

## WHO MOVES AND WHO STAYS? RURAL OUT-MIGRATION IN NIGERIA

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Data from the nationally representative 1993 Migration and Urbanization Survey of Nigeria are used to simultaneously examine the patterns of rural–rural and rural–urban migration in Nigeria. A multinomial logistic regression model predicts the independent and collective association between individual, household, and regional variables and migration from rural areas to rural and urban destinations. Associations between education, religion and ethnicity and migration propensities exist at the national level. The Kanuri-ShuaArabs are generally non-migrants, the Hausa-Fulani and Yoruba are predominantly rural–rural migrants and the Igbo-Ibibio and Urhobo-Isoko-Edo are predominantly rural–urban migrants. Christians are significantly more mobile than Muslims. While the highly educated are most likely to choose an urban destination, a significant proportion migrate to other rural areas. Concern over population concentration is not supported, as rural migrants move to all regions and to urban and rural areas.

**Keywords:** Nigeria, rural out-migration, migration propensity, urbanization, agglomeration, spatial redistribution, even development, rural–rural migration, rural–urban migration

Who moves to other rural or urban areas and who stays in rural Nigeria? What are the predictors? These questions address the long-standing concern among scholars, governments and international organizations regarding the determinants of population movements and the net redistribution of population (Abumere 1981; White and Lindstrom 2003). In sub-Saharan Africa, attention has focused on the relationships between migration, spatial redistribution, urbanization and development (Oucho and Gould 1993; Bilsborrow 1998; Oucho 1998; Guest 1998; Weinstein 2001; Black, King and Tiemoko 2003).

Despite evidence that rural–urban migrants are not the largest group of internal migrants in sub-Saharan Africa, rural–urban movement, whether for circulation, temporary sojourns in towns or permanent urban residence, is the most significant form of movement for long-term spatial redistribution, and thus has attracted much study (Oucho 1998). In fact many planners, policy makers and governments see rural–urban migration as the overriding internal migration pattern in the region (Oucho and Gould 1993). The concentration of the urban populations of many devel-

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oping countries in a single city (Zlotnik 1994) engenders rapid and unmanageable growth of large urban agglomerates. Excessive migration from rural to urban areas is implicated as the major cause of this growth (Chen, Valente and Zlotnik 1998).

Other concerns touch on the impact of out-migration on sending communities throughout the Third World, focusing on the effect of population loss (particularly of young people) and remittance dependency, both of which undermine community social viability and promote underdevelopment (Lockwood 1990). Rural–urban migration is selective of the young, the educated, the innovative and the energetic, leaving behind the very young, the apathetic, the retired and the tired, the illiterate and the infirm (Makinwa 1981; Adepoju 1983; Oucho 1998). Consequently, rural populations in sub-Saharan Africa are characterized by high sex and dependency ratios, and low social, educational and economic status (Makinwa 1981; Adepoju 1983).

However, Goldstein (1984) points out that not all rural–urban migration is permanent: return, repeat, and temporary movements are not reflected in redistribution estimates, nor are counter-stream migrants included. New research in recent years has directed attention to the lifelong links between urban migrants and their rural origins, giving rise to what Bartle (1981) termed ‘an extended community’ and Gugler (1991) referred to as ‘living in a dual system’ (see also Geschiere and Gugler 1998; Trager 1998; Nyamnjoh and Rowland 1998; Eyoh 1998; Goheen and Fisiy 1998; Andersson 2001; Gugler 2002). These issues underscore the dynamic nature of migration in sub-Saharan Africa and the need to review the determinants of migration and how counter-stream movements affect population redistribution and the demographic structure of urban and rural areas.

These concerns about rural to urban migration have tended to neglect the fact that urban areas are currently not the primary destination of migrants out of rural areas. In fact, rural–rural migration is by far the most important type of internal migration in sub-Saharan Africa when periodic and seasonal movements are excluded (Oucho and Gould 1993; Oucho 1998; Chattopadhyay, White and Debpuur 2006). Recent studies suggest that the pace of urban growth in Africa tapered off in the 1980s and 1990s, reflecting both a decline in the rate of natural increase and a slowing down of migration to urban areas, along with an intensification of return migration to the countryside (Potts 1995, 2000; Bocquier and Traore 1998; Montgomery *et al* 2003; Tabutin and Schoumaker 2004). In Ghana, data for 1970 and 1984, and recent studies, confirm the excess of urban–rural over rural–urban moves (Zachariah and Conde 1981; Twum-Baah, Nabila and Aryee 1995; Litchfield and Waddington 2003). These dynamics underscore the need to bring rural-destination migration into greater focus.

In the context of Nigeria, existing research on internal migration processes is generally fragmentary, covering only a few villages or medium-sized towns, and now dated (Makinwa 1981; Adepoju 1983, 1986; Pittin 1984; Peil 1985; Gugler 1991; Olurode 1995). This paper presents a national-level analysis based on nationally representative data from the 1993 Migration and Urbanization Survey. The paper simultaneously examines the socio-economic and demographic characteristics of rural–rural and rural–urban migrants and of non-migrants who stay in rural origins. It explores the independent and joint influences of individual, household and community-level variables on individual migration status and destination, and also addresses issues concerning population concentration and migration selectivity.

By focusing on population loss for rural areas, population concentration in urban

areas, and migration selectivity to urban and rural destinations, this analysis provides the elements for an overview of the distribution repercussions of migration for both origin and receiving areas, which are specifically relevant to relating migration to development planning. It answers in part the call for new research on migration at national and regional levels in sub-Saharan Africa, taking into account the primary rural-rural character of internal migration in the region (Bilsborrow 1998). By identifying groups and factors prone to high levels of migration, this paper aims both to inform policy and to provide a basis for further analysis of migration processes in Nigeria at the national level. Theoretically it contributes to the macro context of migration in which an individual migration decision is historically at the confluence of social, economic, political and demographic factors.

### **Literature review**

Nigeria, with an annual population growth rate of 2.5 per cent and a 2005 estimated population of 132 million, is the most populous country in Africa (UN 2005). The 1963 and 1991 censuses defined an urban centre as a settlement with not less than 20,000 people. The proportion of Nigerians living in urban areas of 20,000 or more was put at 38 per cent in the 1991 census report, a remarkable increase from 15 per cent at Independence in 1960 (NISER 1997). Urbanization in Nigeria was estimated to have grown from 5.0 per cent in 1965–1986 to 5.8 per cent in 1995–1999.

The country comprises six geopolitical zones: North West, North East, West Central, East Central, South West and South East. These zones represent not only different ecological features, but also different economic potentials, population densities, levels of development and urbanization (NISER 1997). Ajakaiye and Adeyeye (2001) linked the different patterns of industrial development over the decades to the generation of divergent regional economies with implications for regional dimensions of poverty. Political and economic developments have created centres of counter-attraction all over the country with obvious implications for migration, not only for civil servants engaged in relocations but also for professionals and private self-employed people across the country. Using the economic survival perspective of migration, this analysis seeks to obtain some measure of the propensity of each region to be the choice destination of migrants.

Nigeria is composed of more than 250 ethnic groups with the Hausa-Fulani, Yoruba and Igbo being dominant. Though all ethnic groups can be found in all regions, ethnic origin highly correlates with region of origin. While it is known that ethnic differences portend differences in social identity, social organization, attitudes and behaviour, systematic and comparative analysis of their implications, particularly in relation to migration, has not been undertaken in Nigeria. This may not be unrelated to the sensitivity of ethnic issues in the country, following conflicts resulting from the ethnic-based competition for political and economic power since independence. However, Zachariah and Conde (1981) and Brockerhoff and Hongsook (1993) show that in West Africa, the proportional representation of some ethnic groups is much higher among urban migrants than among the population as a whole, suggesting differential propensities to migrate. Poor economic opportunities in the rural areas in which an ethnic group is concentrated, rather than the sociocultural characteristics of the ethnic group, are often cited as the main reason underlying a group's propensity to migrate (Amin 1974). Gugler and Flanagan (1978) show that some ethnic groups in

West Africa have established social networks in urban areas that encourage in-migration through the prospect of superior income-earning opportunities, housing and social activities for members of that group. While we do not have evidence for most Nigerian ethnic groups in terms of their migration propensities, research suggests that the Igbos of the South East are the most migratory, following not only economic deprivation of their region but also issues related to kinship networks and the enterprising spirit of the people (NISER 1997; Chukwuezi 2001). This supports the expectation in the present analysis that the Igbo will constitute a dominant migrant group in rural out-migration. The same expectation holds for other ethnic groups in regions of origin characterized as poor, particularly areas around the Niger Delta where high levels of out-migration have been found (Makinwa 1981) and where recent conflicts and youth militancy have heightened awareness of poverty and economic exclusion, exacerbated by environmental degradation due to massive oil exploration and exploitation.

The role of religion in influencing demographic outcomes has also been documented. In the context of Africa, Oucho (1998) pointed to the manipulative use of religion and ethnicity by both the colonial regimes and military dictators, perpetuating differences in access to political and economic resources and engendering different demographic responses and outcomes. In Nigeria, the relationship between religion and demographic outcomes (particularly migration) remains largely unexplored, but studies in Northern Nigeria and parts of the South West indicate movement restrictions among Muslims, in particular *purdah* (the practice of married women living in seclusion) and residential restrictions separating indigenes and strangers into enclaves 'Sabon-Gari' or 'Sabon-Layi' (Pittin 1984; Olurode 1995). This tendency with expected negative implications for migration is supported by findings among Muslims in other African countries. Hogan and Biratu (2004) in a study of Southern Ethiopia characterized by religious diversity, found that Muslims more often live in communities in which they are the majority group and less often experience contact with persons of other religious identities. A study of the Maja of northern Cameroon also revealed a tendency to remain in Islamic enclaves rather than migrate to non-Islamic areas of the country (Santen 1998). Nigeria is predominantly Christian in most of the southern regions and predominantly Muslim in the core northern regions. It is expected that Muslims will have a lower migration propensity than Christians, after controlling for the effects of other socio-demographic variables.

The effects of individual and household variables such as education, age, sex, marital status, employment status, occupation and household structure in determining migration propensities have been identified in developed and developing societies. Summarizing findings from fragmented studies in Nigeria, Adepoju (1986) indicates that most migrants, especially rural-urban migrants, are young persons in the age group 15-29. This is corroborated by Oucho's (1998) summary of general findings for sub-Saharan Africa. Researchers suggest that rural-rural migrants predominantly have no education and are unskilled, in the middle age groups and married, while rural-urban migrants are predominantly single, educated, young and often students seeking better educational opportunities. Human capital theories have not only identified the life-cycle advantage for young people to move but also emphasized the role of education, where individuals with more schooling are expected to have greater returns in moving and hence have higher migration rates (White, Moreno and Guo 1995).

Other studies in Nigeria indicate that an increasing number of rural–urban migrants depend on the urban economy as unemployed persons, while rural–rural migrants are fully employed and contribute to the growth and diversification of rural economies by exploiting rural resources such as cocoa, kola, palm products and rubber (Adepoju 1986). In recent years, urban areas in Nigeria have been increasingly associated with economic stagnation related to the structural adjustment programs of the 1980s that increased unemployment through retrenchment from the public sector, declines in real wages following currency-devaluation fiscal policies, as well as educational, health and housing declines (Nwankpa 1998; Oucho 1998). On the other hand, rural areas have assumed new importance for employment following migration from the traditional subsistence economy to the modern economic sector, particularly in the modernized and commercialized agriculture and mining (Hugo 1994; Ohagi 1995).

With regard to the role of gender in rural out-migration, for most female Muslims originating in Nigeria and some areas of the South West, migration is highly restricted or totally ruled out (Pittin 1984; Oluode 1995). However, Baker and Aina (1995) have emphasized the increasing importance of rural–urban migration of females in countries of sub-Saharan Africa including Nigeria. In a study of marriage migration in western Nigeria, Watts (1984) revealed female migration from rural areas for marriage into wealthy polygynous compounds in the city, and some return migration to rural natal compounds later in life. This is suggested as an explanation for the high female proportions in indigenous towns and some newer medium-sized settlements. Similarly, Peil (1985) observed the decreasing male to female ratio in cities throughout Africa. Findings in Ethiopia confirm the dominance of women in rural–urban migration flows. Besides the high percentage of migrants moving because of the transfer of a family member, there are considerable flows for reasons related to the celebration of marriage, following not only patrilineal descent but also patrilocal residence. Also widowed, divorced and separated women contribute significantly to internal mobility in the region: stigma and social isolation force such women out of places of origin into migration to nearby towns (Casacchia, Crisci and Reynaud 2001). This general pattern of migrant selectivity by sex is corroborated by Latin American studies which point to female domination of rural–urban migration and male domination of rural–rural migration. These differentials appear to evolve naturally from the structure of employment opportunities available in each of the destination areas (Martine 1975; Ajakaiye and Adeyeye 2001; Chattopadhyay *et al.* 2006).

Other findings suggest that small households, and members marginally related to the head of a household, are more likely to be migrants (Zachariah and Conde 1981; Buijs 1993).

One objective of this paper is to explore the extent to which the above assertions are supported by the most recent nationally representative Nigerian migration data. The central hypothesis is that regional inequities in economic development, together with differences in the social identity characteristics of religion and ethnicity, define a number of opportunities and constraints and therefore patterns of migration in Nigeria. This study also hypothesizes that socio-economic factors (educational attainment, employment status), household and individual demographic characteristics (relationship to the head of household, marital status, sex, age) significantly affect the patterns of rural out-migration in Nigeria.

## Data

Data for this study were collected by the Nigerian Institute for Social and Economic Research (NISER), Ibadan, under its 1993 Migration and Urbanization Survey Program. The primary report published in 1997 represents an important milestone in the collection of migration data at the national level in Nigeria. The survey was part of a regional study on migration and urbanization involving eight West African countries: Burkina Faso, Côte d'Ivoire, Guinea, Mali, Mauritania, Niger, Nigeria and Senegal, designed to provide up-to-date and reliable statistics on socio-economic characteristics, the volume of migration, rates and patterns of flows in the countries and the subregion, as well as data on the determinants and consequences of migration.

The Nigerian survey used a multistage, stratified nationally representative sample, which resulted in the inclusion of 22 of the then 30 states<sup>1</sup> of Nigeria, and Abuja, the federal capital city. States were purposely selected so that the desired sample size could be realized for each of the subject areas covered by the survey. First, the national and state capitals and other major cities were selected to reflect the importance of the urbanization process. Second, known sending states were selected for the study of rural out-migration and the survey of rural in-migration involved known receiving states. Finally, the study of international migration covered states located along Nigeria's borders with Republic of Benin, Cameroon and Niger (NISER 1997). Urban centres in Nigeria were stratified into five groups: the old and new federal capitals, the old regional centres and major cities, the state capitals created in 1966, state capitals of the 21 states created in 1976, and the capitals of the 1991 states. For each of these five groups, a simple random sampling technique was used to select cities. Subsequently, residential areas of each of the selected urban centres were stratified into areas populated by indigenous non-migrants and areas populated by a mixture of migrants and non-migrants. In the final sampling stage, several census enumeration areas were selected by random sampling and within these, households were randomly selected.

The survey of rural out- and in-migration areas began with a purposive selection of major sending and receiving states. Subsequently, all urban local government areas were excluded from the sampling frame before four rural local government areas were selected from each state. For the survey of the border areas, two local government areas were selected and from these, a total of 40 enumeration areas were included in the study.

The survey instruments include a household questionnaire, individual questionnaires addressed to eligible migrants, non-migrants and return migrants; and a community questionnaire. Each instrument was developed in English and translated into the relevant language spoken at each of the survey sites. The survey provides migration information on 86,233 males and females aged 15 years and above in 31,637 households. A total of 46,964 persons were either rural out-migrants or rural non-migrants, and thus selected for analysis. Of these, 2401 individuals (5.1% of the sample) were found to have missing information on at least one of the required variables; these were dropped from the analysis. Except for the fact that they have missing information, there is no significant difference in the characteristics of those dropped and the 44,561 cases that were eventually analysed. Moreover the large sample size assured that the exclusion did not affect the estimates in any significant way.

As the survey is cross-sectional, it suffers the limitation of being inadequate in studying time-variant determinants of internal migration. Consequently, this study

reports cross-sectional associations between migration status and the individual characteristics at the time of the survey, without making causal inferences. Despite this major limitation, this dataset remains the most current migration survey in Nigeria with national coverage. It includes variables on religion and ethnic origin, the primary social-cultural identity markers in the country, thus enabling a comparative examination of migration propensities among distinct Nigerian groups.

## **Measures**

### *Dependent variables*

The outcome measures for this study are three categories of migration status: rural non-migrants, rural–rural migrants and rural–urban migrants. Rural non-migrants are persons living in their places of rural origin at the time of the survey, who have not made any migratory move since birth. Rural–rural and rural–urban migrants are persons aged 15 years and above who reside at the time of the survey outside their rural places of origin and have done so for a minimum of six months in other rural or urban areas respectively.

### *Independent variables*

The study distinguished between time-variant and antecedent variables. The antecedent variables which are exogenous and/or fixed are not altered before or after migration: sex, social identity factors (ethnicity and religion), and regions of current residence. The time-variant covariates are independent variables the states of which continue to change over the lifecourse such that their current states may be acquired before or after migration. They include age, educational attainment, marital status, household size, relationship to the head of household and employment status. Information on the history of these variables is not available. Therefore individual characteristics at the time of the survey were used for the analysis, while acknowledging its limitation for making causal inferences. The definitions of variables are summarized in Table 1, and a map of Nigeria showing the geographical location of the major ethnic–linguistic groups is presented as Figure 1.

## **Methods of analysis**

The analysis of data uses univariate and bivariate statistical techniques to generate descriptive statistics of the characteristics of non-migrants, rural–rural and rural–urban migrants. With these three migration outcomes, a multinomial logistic regression model is estimated to simultaneously measure the independent and collective predictive power of the explanatory variables on the likelihood of being a rural–rural or a rural–urban migrant relative to being a rural non-migrant (the base category). This model is appropriate for regressing a categorical dependent variable with more than two categories on a set of independent variables.

## **Results**

### *Internal migration patterns in Nigeria*

Following the establishment of origins of individual migrants and their current places of residence, the patterns and volumes of rural out-migration as opposed to rural

**Table 1** Definition of variables in the analysis of rural out-migration, Nigeria

Variable	Operational definition
<b>Outcome variable</b>	
Rural out-migration status	Rural non-migrant (base category), Rural-rural migrant, Rural-urban migrant
<b>Antecedent independent predictors</b>	
Sex	Dummy variable: male = 0, female = 1
Religion	Muslim (reference category), Christian, Animist/other
Ethnic origin	Hausa-Fulani (reference category), Yoruba, Igbo-Ibibio, Kanuri-Shua Arab, Tiv-Igala-Idoma, Urhobo-Isoko-Edo, Nupe-Kamberi-Gwari, Other Nigerian (grouped following NISER 1997)
Region of current residence	North West (reference category), North East, West Central, East Central, South West, South East
<b>Time-variant covariates</b>	
Age	15–29 (reference category), 30–44, 45–59, 60 and above
Educational attainment	None or less than primary education (reference category), full primary, full secondary, higher education
Marital status	Never married (reference category), currently married, previously married (separated, divorced and widowed)
Relationship to head of household	Head (reference category), spouse, son/daughter, non/other relative
Household size	Small, 1–5 persons (reference category), medium, 6–10 persons, large, 11 persons and above
Employment status	Employed (reference category), unemployed, student

Source: Migration and Urbanization Survey, 1993.

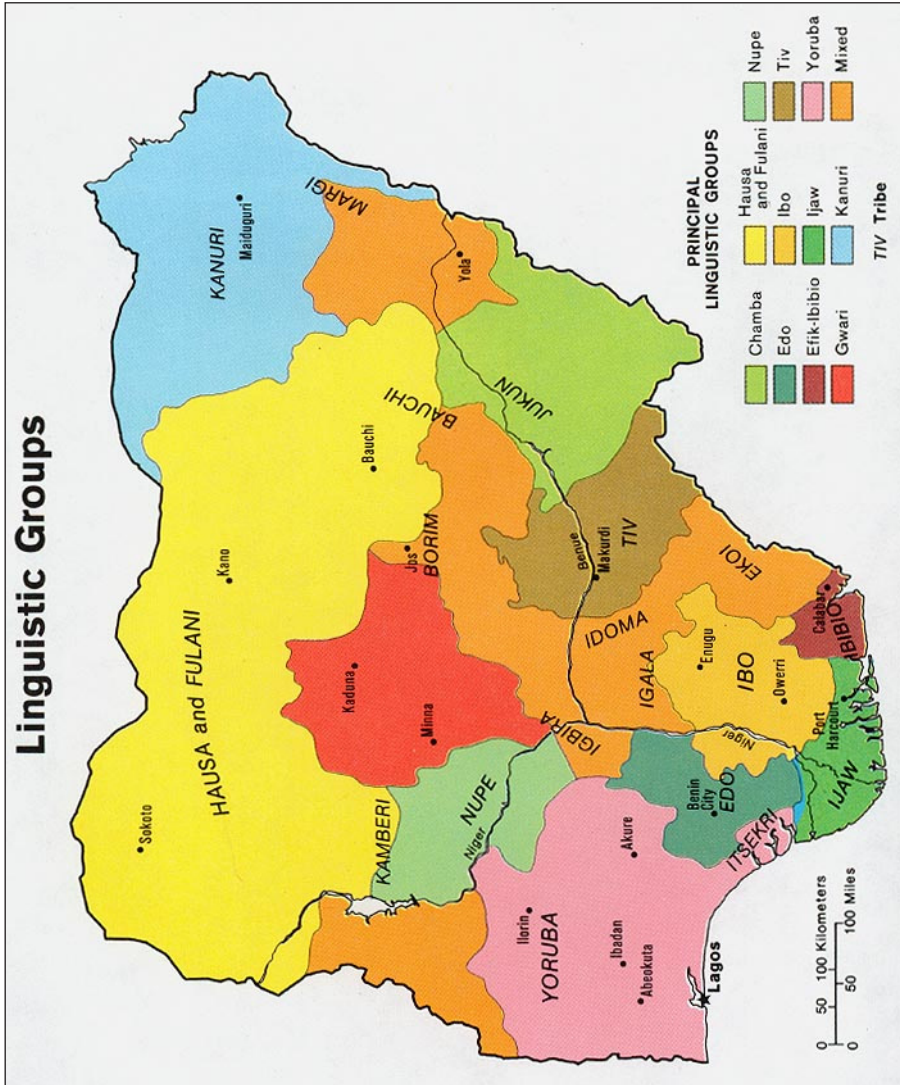
non-migration are summarized in Table 2. It is seen that rural out-migrants constitute 58 per cent of all persons of rural origin. Further, urban areas are not the primary destination of migrants from rural areas: 64 per cent of all migrants from rural areas have other rural areas as destinations, while only 36 per cent move to urban destinations. This finding is congruent with other findings in sub-Saharan African (Oucho 1998; Chattopadhyay *et al.* 2006).

### ***Bivariate analysis***

The bivariate relationships between the independent variables and rural out-migration are presented in Table 3. It is seen that males and females are fairly distributed in all migration categories, with a slight dominance of females in rural–urban migration. Muslims proportionally dominate rural non-migrants and rural–rural migration. However Christians constitute 70 per cent of rural–urban migrants. This result



Figure 1 Geographic location of Nigeria's major ethno-linguistic groups



Source: Courtesy of the University of Texas Libraries, The University of Texas at Austin <[http://www.lib.utexas.edu/maps/africa/nigeria\\_linguistic\\_1979.jpg](http://www.lib.utexas.edu/maps/africa/nigeria_linguistic_1979.jpg)>.

**Table 2 Rural out-migration processes in Nigeria, 1993**

Pattern of migration	Rural-origin population <sup>a</sup>	% of rural-origin population	% of rural out-migrants
Rural–urban	9,594	21.5	37.04
Rural–rural	16,311	37.1	62.96
Rural non-migrant	18,656	41.7	–
<b>Total</b>	<b>44,561</b>	<b>100.0</b>	<b>100.00</b>

a Survey population, aged 15+.

Source: Migration and Urbanization Survey, 1993.

is related to the marked ethnic variation in migration outcomes. The Hausa-Fulani are overrepresented among non-migrants, as well as rural–rural migrants. The Igbo-Ibibio are overrepresented among rural–urban migrants. The Yoruba share a similar migration pattern to the Hausa-Fulani with higher propensities for non-migration and rural–rural migration. While the Kanuri-Shua Arabs are overrepresented among non-migrants, the Nupe-Kamberi-Gwari ethnic groups are predominantly rural–rural migrants. The Tiv-Igala-Idoma and the Urhobo-Isoko-Edos indicate high propensities for rural–urban migration.

In terms of region of current residence, 32 per cent of rural non-migrants are resident in the North East region, with another 22 per cent resident in the South West. Rural–rural migrants are evenly distributed across the country, though they are slightly more concentrated in the West Central and South West regions. The majority of rural–urban migrants are resident in the South East and West Central regions: 30 and 28 per cent respectively.

The age distributions show that rural non-migrants are more likely than migrants to be young (15–29) or old (60+). Rural–urban migrants are particularly concentrated in the 30–44 and 45–59 age groups, reflecting cumulated past migration. Related to age, non-migrants are disproportionately never-married and previously-married. Rural–urban migrants are more likely to be never-married than rural–rural migrants.

The least educated constitute the majority among non-migrants and rural–rural migrants, though the level of educational attainment is higher for rural–rural migrants. In contrast, rural–urban migrants have much higher educational attainment, showing that people with higher education are more likely to choose rural–urban migration than any other migration option. While a greater proportion of both rural–rural and rural–urban migrants are employed, compared with non-migrants, the urban-destination employment advantage over rural destinations may have become too narrow.

Small households are overrepresented among rural–urban and rural–rural migrants. Large households are overrepresented among non-migrants and underrepresented among rural–urban migrants. Related to household size, heads of households are over-represented among migrants, particularly rural–urban migrants. Persons who are marginally or not related to the head of household are most likely

**Table 3** Percentage distribution of migration status by background characteristics

Variable	Rural non-migrants	Rural-rural migrants	Rural-urban migrants	Total
<b>Sex***</b>	–	–	–	–
Male	50.1	51.1	53.4	51.2
Female	49.9	48.9	46.6	48.8
<b>Religion***</b>	–	–	–	–
Muslim	56.1	54.0	29.5	49.6
Christian	39.9	44.0	70.2	47.9
Animist/other	4.0	2.0	0.3	2.5
<b>Ethnic origin***</b>	–	–	–	–
Hausa-Fulani	35.4	35.1	15.3	30.9
Yoruba	15.2	16.1	8.5	14.1
Igbo-Ibibio	21.4	21.9	40.1	25.6
Kanuri-Shua Arab	5.8	3.8	0.5	3.9
Tiv-Igala-Idoma	9.2	7.8	20.4	11.1
Urhobo-Isoko-Edo	4.1	1.6	9.1	4.3
Nupe-Kamberi-Gwari	2.0	4.9	2.9	3.3
Other Nigerian	6.8	8.9	3.2	6.8
<b>Destination***</b>	–	–	–	–
North West	8.7	13.9	6.8	10.2
North East	31.8	18.7	10.3	22.3
West Central	14.4	18.2	28.4	18.8
East Central	6.9	12.1	9.8	9.4
South West	22.2	20.2	15.0	20.0
South East	15.9	16.9	29.7	19.2
<b>Age group***</b>	–	–	–	–
15–29	46.9	43.3	39.4	44.0
30–44	27.5	33.3	39.9	32.3
45–59	14.6	15.0	16.0	15.1
60+	10.9	8.4	4.6	8.6
<b>Education***</b>	–	–	–	–
< Primary	59.6	59.2	24.8	52.0
Full primary	27.3	24.1	29.9	26.7
Full secondary	10.3	11.8	29.2	14.9
Higher education	2.7	4.9	16.1	6.4
<b>Marital status***</b>	–	–	–	–
Never married	31.9	23.0	25.1	27.2
Currently married	62.2	72.0	71.3	67.7
Previously married	5.9	5.0	3.6	5.1
<b>Employment status***</b>	–	–	–	–
Employed	59.2	67.4	69.3	64.4
Unemployed	24.1	23.8	20.1	23.1
Student	16.7	8.8	10.6	12.5
<b>Household size***</b>	–	–	–	–
1–5	42.6	51.8	52.1	48.1
6–10	40.4	37.2	42.2	39.6
11+	16.9	10.9	5.7	12.3
<b>Relationship to head***</b>	–	–	–	–
Head	31.4	37.7	46.6	37.0
Spouse	30.5	35.9	31.7	32.8
Son/daughter	30.4	18.6	8.3	21.3
Non/other relative	7.6	7.8	13.4	8.9
<b>Total</b>	n=18, 656	n=16, 311	n=9, 594	N=44, 561

\*\*\* $\chi^2$  tests,  $p < 0.001$ .

to be rural–urban migrants. These outcomes reflect particularly the differing migration experiences of migrant heads and their family members (spouses and children), pointing perhaps to the tendency of a husband to migrate ahead of members of his household.

### *Multivariate analysis*

This analysis evaluates the association between each of the independent variables and rural out-migration while controlling for the effects of all other variables in the model. Two multinomial logistic regression models are executed. Model 1 is restricted to the four antecedent variables; Model 2 also includes all the time-variant covariates. The results are presented in Table 4. The direction and significance of the relationships between migration and the antecedent independent variables in the two models are virtually the same. The following discussion refers to Model 2.

Net of the effects of other covariates, there is no consistent association between gender and rural out-migration in Nigeria. While males are 19 per cent more likely to be rural–rural migrants, there is no statistically significant gender difference in rural–urban migration. This outcome fits the selectivity pattern of other findings in rural–rural migration in developing countries which appears to evolve from the structure of employment opportunities available in rural destinations: farming, mining and labour-intensive endeavours. The rural–urban outcome is also consistent with the observed decrease in the sex ratio in cities throughout Africa (Peil 1985). While migration for employment is a significant reason for female migration in Nigeria, joining a migrant spouse is the most important reason (Watts 1984; NISER 1997).

Religion stands out as a significant predictor of migration propensities. As expected, Christians are significantly more likely to be rural–rural and rural–urban migrants than Muslims. The plausible explanation identified above concerns movement restriction practices associated with Muslims in Northern Nigeria.

In terms of the extent to which ethnicity matters, the Hausa-Fulani are significantly more likely to be rural–rural migrants when compared with all other ethnicities except the Nupe-Kamberi-Gwari. The dominance of the Hausa-Fulani in rural–rural migration can be attributed to the nature of economic activities associated with the group. Survey data indicate that they constitute over 30 per cent of farmers in the country, an occupation which is predominantly cattle-rearing. The same can be said of the Nupe-Gwari-Kamberi whose region of origin in central Nigeria is largely associated with tremendous agricultural resources and production.

For rural–urban migration the pattern changes dramatically: most ethnic groups are significantly more likely to be rural–urban migrants than the Hausa-Fulani. A notable exception is the Kanuri-Shua-Arabs, a political minority, representing a distinct group in North Eastern Nigeria built around the pristine Kanem-Bornu empire state, which was and remains a contending centre of Islamic civilization and influence. Despite a dry and harsh environment due to proximity to the Sahara desert, the area is reputed to be an oasis of beauty, serenity and peace relative to other areas in Northern Nigeria. The group's relationship with the dominant Hausa-Fulani in the core north has been a mix of separatism (as in the Kanuri demand for a separate state in the 1950s and 1960s and party politics in the Second Republic), accommodation (as in party politics in the First Republic), and struggles for supremacy (Osaghae 1998). The region's economic mainstay is agriculture, which involves cattle-rearing and a massive irrigation-supported farming. Given these factors, it is logical that migration

**Table 4** Multinomial logistic regression models predicting rural out-migration to rural and urban destinations

	Model 1				Model 2			
	Rural-rural odds ratio	SE	Rural-urban odds ratio	SE	Rural-rural odds ratio	SE	Rural-urban odds ratio	SE
<b>Sex</b>								
Male	1.00	–	1.00	–	1.00	–	1.00	–
Female	0.96*	.02	0.88***	.03	0.81***	.04	1.09	.05
<b>Religion</b>								
Muslim	1.00	–	1.00	–	1.00	–	1.00	–
Christian	1.35***	.03	1.99***	.04	1.40***	.03	1.52***	.05
Animist/other	0.70***	.08	0.09***	.20	0.72***	.08	0.10***	.20
<b>Ethnic origin</b>								
Hausa-Fulani	1.00	–	1.00	–	1.00	–	1.00	–
Yoruba	0.46***	.07	2.05***	.09	0.47***	.07	1.56***	.09
Igbo-Ibibio	0.42***	.08	6.46***	.09	0.44***	.08	4.29***	.10
Kanuri-Shua Arab	0.93	.06	0.32***	.15	0.86**	.06	0.26***	.15
Tiv-Igala-Idoma	0.35***	.07	3.37***	.08	0.37***	.07	2.68***	.08
Urhobo-Isoko-Edo	0.18***	.10	14.42***	.10	0.18***	.10	9.23***	.11
Nupe-Kamberi-Gwari	1.06	.08	2.69***	.11	1.01	.09	1.95***	.11
Other Nigerian	0.44***	.07	0.32***	.10	0.42***	.07	0.30***	.11
<b>Destination</b>								
North West	1.00	–	1.00	–	1.00	–	1.00	–
North East	0.37***	.04	0.45***	.06	0.39***	.04	0.45***	.06
West Central	1.38***	.07	0.73***	.08	1.57***	.07	0.87	.09
East Central	1.91***	.07	1.90***	.09	1.96***	.07	2.22***	.10
South West	1.18*	.07	0.15***	.09	1.40***	.07	0.20***	.10
South East	1.17*	.08	0.23***	.10	1.34***	.08	0.34***	.10
<b>Age group</b>								
15–29					1.00	–	1.00	–
30–44					0.90***	.03	1.12**	.04
45–59					0.77***	.04	0.95	.06
60+					0.58***	.05	0.48***	.07
<b>Education</b>								
< Primary					1.00	–	1.00	–
Full primary					1.11***	.032	2.55***	.04
Full secondary					1.30***	.041	5.96***	.05
Higher education					1.90***	.062	10.57***	.07
<b>Marital status</b>								
Never married					1.00	–	1.00	–
Currently married					1.18***	.05	0.82***	.06
Previously married					1.11	.07	0.64***	.09
<b>Employment status</b>								
Employed					1.00	–	1.00	–
Unemployed					1.04	.03	1.47***	.04
Student					0.64***	.05	1.40***	.06
<b>Household size</b>								
1–5					1.00	–	1.00	–
6–10					0.90***	.03	1.08	.03
11+					0.71***	.04	0.46***	.06
<b>Relationship to head</b>								
Head					1.00	–	1.00	–
Spouse					1.08	.05	0.78***	.06
Son/daughter					0.58***	.05	0.07***	.07
Non/other relative					0.99	.05	0.74***	.07
–2Log-likelihood (d.f.)				5487.0 (30)	31107.1 (60)			

N = 44,561; \* p &lt; 0.05, \*\* p &lt; 0.01, \*\*\* p &lt; 0.001.

is very low among the group relative to other groups. However rural–rural migration within the region, to the shores of Lake Chad and the wetter areas, is significant (Osaghae 1998).

Two other profound results on ethnic differentials are identified. The Urhobo-Edo-Isoko are 9.4 times and the Igbo-Ibibio 4.4 times as likely as the Hausa-Fulani to be rural–urban migrants. These outcomes corroborate the suggestion of a greater tendency to migrate among some ethnic groups than others (Zachariah and Conde 1981; Brockerhoff and Hongsook 1993). The migration of the Igbo-Ibibio can be explained historically, culturally and geographically. Chukwuezi (2001) linked the historical impact of the Nigerian civil war with spurring the outward-directedness of the Igbo into the private sector, specializing in trading that takes them to all parts of the country. Linked to this is the culture of kinship, which Smith (1999) identified above all other factors as the thread that links particular rural and urban communities in Nigeria and connects individuals and communities with access to resources and opportunities to the state and the wider economy. Part of this kinship network among the Igbo operates through kin-base business apprenticeship, thus linking urban business success to labour recruitment from the rural home base, and delivering manpower training for Igbo society (Chukwuezi 2001). The geographic explanation is related to the high population density in the Igbo region of origin, which puts pressure on land resources. This is exacerbated by the economic neglect and stagnation in the Igbo-Ibibio region following government investment patterns after the civil war. Limited opportunities for wage employment, due to the low level of industrialization and underdevelopment in the organized private sector, make the Igbo region economically unattractive, engendering the out-migration of these groups (NISER 1997).

For the Urhobo-Isoko-Edo, Makinwa (1981) suggested an earlier history of high levels of rural–urban migration in their local region. The present analysis places the migration propensity of the group on a national scale, and indicates a far higher rural out-migration propensity than any other ethnic group. While a full explanation is beyond the scope of this paper, it is instructive to note that the regions of origin of the groups include substantially the Niger Delta, which remains a hotbed of youth militancy arising from high levels of poverty in the face of huge investments in oil exploration and exploitation. This may have engendered rural out-migration, more so as oil exploration and exploitation lead to environmental degradation that impairs agricultural enterprises including fishing.

On the attractiveness of the regions to migrants, the results reveal that the North East is least likely to attract rural–rural migrants, while the East and West Central regions are the most likely to do so. Most migrants identified in these central regions are farmers who migrate to exploit the enormous agricultural resources. It is noteworthy that this area is referred to as the breadbasket of Nigeria. The unattractiveness of the North East may be related to unfavourable ecological forces engendered by drought and desertification. Again, the advantage of the North West over the North East among rural–rural migrants may be related to the region's ecological advantage for agriculture. Research has identified the agricultural potential of the areas around the Sokoto-Rima river basin which not only have water resources, generally scarce in the region, but also have benefited from huge government-sponsored irrigation programs (Udoh 1997). The spread across regions in rural–rural migration not only confirms the importance of such migration across the country, but also may under-

line migration transition from urban to rural destinations following an appreciable modernization of rural economic sectors (Ohagi 1995; Chukwuezi 2001).

For rural–urban migration, the East Central region is also the most attractive region of residence, followed by the North West and the West Central regions. The attractiveness of the central regions in rural–urban migration may be plausibly linked to the transfer of Nigeria’s federal capital to Abuja in 1991, together with the creation of new states and their administrative capitals. It is important to observe that the South West, which includes Lagos, the largest and fastest-growing agglomerate in Africa, is significantly less likely to be the region of residence for rural–urban migrants. This lack of attractiveness relative to other regions contradicts the patterns of mega-city and primate-city development that are presumed to characterize developing countries. However, the region is attractive compared with North West for rural–rural migrants. Again, this destination shift diffuses even further the concern for population concentration and over-urbanization occasioned by rural–urban migration, particularly in Nigeria. This outcome is consistent with suggestions that the pace of urban growth in Africa declined in the 1980s and 1990s, reflecting among other factors a slowing-down of migration to urban destinations and a huge migration towards rural destinations by both rural–rural and urban–rural migrants (Bocquier and Traore 1998; Oucho 1998; Litchfield and Waddington 2003; Montgomery *et al.* 2003; Tabutin and Schoumaker 2004; Chattopadhyay *et al.* 2006). In an Ethiopian study, Berhanu and White (2000) show that proportions of migrants going to Addis Ababa and other urban centres declined in the 1970s. This decline is attributed to the fact that the opportunities that were thought to exist in these centres were no longer strong enough to attract distant migrants. Severe urban housing shortages and introduction of urban services to regional centres are also cited as important factors occasioning these changes. It is plausible that rural destinations have become centres of counter-attraction, significantly altering migration destination equations in Nigeria.

Turning to examine the time-variant covariates, Model 2 indicates that age is significantly related to rural out-migration. For rural–rural migration the result shows an inverse relationship with age, with the youngest age group (15–29) having the highest likelihood to migrate. In rural–urban migration, we have a slightly inverted curvilinear relationship. The middle-aged (30–44) are marginally more likely to migrate than the youngest age cohort, while the oldest group has the lowest probability of being migrants to urban areas. These outcomes, which indicate a slight migrant concentration among the youngest and middle-aged, are consistent with findings from most sub-Saharan African countries (Oucho 1998), which indicate that the younger are more likely to migrate.

The association between education and rural out-migration is highly significant for both rural–rural and rural–urban migration. The odds of out-migration increase as the level of education increases from primary to higher levels, and this relationship is much stronger for rural–urban than for rural–rural migration. While the likelihood of rural–rural migration for the highest educated when compared with those who have less than primary education is in the ratio 2:1, the ratio in rural–urban migration is 10:1. The explanation for these patterns may be found in the different educational requirements of the migration destinations. While education is critical for urban employment and survival, this may not strictly be said of life and employment in the rural economy. Urban centres in much of the developing world have a core of modern economic activity, and those who seek upward social mobility which

is highly associated with higher education may find the best opportunities in the city (Lowry 1990; Chen *et al.* 1998). Attracting highly-valued human resources therefore may need to be preconditioned by the creation of an economic and social environment that will engender it. This may also explain the positive role of education in rural–rural migration, given the modernization of rural economies with economic opportunities for employment of the highly educated in their modern developed nodes (Oucho 1998). The economic role of migration may therefore be fundamental in understanding the relationship between migrant destination and educational attainment in Nigeria.

In rural–rural migration those currently married are significantly more likely than the never-married to migrate. In rural–urban migration, the hypothesis that singles are more likely to migrate is strongly supported. This corroborates earlier findings (Martine 1975; Zachariah and Conde 1981; Oucho and Gould 1993). The less-attractiveness of rural destinations for the single is perhaps due to the dominance of farming-related economic activities; this may also account for the higher propensity of the currently married to engage in rural–rural migration.

The result shows that while students are significantly less likely to migrate to rural destinations, they are more likely to migrate to urban destinations. This reflects the primary urban loci of educational infrastructure. There is also a significant propensity for rural–urban migrants to be unemployed. The economic stagnation of the 1980s adversely affected urban areas as the downsizing of the workforce in the public sector through retirements and retrenchments yielded a sizable number of retired but not tired urban dwellers. NISER (1997) confirms the preponderance of the unemployed among rural–urban migrants, pointing out that a large number of those who migrate to cities to avoid rural poverty often remain unemployed for several months or even years, resulting in the high incidence of hawkers and beggars at traffic bottlenecks, and rising crime rates in Nigerian cities.

In both rural–rural and rural–urban migration, the result shows that as current household size increases, the propensity to be a migrant decreases: the likelihood of being a migrant is higher for members of smaller households. This finds explanation in the human capital or cost–benefit approach to migration, which suggests that people with greater ties to a location and for whom the economic and psychological costs of relocation are higher are less likely to move (White *et al.* 1995). Smaller households are also associated with weaker location-specific advantages to stay (Fischer, Martin and Straubhaar 1997). This makes out-migration more attractive to smaller households despite the uncertainties of moving to a new location.

Finally, heads of households are more likely to migrate to rural areas than their children, partly reflecting family formation after migration. Moreover in rural–urban migration, household heads are more likely to be migrants than spouses, children and other relatives. This is consistent with the perspective that migration is a family survival strategy and families seek to diversify their risk and improve their chance of survival (Lockwood 1990; Trager 1995). Studies in southeastern Nigeria confirm that male migrants who cannot afford to maintain their immediate families at the destination, leave them in the place of origin, while sending remittances for their maintenance (Gugler 1971, 1991). That spouses are less likely than heads to be rural–urban migrants supports the hypothesis that spouses often join their husbands after they are settled with housing and employment. This finding is supported by other studies in different parts of the country on the relationship between marriage and



migration (Watts 1984; Hollos 1991; Trager 1995), and is consistent with findings in Senegal, Mali, Togo, Ethiopia, and other African countries (Gugler and Ludwar-Ene 1995; Casacchia *et al.* 2001).

## Conclusion

This study focused on simultaneously modelling correlates of rural–rural and rural–urban migration relative to rural non-migrants in Nigeria. The analysis found evidence that ethnic origin is an important determinant of rural out-migration. Moreover it gives some comparative insight into the migration propensity of each group. Besides the much studied outward migration of the Igbo, the study identified a much higher, but little known, rural out-migration propensity among the Urhobo-Isoko-Edo. This underlines the need for further work on the mechanisms that account for the significant variation in migration propensities among Nigeria’s diverse ethnic groups.

A quantitative dominance of migration to other rural destinations was identified, consistent with findings in other countries in sub-Saharan Africa. This underlines the need for research and policy initiatives to sustain rural development. However, it is equally reasonable under the circumstances of urban areas in the country, to focus concerted attention on better management of Nigerian urban areas to address likely economic and social deterioration.

Contrary to the expectation of migration concentration towards a specific region, there is migration spread across most regions of the country and to rural and urban destinations. In particular the results indicate a lower propensity for rural–urban migration to the South West where Lagos, the prime city in Nigeria, is located. This outcome contradicts the patterns of mega-city and primate-city development that are often predicted for developing countries. It speaks contrary to population concentration towards one metropolitan city, leading to what is termed ‘overurbanization’ and unmanageable agglomerates. Perhaps such a trend may have been reversed as part of what Kuroda (1977) termed the migration transition. One plausible explanation for the even spread of migration may be related to the 36-state federal political structure and 776 local government areas, which simultaneously opened up political and economic opportunities in all the regions of the country. That rural–urban migration is not as prominent as rural–rural migration shows that people may not be attracted by the bright lights of cities but may rather be looking for economic sustenance. This is an area of policy importance, as it is already known that policies to deter urban growth caused by migration are difficult to implement in the absence of coercion by governments (Brockerhoff 1998). According to the economic-survival perspective of migration, the alternative strategy is the even development of the regional economies, more so in the rural sector. This will create and sustain centres of counterattraction, which will pull populations to productive regions, as this analysis suggests is already happening.

The findings on rural–rural migration demonstrate the need for a review of the dualistic development models, which envisaged a rather homogeneous rural sector within which migration was seen to confer no real benefit (Oucho 1998). The evidence from this study suggests that while some rural areas are losing population to out-migration, others are attracting high-level productive human resources. This calls for theoretical development to redefine the rural label, which traditionally

depicts homogeneity, a lack of modern economic activity and a lack of professionalism.

One major use of this analysis, despite data limitations, is the ability to identify groups prone to higher levels of rural–rural and rural–urban migration nationally and simultaneously. The relevant factors need to be further analysed with new data to enhance our understanding of current migration processes in Nigeria.

Following the human-capital perspective on migration, education remains a dominant factor. However, the quantitative relevance of rural–rural migration, and the need to understand the mechanisms through which religion and ethnicity play roles in migration, also call for further and closer research attention. This is critical for Nigeria in the context of the burdens and challenges to nation building posed by religious dichotomy and ethnic heterogeneity.

### Acknowledgment

The author completed this paper while a Research Intern at the African Population and Health Research Center, Nairobi and a Senior Lecturer at Abia State University, Uturu, Nigeria.

### Note

- 1 In October 1996, Nigeria became a 36-state federation following the creation of six new states by the federal military government.

### References

- Abumere, S.I. 1981. Population distribution policies and measures in Africa south of the Sahara: a review. *Population and Development Review* 17(3): 421–433.
- Adepoju, A. 1983. *Selected Studies on Dynamics, Patterns and Consequences of Migration: Medium-Sized Towns in Nigeria*, Vol. 4. Paris: UNESCO.
- Adepoju, A. 1986. *Rural Migration in Nigeria*. Ile-Ife: Department of Demography and Social Statistics, University of Ife.
- Ajakaiye, D.O. and V.A. Adeyeye. 2001. *The Nature of Poverty in Nigeria*. NISER Monograph Series. No. 13. Ibadan: Nigeria Institute of Social and Economic Research.
- Amin, S. 1974. *Modern Migrations in West Africa*. London: Oxford University Press.
- Andersson, J.A. 2001. Mobile workers, urban employment and ‘rural’ identities: rural–urban networks of Buhera migrants, Zimbabwe. Pp. 89–106 in M. de Bruijn, R. Van Dijk and D. Foeken (eds), *Mobile Africa: Changing Patterns of Movement in Africa and Beyond*. Leiden: Brill.
- Baker, J. and T.A. Aina. 1995. *The Migration Experience in Africa*. Uppsala: Nordiska Africainstitutet.
- Bartle, P.F.W. 1981. Cyclical migration and extended community: a West African example. Pp. 105–139 in R.B. Mandal (ed.), *Frontiers in Migration Analysis*. New Delhi: Concept Publishing Co.
- Berhanu, B. and M. White. 2000. War, famine and female migration in Ethiopia, 1960–1989. *Economic Development and Social Change* 49 (1): 91–113.
- Bilsborrow, R.E. 1998. The state of the art and overview of chapters. Pp. 1–56 in R.E. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. New York: UNFPA and Kluwer Academic Publishers.

- Black, R., R. King and R. Tiemoko. 2003. Migration, return and small enterprise development in Ghana. *Sussex Migration Working Paper 9*, University of Sussex, Brighton.
- Bocquier, P. and S. Traore. 1998. Migration and urbanization in West Africa: methodological issues in data collection and inference. In R.E. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. New York: UNFPA and Kluwer Academic Publishers.
- Brockerhoff, M. 1998. Migration and fertility transition in African cities. Pp. 357–390 in R.E. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. New York: UNFPA and Kluwer Academic Publishers.
- Brockerhoff, M. and E. Hongsook. 1993. Demographic and socioeconomic determinants of female rural to urban migration in Sub-Saharan Africa. *International Migration Review* 27(3): 557–577.
- Buijs, G. 1993. Introduction. Pp. 1–20 in G. Buijs (ed.), *Migrant Women: Crossing Boundaries and Changing Identities*. Oxford: Berg.
- Casacchia, O., M. Crisci and C. Reynaud. 2001. Internal migration in Ethiopia. Pp. 53–85 in A. Golini et al. (eds), *Migration and Urbanization in Ethiopia, with Special Reference to Addis Ababa*. Rome: Institute for Population Research – National Research Council. <<http://www.irpps.cnr.it/etiopia/sito/progetto3.htm>>. Accessed: 17 January 2006.
- Chattopadhyay, A., M.J. White and C. Debpuur. 2006. Migrant fertility in Ghana: selection versus adaptation and disruption as causal mechanisms. *Population Studies* 60(2): 1–15 (forthcoming).
- Chen, N., P. Valente and H. Zlotnik. 1998. What do we know about recent trends in urbanization? Pp. 59–88 in R.E. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. New York: UNFPA and Kluwer Academic Publishers.
- Chukwuezi, B. 2001. Through thick and thin: Igbo rural–urban circularity, identity and investment. *Journal of Contemporary African Studies* 19(1): 55–66.
- Eyoh, D. 1998. Through the prism of a local tragedy: political liberalism, regionalism and elite struggles for power in Cameroon. *Africa* 68(3): 339–359.
- Fischer, P. A., Reiner Martin and Thomas Straubhaar. 1997. Should I stay or should I go? Pp. 49–90 in T. Hammar et al. (eds), *International Migration, Immobility and Development: Multidisciplinary Perspectives*. Oxford and New York: Berg.
- Geschiere, P. and J. Gugler. 1998. The urban–rural connections: changing issues of belonging and identification. *Africa* 68(3): 309–319.
- Goheen, M. and C. Fisiy. 1998. Power and the quest for recognition: neo-traditional titles among the new elite in Nso, Cameroon. *Africa* 68(3): 383–402.
- Goldstein, S. 1984. Circulation in Southeast Asia. In M. Chapman and R.M. Prothero (eds), *Circulation in Population Movement*. Boston: Routledge and Kegan Paul.
- Guest, P. 1998. Assessing the consequences of internal migration: methodological issues and a case study on Thailand based on longitudinal household survey data. Pp. 275–318 in R.E. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. New York: UNFPA and Kluwer Academic Publishers.
- Gugler, J. 1971. Life in a dual system: Eastern Nigerians in towns 1961. *Cahiers d'Etudes Africaines* 11: 400–421.
- Gugler, J. 1991. Life in a dual system revisited: urban–rural ties in Enugu, Nigeria, 1961–1987. *World Development* 19(5): 399–409.
- Gugler, J. 2002. The son of a hawk does not remain abroad: the urban–rural connection in Africa. *African Studies Review* 45 (1): 21–41.
- Gugler, J. and W.G. Flanagan. 1978. Urban rural ties in West Africa: extent, interpretation, prospects and implications. *African Perspectives* 1: 68–78.
- Gugler, J. and G. Ludwar-Ene. 1995. Gender and migration in Africa south of the Sahara. Pp. 257–268 in J. Baker and T.A. Aina (eds), *The Migration Experience in Africa*. Uppsala: Nordiska Afrikainstitutet.

- Hogan, D.P. and Belay Biratu. 2004. Social identity and community effects on contraceptive use and intentions in Southern Ethiopia. *Studies in Family Planning* 35(2): 79–89.
- Hollos, M. 1991. Migration, education and the status of women in Southern Nigeria. *American Ethnologist* 93: 852–897.
- Hugo, G.J. 1994. Migration as a survival strategy: the family dimension of migration. In *Proceedings of the United Nations Expert Group Meeting on Population Distribution and Migration, Santa Cruz, Bolivia, 18–22 January 1993*. New York: United Nations.
- Kuroda, T. 1977. The role of migration and population distribution in Japan's demographic transition. *Papers of the East-West Population Institute* 46. Honolulu: East-West Center.
- Litchfield, J. and Hugh Waddington. 2003. Migration and poverty in Ghana: evidence from the Ghana Living Standards Survey. *Sussex Migration Working Paper 10*. Brighton: Sussex Centre of Migration Research, University of Sussex.
- Lockwood, V.S. 1990. Development and return migration to Rural Polynesia. *International Migration Review* 24(2): 347–371.
- Lowry, Ira. 1990. World urbanization in perspective. Pp. 148–176 in K. Davis (ed.), *Population Resources and Environment: Present Knowledge, Future Options*. Supplement to *Population and Development Review* 16.
- Makinwa, P.K. 1981. *Internal Migration and Development in Nigeria: Lessons From Bendel State*. Ibadan: Heinemann Educational Books (Nig.) Ltd.
- Martine, G. 1975. Volume, characteristics and consequences of internal migration in Colombia. *Demography* 12(2): 193–208
- Montgomery, M., R. Stern, B. Cohen and H. Reed (eds). 2003. *Cities Transformed: Demographic Change and Its Implications in the Developing World*. Washington DC: National Academy Press.
- Nigerian Institute of Social and Economic Research (NISER). 1997. *Nigeria Migration and Urbanization Survey 1993*. Ibadan.
- Nwankpa, E. 1998. This is the generation. In D. Dimoji (ed.), *This Is the Generation: Messages of Our Time*. Enugu: Intercrossers for Nigeria.
- Nyamnjoh, F. and M. Rowland. 1998. Elite associations and the politics of belonging in Cameroon. *Africa* 68(3): 320–337.
- Ohagi, J.E. 1995. Urban–rural migratory turnaround: implications for rural development in Eastern Nigeria. Ph.D dissertation, Department of Sociology, University of Ibadan.
- Olurode, L. 1995. Women in rural–urban migration in the town of Iwo in Nigeria. Pp. 289–302 in J. Baker and T.A. Aina (eds), *The Migration Experience in Africa*. Uppsala, Sweden: Nordiska Afrikainstitutet.
- Osaghae, E.E. 1998. Managing multiple minority problems in a divided society: the Nigerian experience. *Journal of Modern African Studies* 36(1): 1–24.
- Oucho, J.O. 1998. Recent internal migration processes in Sub-Saharan Africa: determinants, consequences and data adequacy issues. Pp. 89–120 in R.E. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. New York: UNFPA and Kluwer Academic Publishers.
- Oucho, J.O. and W.T.S. Gould. 1993. Internal migration, urbanization, and population distribution. Pp. 256–296 in K. A. Foote, K. H. Hill and L. G. Martin (eds), *Demographic Change in Sub-Saharan Africa*. Washington DC: National Academy Press.
- Peil, M. 1985. Changing structures: a democratic comparison. *Contemporary Urban Research* 10(2): 76–91.
- Pittin, R. 1984. Migration of women in Nigeria: the Hausa case. *International Migration Review* 18(4): 1293–1314.
- Potts, D. 1995. Shall we go home? Increasing urban poverty in African cities and the migration process. *Geographical Journal* 161(3): 245–264.
- Potts, D. 2000. Urban unemployment and migrants in Africa: evidence from Harare 1985–1994. *Development and Change* 31(4): 879–910.

- Santen, G. 1998. Islam, gender, and urbanisation among the Mafa of Northern Cameroon: the differing commitment to 'home' among Muslims and Non-Muslims. *Africa* 68(3): 403–424.
- Smith, D.J. 1999. Having people: fertility, family and modernity in Igbo speaking Nigeria. Ph.D Dissertation, Emory University, Atlanta.
- Tabutin, D. and B. Schoumaker. 2004. The demography of sub-Saharan Africa from the 1950s to the 2000s. A survey of changes and a statistical assessment. *Population* E 59: 457–556.
- Trager, L. 1995. Women migrants and urban–rural linkages in Southwestern Nigeria. In J. Baker and T.A. Aina (eds), *The Migration Experience in Africa*. Uppsala: Nordiska Africainstitutet.
- Trager, L. 1998. Home town linkages and local development in South Western Nigeria – whose agenda, what impact? *Africa* 68(3): 360–382.
- Twum-Baah, K.A., J.S. Nabila and A.F. Aryee (eds). 1995. *Migration Research in Ghana, Volume 1, Internal Migration*. Accra: Ghana Statistical Service.
- Udoh, R.K. 1997. Migration and urbanization in Nigeria. Pp. 91–106 in *Nigeria Migration and Urbanization Survey 1993*. Ibadan: Nigerian Institute of Social and Economic Research.
- United Nations Population Division. 2005. *World Population Prospects: The 2004 Revision*. New York.
- Watts, S. 1984. Marriage migration, a neglected form of long-term mobility: a case study from Ilorin, Nigeria. *International Migration Review* 17(4): 682–698.
- Weinstein, E. 2001. *Migration for the Benefit of All: Towards a New Paradigm for Migrant Labor*. International Migration Papers 40. Geneva: International Labour Office.
- White, J.M. and David P. Lindstrom. Forthcoming. Internal migration. In D. Poston and M. Micklin (eds), *Handbook of Demography*.
- White, J.M., Lorenzo Moreno and Shenyang Guo. 1995. The interrelation of fertility and geographic mobility in Peru: a hazards model analysis. *International Migration Review* 29: 492–514.
- Zachariah, K.C. and J. Conde. 1981. *Migration in West Africa: Demographic Aspects. A Joint World Bank OECD Study*. Oxford: Oxford University Press.
- Zlotnik, H. 1994. Expert Group Meeting on Population Distribution and Migration. *International Migration Review* 28(1): 171–204.