term unemployment is a major problem. The duration of unemployment varies among individuals of different age brackets, gender, spatial location, educational levels and spousal income.

Previous research has shown that education has a substantial impact on labour market outcomes such as earnings and employment. Education improves the skills of an individual making him/her more productive and thereby increasing his/her prospects on the labour market. Tansel and Tasci, (2010) however observed that the phenomenon of over education, where it exists, could undermine the labour market outcomes of education. For example, excessive supply of graduates and the inefficiency of education system in developing countries could raise concerns of longer unemployment duration for persons with high education. Another factor that could be critical for the duration of unemployment is spousal income, which according to Arulampalam and Stewart (1995) is the income of the spouse of an unemployed person. According to Stefania (2013), spousal income could act as wealth to the unemployed partner. As noted by Lentz and Tranas (2005), it is relatively well understood how wealth can influence search effort and reservation wages of unemployed individuals and

thereby the duration of unemployment. Stefania (2013) argues that in the absence of full unemployment insurance, spousal income acts as supplementary self-insurance against unemployment: the more income one's spouse earns, the better insured one is in the sense that one can smooth consumption better between spells of employment and unemployment. In contrast to the above view, Weiss and Robert (1997) observed that spouse income would influence one's behavior in the opposite direction to one's own wealth. Either spousal income does not add to one's wealth, or it adds something positive but not negative effect. But as Lentz and Tranas (2005) argued, it seems that this logic applies only to married women. Lentz and Tranas (2005) contend that for married men, the opposite is in fact the case: the higher the woman's income is, the faster the husband finds a job.

In the view of Lentz and Tranas, unemployment duration could also be influenced age and gender. In cultures where gender discrimination exists in the labour market, the discriminated gender could experience longer duration of unemployment. In addition, differences in capabilities and skills across gender distribution may equally contribute to differences in unemployment duration of different genders. Also, in societies where social constructs define jobs that could be done by women and men, one gender may experience longer duration of unemployment even when there are jobs acceptance of can shorten the duration of unemployment. In the same vein, age distributions may be subject to variations in duration of unemployment in similar circumstances. In developing countries in general, there are limited empirical studies on unemployment duration or its determinants. This could be as a result of dearth of survey longitudinal data on unemployment duration by the country's database bodies. In Nigeria in general and Anambra state in particular it is difficult to find studies on determinants of unemployment duration. This apparently undermines holistic and appropriate policy intervention on unemployment duration which varies among individuals of different age brackets, gender, spatial location, education levels and spousal income. To the best knowledge of the researchers, there are hardly empirical studies on unemployment duration in Nigeria in general and Anambra state in particular. It is against this backdrop that this study examines the determinants of unemployment duration in Anambra state.

The rest of the paper is organized as follows. Section two and three discuss the theoretical framework and empirical strategy respectively. In section four, the results of the quantitative procedure is presented and discussed. Finally, section five presents the conclusion and recommendation.

II. THEORETICAL FRAMEWORK

Unemployment is an age long economic problem that has continued to puzzle economists. To this end, economic theorists have made several explanations on the dynamics of unemployment and unemployment duration. The classical theory was the first attempt at explaining the dynamics of unemployment duration. the classical theory, however, could not explain the phenomenon of unemployment duration. This is because its assumption of full employment dismisses the possibility of unemployment in an economy. If when unemployment exists, it is a temporary phenomenon given that the economy is self-correcting. The business cycle theory argues that unemployment is a consequence of recession and if the recession that gave birth to it remains, then unemployment could remain, even in the long run. Thus, the duration of unemployment is a function of the duration of recession. But the idea that unemployment caused by recession clears when recession clears is not supported by hysteresis hypothesis. Going further, the signaling and search theory explains that unemployment is characteristic of even a normal economy due to the existence of information asymmetry and frictions within the economy. Cahuc and Zylberberg (2004), in his job search theory argues that unemployment is a result of employees quitting their job to search for a new and better-paid job. While searching, the worker is unemployed. Cahuc and Zylberberg (2004) noted that the optimal strategy for an individual looking for a job is to select a reservation wage which is the lowest wage rate at which one accepts a given job offer. Various factors, such as gender, marital status, household income, educational level, spatial location, job offer arrival rates, availability of jobs, and the quality of the match, affect the reservation wage.

Suppose an unemployed individual knows the distribution of wage offers. This distribution is assumed to be constant and each successive random wage offer is assumed to be an independent draw. In addition, an unemployed individual is assumed to be risk-neutral and the disutility of work is negligible. Following Cahuc and Zylberberg (2004), let F(·) denote the cumulative distribution function of wage offers. An unemployed individual's discounted expected utility is then given by:

$$rV_u = z + \lambda \int_{w^R}^{\infty} [V_E(w) - V_u] dF(w) \qquad\qquad 2.1$$

where r and V_U are real interest rate and the discounted expected utility of an unemployed individual respectively. Also, z is the net income while looking for a job, λ is the job offer arrival rate, w^R is the reservation wage, $V_E(w)$ is an expected utility of an individual while employed with wage, w.

The job offers arrival rate, λ, is a function of personal characteristics of an unemployed individual, including age and schooling, and also her effort level of job search. Since the left-hand side of Equation 3.1 shows the level of utility that an unemployed person receives by staying unemployed and the right-hand side

shows the sum of the net income from looking for a job (z) and the average gain from changing from unemployment to employment at wage, w, it implies that Equation (2.1) shows a tradeoff between staying unemployed, and searching and accepting a given job offer.

Defining the hazard rate (HR) as the separation rate from unemployment, Cahuc and Zylberberg (2004) asserts that HR is a function of reservation wage. Mathematically,

$$HR = \lambda[1 - F(w^R)] \qquad\qquad 2.2$$

$1 - F(w^R)$ is the probability of an unemployed individual accepting a wage offer given that the wage offer is equal to or greater than her reservation wage. Hence, the duration of unemployment is given by

$$T_U = \frac{1}{\lambda[1 - F(w^R)]} \qquad\qquad 2.3$$

Where

$$w^R = z + \frac{\lambda}{r+q}\int_x^\infty (w - w^R)dF(w)$$

Where $z = b - c$ where b is the sum of factors, including unemployment benefits, consumption of domestic production, other household income and leisure and c is the sum of factors, including financial cost of looking for a job and the opportunity cost of looking for a job (e.g., foregone leisure).

Equation (2.3) indicates that the length of unemployment spell increases with the reservation wage (wR), which suggests that when searching for a job if the reservation wage of an unemployed individual increases the duration of job search increases on average.

III. EMPIRICAL STRATEGY

This study is essentially a survey research. It is employs quantitative research method in providing answers to the implicit research questions. The study is focused on the three senatorial districts in Anambra state. The study employs stratified multistage sampling procedure in selecting the local councils where the questionnaires were administered. However, in sampling respondents from the selecting local councils, random sampling method is employed. Structured questionnaire was administered to about 770 respondents and about 96.7% was returned or retrieved. The demographic attributes of the respondents is as summarized in Table 3.1(a) and (b).

Table 3.1(a) Summary of Respondents Attributes

Variables	frequency	percentage
Age		
18-25	186	24.47%
26-35	265	34.87%
36-45	92	12.11%
46-55	119	15.66%
56 and above	98	12.89%
Total	760	100.00%
Gender		
Male	312	41.05%
Female	448	58.95%
Total	760	100.00%
Marital status		
Single	301	39.61%
Married	334	43.95%
Widowed	61	8.03%
divorced/separated	64	8.42%
Total	760	100.00%
Household Size		
1-3 persons	146	19.21%
4-6 persons	476	62.63%
7-9 persons	98	12.89%
10-12 persons	40	5.26%
Total	760	100.00%

The LGA of residence		
Anambra West	245	32.24%
Awka South	253	33.29%
Aguata	262	34.47%
Total	760	100.00%

Source: Field Survey (2020)

Table 3.1(a) summarizes the demographic attributes of the respondents. The survey nets all age brackets starting from 18 years of age. The most popular age bracket in the survey is 26-35 years with representation of about 34.87%. This is followed by 18-25 years (24.47%), 46-55 years (15.66%), 56 years and above (12.89%) and 36-45 years (12.1%). The respondents are fairly distributed between male (41.05%) and female (58.95%). Majority of the respondents are either married (43.95%) or single (39.61%). Also, about 8.03% and 8.42% of the respondents are widowed and separated/divorced respectively. Table 3.1(a) also shows that over 62% of the respondents are members of households of size ranging from 4 to 6 persons. However, about 19.21% of the respondents have households of size 1-3 persons. Other household sizes indicated include 7-9 persons (12.89%) and 10-12 persons (5.26%). The respondents are also fairly distributed among the local councils that were surveyed. To be precise, about 32.24% of the respondents were surveyed from Anambra West LGA. The proportion of respondents from Awka South and Aguata were 33.29% and 34.47% respectively.

Table 3.1(b) Summary of Respondents Attributes

Variables	Frequency	percentage	
Highest education obtained			
No formal education	12	1.58%	
Primary education	147	19.34%	
Secondary education	338	44.47%	
Tertiary education	201	26.45%	
Postgraduate education	62	8.16%	
Total	760	100.00%	
Town/Ward of residence			
Umueze Anam I	245	32.24%	
Awka IV	253	33.29%	
Ekwulobia I	262	34.47%	
Total	760	100.00%	
Spousal monthly income			
Less than N20,000	46	13.77%	
N20,000-N40,000	29	8.68%	
N41,000-N60,000	73	21.86%	
N61,000-N80,000	93	27.84%	
N81,000-N100,000	34		10.18%
N101,000- N200,000	38	11.38%	
N201,000 and above	21	6.29%	
Total	334	100.00%	
Respondent's wealth level			
Less than N500,000	443	58.29%	
N500,000-N999,000	198	26.05%	
N1,000,000-N4,999,000	85	11.18%	
N5,000,000-N9,999,000	29	3.82%	
N10m and above	5	0.66%	
Total	760	100.00%	

Source: Field Survey (2020)

Table 3.1(b) shows that about 44.47% of the respondents obtained secondary school certification. Another 26.45 and 8.16% of the respondents indicated that they attained bachelor and postgraduate degree. Other educational status include no formal education (1.58%) and primary education (19.34%). The mean spousal income stood at about N73, 203. A look at the wealth level indicates that over 58% of the respondents have wealth level below N500, 000. Another 26.05%, 11.18% and 3.82% have wealth level within the range of N500,000 – N999,000; N1,000,000 – N4,999,000 and N5,000,000 – N9,999,000 respectively. Only 0.66% of the respondents indicated that their wealth were in excess of N10 million.

To analysis the data obtained, logistic regression was employed. Logistic regression measures the relationship between the categorical dependent variable and one or more independent variables by estimating probabilities using a logistic function, which is the cumulative logistic distribution. Thus, it treats the same set of problems as probit regression using similar techniques, with the latter using a cumulative normal distribution curve instead (Woodridge, 1995). Logistic regression is considered apt given that the dependent variable (y = UND) is a binary choice. The values of UND are actually 1 or 0. UND takes the value of 1 when spell is long and value 0 when spell is short. These responses shall be obtained from questionnaire responses that would be administered to the respondents. In principle, the coding of the two numerical values of y is not critical since each of the binary responses only represents an event. Nevertheless, the logistic regression framework requires that you code y as a zero-one variable. This restriction yields a number of advantages. For one, coding the variable in this fashion implies that expected value of y is simply the probability that y = 1:

$$E(y_i / x_i, \beta) = 1.\Pr(y_i = 1/x_i, \beta) + 0.\Pr(y_i = 0/x_i, \beta)$$ 3.1

$$= \Pr(y_i = 1/x_i, \beta)$$ 3.2

Where x_i is a vector of explanatory variables and β is a vector of parameter estimates.

Logistic regression first takes the odds of the event happening for different levels of each independent variable, then takes the ratio of those odds (which is continuous but cannot be negative) and then takes the logarithm of that ratio (this is referred to as logit or log-odds) to create a continuous criterion as a transformed version of the dependent variable such that

$$y = \begin{cases} 1 & if \quad y_i^* > 0 \\ 0 & if \quad y_i^* \le 0 \end{cases}$$ *Where y_i^* is the predicted y* 3.3

In practice, the logistic regression rather estimates the odd-ratio specified as:

$$L^* = \ln(\frac{P_i}{1 - P_i}) = \alpha_0 + \sum_{j=1}^{J} \beta_j x_j + \varepsilon$$ 3.4

To obtain the parameter estimates, logistic regression follows maximum likelihood procedure using Newton-Raphson with Marquardt iteration process. Specifically, we specify the empirical model as follows. First, the relational function is specified as follows:

$UND = F(GEND,INCO, AGE,LOCA,EDU, X)$ 3.5

Where UND =unemployment duration, GEND = gender, EDU = educational level, INCO = income level, AGE = age structure, LOCA = spatial location, X = other variables.

As contended by Gujarati (2004) and Woodridge (1995), the major problem with Equation 3.5 is the estimation. Notice that the dependent variable is a discrete binary choice variable that takes the values 1 for longer duration and zero (0) for short duration. But a key implicit assumption in classical regression analysis is that the dependent variable is continuous. Thus, estimating Equation 3.5 using OLS or any other classical or time-series linear regression framework could tantamount to serious breach of the continuous variable assumption. For instance, using OLS to estimate equation 3.5 may seriously bias the magnitude of the effects of independent variables on the dependent variable. Second, all of the standard statistical inferences (e.g. hypothesis tests, construction of confidence intervals) may consequently be biased, and finally, regression estimates will be highly sensitive to the range of particular values observed (thus making extrapolations or forecasts beyond the range of the data especially unjustified).

Now a binary logit model is set up as follows:

$$L^* = \ln(\frac{P_i}{1 - P_i}) = \alpha_0 + \alpha_1 GED + \alpha_2 INCO + \alpha_3 AGE + \alpha_4 LOCA + \alpha_5 EDU + \Phi_j X + \varepsilon$$ 3.6

Where:

$L^* =$ *The logit function expressed as the log-odds ratio. The logit function is a linear function of the explanatory variables GED, INCO, AGE, LOCA, EDU.*

The odd-ratio, $\dfrac{P_i}{1 - P_i}$ *is modeled to avoid the possibility of the predicted values being outside the probability interval of 0 to 1. Odds refer to the ratio of the likelihood, or probability that an unemployed person will have a long spell*

Ln=natural logarithm

$$P_i = E(UND = 1/x_i) = \frac{1}{1 + e^{-(\alpha_0 + \sum\limits_{j=1}^{J} \beta_j x_j)}} .$$

In other words, *Pi* is the probability that the dependent variable (i.e the propensity that a worker has long spell) equals a case (i.e 1 or 0), given some linear combination of the predictors. If an unemployed person has long spell, we assign 1 to that response, otherwise we assign zero (0). In order words, UND takes either 1 (long spell) or 0 (short spell).

$\alpha_0 =$ is the intercept from the linear regression equation (the value of the criterion when the predictor is equal to zero).

$\sum\limits_{j=1}^{J} \beta_j x_j =$ is a *1 x k* column vector of parameter estimates multiplied by the explanatory variables earlier defined in Equation 3.6 to include gender (GED), educational level(EDU), income level(INCO), age structure (AGE), spatial location (LOCA).

IV. RESULTS AND DISCUSSION

In this section, we present the results and discuss the findings thereof. First, we obtain the unemployment duration statistics. The results of unemployment statistics is presented in Table 4.1. Completed spell indicates how long it took those who were previously unemployed to get job. These set of people are not unemployed as at the time of this survey.

However, they were unemployed at some time in the past. Incomplete spell summarizes the length of time unemployed individuals have stayed unemployed. In this case, unemployed persons are still unemployed as at the time of this survey. The result show that female unemployment duration of 50.5 months is higher than that of men whose unemployment duration is 42 months. The length of duration of unemployment appears to be longer for urban areas represented by Awka South (57.5 months) and semi-urban areas represented by Aguata LGA (43.5 months) than for rural areas represented by Anambra West LGA (38 months). Unemployment duration also appears to be longer for higher spousal income than for lower spousal income. The overall unemployment duration in Anambra was approximately forty-two and half months.

Table 4.1: Individual Characteristics and Unemployment Durations

Categories		Unemployment Duration (months)		
		Completed spell	Incomplete Spell	Overall Average
Gender	Male	38	46	42
	Female	42	59	50.5
Age	18-25	25	33	29
	26-35	42	58	50
	36-45	38	69	53.5
	46-55	58	49	53.5
	56 and above	37	53	45
Spatial Location	Anambra West	32	44	38
	Awka South	52	63	57.5
	Aguata	36	51	43.5
Spousal Income	Less than N20,000	20	26	23
	N20,000-N40,000	29	39	34

N41,000-N60,000	32	28	30
N61,000-N80,000	26	37	31.5
N81,000-N100,000	42	32	37
N101,000- N200,000	47	55	51
N201,000 and above	52	61	56.5
Average unemployment duration	38.11765	47.23529	42.67647

Source: Field Survey, 2020

Table 4.2 presents the summary of logistic regression estimates of the model of unemployment duration in terms of the following explanatory variables: gender, education, age, spousal income and spatial location. The logit model was optimized using Berndt-Hall-Hall-Hausman algorithm.

Table 4.2: Summary of Logit Estimates.

Independent Variable: unemployment Duration						
1	2	3	4	5	6	7
Variable	Coefficient	Std. Error	z-Statistic	Prob.	Odd ratio	Standardized Coefficient
	(log Odd)					
Education (EDU)	0.557575	0.141547	3.939146	0.0001	1.746432	0.287822
Gender (GED)	-0.100003	0.019685	-5.08005	0.0000	0.904835	-0.00718
Age (AGE)	0.342092	0.119654	2.859022	0.0042	1.40789	0.149276
Spousal Income (SPY)	0.815096	0.083842	9.721779	0.0000	2.259393	0.249224
Spatial Location (LOCA)	-0.22395	0.131821	-1.69887	0.0893	0.799357	-0.10766
C	1.625748	0.435173	3.735862	0.0002	5.082219	2.580091
McFadden R-squared	0.664					
S.E. of regression	0.274208					
LR statistic	591.56					
Prob(LR statistic)	0.000000					
H-L Statistic	0.0916					
Prob. (H-L)*	0.8520					
Obs	760					

Source: Estimated by the Researchers Using Eview 10.1

The result shows that gender and spatial location entered the model with negative log odds of 0.10 and 0.223 respectively. The log odd for years of education, age and spousal income are 0.558, 0.342 and 0.815 respectively. Given that the mechanical interpretation of log odd is considered to convey limited information (Gujarati, 2004; Woldridge, 2005), we rather interpreted the estimates based on odd ratios. When odd ratios are used to interpret logit estimates, odd ratios less than one are considered to imply negative relationship.

As shown in Table 4.2, increasing the years of education by 1 year will raise the odd in favour of longer unemployment duration by 75%. In normal times, it is expected that higher education increases the chances of unemployed to get job. However, in situations where there are limited jobs and/or low wage jobs, high-education may be a disincentive for job engagement. As observed by Fields (1995), workers with a higher education usually have higher wage expectations; therefore, they have higher reservation wages, which tend to be a disadvantage when searching for a job, particularly when forced to search for work with lower education requirements. Banerji and Riedel (2000) have found that 'over-education' increased an individual's unemployment spell. The idea that persons with high-education may be disadvantaged in job search emerged in the 1960s. This situation was dubbed 'educational unemployment', which was an aspect of 'over-education' (Rumberger & Russell, 1997). An additional reason for over-education is that most employers are more likely to hire an employee with a higher than necessary level of education when given the opportunity (Bishop, 1995). Consequently, the surplus of highly educated workers is forced to search for jobs for longer periods than necessary.

In the same vein, increasing spousal income and age by one unit will increasing the odd in favour of longer duration of unemployment by 125% and 41% respectively. This finding implies that unemployed persons whose partners have good earnings has higher tendency of experiencing longer unemployment spell. Naturally, individuals who live with a partner may enjoy the support of his/her partner during the periods of unemployment. For example, a single person who cannot find a job is likely to reduce some of his/her spending to compensate for the lower income. Individuals who live with a partner may have another option. Instead of just reducing consumption, it might be possible for the spouse to try to compensate the partner's loss in income by working more hours or finding a higher paid job. Having two sources of income is a way of not putting all

one's eggs in the same basket. Further, compensating the partner's economic difficulties would be a way to handle risk within families by helping to reduce the family's vulnerability (Dynarski & Sheffrin, 1987; Stephens, 2002). If the period in unemployment is expected to be long, or to be followed by more spells of unemployment, it is reasonable to expect that households will consider the possibilities for the spouse to try to compensate for the lower income.

As the number of men increases relative to the number of women, the odd in favour of longer unemployment duration decreases by approximately 10%. Invariably, longer unemployment duration is associated more with women than men. This finding corroborates Timberlake (2005) and Crossley, Jones and Kuhn (1994) who also found that women experience longer unemployment duration than men. Several explanations on gender differences in duration of unemployment exists in the literature. Feminist school of thought focuses on institutional factors that disadvantage women in the labour market. They have long contended that gender segregation and domestic responsibilities have excluded women from powerful social connections, hampering women's labour market outcomes (King & Mason, 2001; Timberlake, 2005). Laid-off workers with limited access to social networks may have a low probability of finding a job, as it is widely recognized that personal connection and information networks play pivotal roles in facilitating job searches in a market economy (McCall, 1988). Analysts have also noticed that re-employment incentives may differ between men and women separated from regulated sectors due to the gender disparity in displacement costs (Crossley et al., 1994; Madden, 1987). In accordance with these studies, workers who are separated from the sector paying economic rents (e.g., the unionized sector) and subsequently find new jobs in competitive sectors endure earnings losses because the pre-displacement wage overstates market worth for these workers; these earnings losses are particularly pronounced for women (Elvira & Saporta, 2001; Hirsch & Schumacher, 1998).

Similarly, residency in rural area could decrease the odd in favour of longer unemployment duration by 25%. In other words, unemployment duration is higher for urban dwellers than rural dwellers. It bears mentioning that the constant term is not only significant but also has the highest odd ratio. Technically, the constant term captures the mean value of the dependent variable when the hypothesized explanatory variables are jointly zero. The mean value could represent the effect of macroeconomic factors on unemployment which cannot be accommodated in the model. Finally, column seven (7) presents the standardized coefficients of the log odd. Since the explanatory variables are measured in different units, standardized variables are used to evaluate the individual influence of the explanatory variables on the predicted variable. The standardized coefficient is computed by dividing and multiplying each coefficient with the standard error of equation and standard error of the coefficient respectively (see Woodridge, 1995). In ranking the magnitude of the effects of the explanatory variables on unemployment duration, the constant term ranked first with a coefficient of 2.58. This may suggest that non-micro factors, such as macroeconomic outlook of the economy, may also have non-trivial implication for unemployment duration. Educational status and spousal income ranked second and third respectively. The third and fourth factors are location and gender.

V. CONCLUSION AND RECOMMENDATIONS

The thrust of this work is to ascertain the determinants of unemployment duration in Anambra state of Nigeria. From the findings and inferences obtained from the logit estimates, we conclude as follows. First, gender and age differences matter for the length of unemployment spell experienced by an individual. On average women and young people are more likely to experience longer duration of unemployment than men and older people. Second, spousal income has significant positive effect on unemployment duration. In other words, unemployed partners whose spouses earn more money tend to experience longer duration of unemployment. Third, over-education engenders longer length of spell. Finally, spatial location does not have significant effect on unemployment duration in Anambra state.

Based on the findings of this study, we make the following recommendations. First, the state should focus on strong economic policies with strong sustainable economic growth. Strong economic growth would be the most effective remedy for reducing today's elevated levels of long-term unemployment. The severity of the economic contraction during the recent recession and the relatively weak economic recovery could reinforce high levels of long-term unemployment. There is considerable debate about how to spur growth in the short term and the impact of short-term measures on long-term growth. Policies to spur growth fall into three broad categories: (1) direct government spending on goods and services, (2) increasing households' disposable income, and (3) reducing the costs of doing business. Second, the state government should engage in workforce development program. Individuals who have been unemployed for more than six months face increasing obstacles in their search for jobs. Their workplace skills may have eroded as they remained jobless. Even if they do have suitable skills, employers may believe that a long spell of unemployment reflects badly on the workers' potential productivity. Third, to address the problem of relatively longer female unemployment duration, there is need for the state to initiate gender-based policies that would enhance women labour participation. Private sector employers should be mandated to offer sufficient maternity leaves and associated benefits to women (note that in some private establishments, nursing mothers are only given a month or two weeks maternity leave after

which they face the risk of either losing their jobs or not being paid). In the same vein, we also recommend that employers consider allowing employees, especially women work-time flexibility. This will enable women to choose hours of work that would be convenient for them. Finally, this study shows that long unemployment durations is endemic. Therefore, there is need to empirically model the effects of unemployment durations on wages and future earnings.

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