DECLARATION

I, Latifat Dasola Gbonjubola Ibisomi, declare that this thesis is my own original work. It is being submitted for the degree of Doctor of Philosophy in Demography and Population Studies of the University of the Witwatersrand, Johannesburg. To the best of my knowledge, it has not been submitted before in part or in full for any degree or examination at this or any other University.

…….

…….. day of ……., 2007.

DEDICATION

With humility, gratitude and love, to:

Ibrahim
Barakah
Fathullah
Sakinah

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All thanks, praise, glory and honour to the Lord of the Universe, Who created Man and taught him what he knew not, for yet another milestone.

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AIDS	Acquired Immune Deficiency Syndrome
APHRC	African Population and Health Research Council
ASFP	Age Specific Fertility Pattern
ASFR	Age Specific Fertility Rates
BFI	Baby Friendly Initiative
BLY	Birth last year
CEB	Children Ever Born
CODESRIA	Council for the Development of Social Research in Africa
DFID	Department for International Development (DFID)
DHS	Demographic and Health Survey
EA	Enumeration Area
EAs	Enumeration Areas
FCT	Federal Capital Territory, Nigeria
FGD	Focus Group Discussion
FGN	Federal Government of Nigeria
Fn	Natural Fertility
FOS	Federal Office of Statistics, Nigeria
Fw	Wanted fertility
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
Ip	Index of Fertility Preference Implementation
MCEB	Mean Children Ever Born
NDHS	Nigeria Demographic and Health Survey
NEEDS	National Economic Empowerment and Development Strategy
NGO	Non-Governmental Organization
NISH	National Integrated Survey of Households (NISH)
NPC	National Population Commission, Nigeria
NSFG	National Survey of Family Growth
OPEC	Organisation of Petroleum Exporting Countries
PAS	Population Analysis Spreadsheet
PDF	Proximate Determinants of Fertility
PF	Potential Fertility
PPR	Parity Progression Ratios
SPSS	Statistical Package for Social Scientists
TF	Total fecundity
TFR	Total Fertility Rates
UBE	Universal Basic Education, Nigeria
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFS	World fertility survey

ABSTRACT

While studies have indicated the onset of fertility transition in Nigeria as in most Sub-Saharan countries, no systematic attempt has been made to identify the factors responsible for this trend. Existing explanation tends to draw from the demographic transition theory without exploring the value of other key variables. One of these variables is the degree of preference implementation. This study explores the role of fertility preference implementation on the onset of fertility transition in Nigeria. The study estimated the extent to which couples have been able to implement their fertility preferences with a view to better understand the factors that are responsible for the fertility changes in the country.

This study was based on the socio-economic and microeconomic frameworks of fertility namely: the Bongaarts et al (1984) version and its Stover's reformulation (1998) of the proximate determinants of fertility and the Bongaarts (1993) supply-demand framework for the analysis of the determinants of fertility, respectively. The proximate determinant of fertility frameworks holds that all demographic, socio-economic, cultural, institutional, psychological, health and environmental factors (background variables) operate through the proximate or intermediate variables to affect fertility. The Bongaarts (1993) supply-demand framework posits that fertility (F) as measured by total fertility rate is an outcome of the interaction of supply of births (natural fertility), demand for births (wanted fertility) and degree of fertility preference implementation (an index, which measures the extent to which people have been able to implement their fertility preferences). The degree of preference implementation is in turn dependent on cost of fertility regulation and that of

unwanted childbearing. The husbands' family planning attitude and desired number of children were incorporated into the latter framework to recognize and bring out the crucial roles of the males in eventual fertility outcomes.

The 1990, 1999 and 2003 Nigeria Demographic and Health Survey (NDHS) data sets for men, women and couples were used. The methodology of the three NDHS is not too different from each other. They are nationally representative cross-sectional survey of women between the ages of 15 and 49 in 1990, 1999 and 2003 and men between 15 and 64 in 1999 and 15-59 in the 2003 survey. Twenty-four focus group discussions were also conducted among the sexes across the country to gain better insight and understanding into the issues examined. Focus group research is based on facilitating an organized discussion with a group of individuals selected because they were believed to be representative of some class. The discussion is used to bring out insights and understandings in ways, which cannot be captured by questionnaire. The focus group discussions (FGD) are also national in scope. Participants were drawn from the Northern, South Eastern and South Western regions of the country.

The study population consisted of 8,781; 8,199 and 7,620 women aged 15-49 interviewed during the 1990, 1999 and 2003 NDHS, respectively. In addition, 2,584 men aged 15-64 and 2,346 men aged 15-59 interviewed during the 1999 and 2003 NDHS, respectively were used. One thousand, one hundred and sixty-eight (1,168) couples' records derived from the 2003 NDHS and 1,280 (constructed) couples' records for 1999 were also used. A total of eighty-nine (89) men and eighty-five (85) women participated in the twenty-four (24) focus group discussion sessions.

To achieve the research objectives, a wide range of analysis was carried out in the study. In the estimation of all means and medians, the Kaplan Meier survival analysis is used. Some other estimations were done using specific formulations developed for the purpose. Thirty-six binary logistic regression models were also fitted to bring out spousal influences on each other's attitude to family planning and desired number of children. Lastly, the focus group discussion sessions were analysed by themes to give better understanding into the issues examined. Five hypotheses were tested in the study.

There was a general decline in the age specific fertility rates (ASFR) between 1990 and 2003 in all the age groups. This is reflected in the total fertility rate (TFR) for the country as a whole, which declined from 6.32 in 1990 to 5.82 in 2003. The national average masks large variations in the fertility levels between subgroups in the country. The women in the North generally have higher number of children than their Southern counterparts. This is particularly marked in the early childbearing years. Fertility levels are also higher among rural residents compared to those in the urban area. Substantial differences equally exist in the fertility levels of women by their level of education with fertility being negatively associated with level of education. A comparison of the past and current fertility also confirms that fertility has been on the decline in the country.

Age at first and last births have been declining and the differentials between the two show that the number of years spent in childbearing is decreasing. Non-marital birth was also found to be increasing over time but at a level below six percent and with no identifiable educational or regional pattern. Teenage motherhood is equally declining

both nationally and regionally and is relatively high among teenagers from the rural area and those with less than secondary level of education.

The proportion of women that progress from one parity to another decreases as parity increases and no socially imposed optimum number of children is observed (although there is a political four-child policy in existence) among the Nigerian women. Apart from age of mother at the birth of child, which has a positive association with median length of birth interval and the surviving status of preceding child (which is understandably shorter if the preceding child is dead), length of birth interval by other characteristics shows no significant variation across sub groups.

Age at first marriage remained between 16 and 17 over the years. This is lower for respondents from the rural, the North and for those with less than secondary level of education. For age at first sexual intercourse, it increased over time in the age groups. Respondents from the North and rural area however initiated sexual intercourse earlier and age at first sexual intercourse increases with level of education.

Among the proximate determinant indices, the index of postpartum insusceptibility has the greatest inhibiting effect, followed by that of marriage/sexually active, contraception and then sterility. In the Bongaarts model, the indices reduced total fecundity by 12.46 births in the total sample of married women in 1990; 8.90 births in 1999 and 9.45 births in 2003 while the indices jointly reduced potential fertility by 17.69 births in the total sample of sexually active women in 1990; 16.06 births in 1999 and 16.50 births in 2003 in the Stover's reformulation.

The number of children desired marginally increased over time. This could have been affected by the high proportion of non-response especially in the 1990 survey. The desired number of children is positively related to age and number of surviving children while it is negatively related to education. Number of children desired is found to be lower among urban residents and respondents from the Southern part of the country and highest among currently married women. The focus group discussion sessions also show that people have been revising the number of children they are having downward due to 'supposed' economic hardship in the country and the need to give quality education, training and care to the children. However, their desire remain high.

The extent, to which fertility preference is achieved, is generally high and increasing over the years in the total sample of married women with some variations in the sub groups. It is higher in the urban compared to the rural; increases with level of education, lowest in the North East and highest in the South West. Surprisingly, the extent to which concordant couples achieve their fertility preferences was lower than that of discordant couples. The fitted logistic models showed no evidence of the husbands having an upper hand in the number of children desired by the wives or on their attitude to family planning and vice versa. While the husbands play greater role in fertility decision-making in households, who has the upper hand between the husbands and the wives in actual fertility outcome was not conclusive in this study.

Knowledge about family planning methods and their availability is high. The costs of fertility regulation in terms of its social, economic and in particular health components as well as obstacles to the use of fertility regulation methods were

highlighted. The psychological, health, social and more frequently the economic costs of unwanted childbearing were also brought out. The responses to questions on pregnancy wantedness was also validated in this study as people generally acknowledged the circumstance of the birth of additional child(ren) as accidental.

Two of the five hypotheses proposed were confirmed. One, the hypothesis that 'the degree of fertility preference implementation is higher in the south than in the North, higher among urban residents compared to the rural residents and increases as the level of education increases' is supported by the results of the study. Two, that 'the degree of fertility preference implementation is increasing and playing an increasing (a more positive) role in fertility changes in Nigeria' is also supported. The study could not confirm that 'the indices of marriage/sexual activity, postpartum insusceptibility and contraception (in that order) have the most inhibiting effect on fertility in Nigeria.' The other two hypotheses could not be proven conclusively either. These were that 'degree of fertility preference implementation is higher among couples with similar desired number of children than among discordant couples' and 'the Husbands have more influence on their wives' family planning attitude and desired number of children than the wives have over their husbands'.

These findings have programme and policy implications. For instance, although the reduction in the number of years spent in child bearing is welcome as a result of decline in the number of older women in active childbearing, the increasing entrance of women under the age of eighteen years is worrisome. This could impact negatively on school enrolment and retention as well as on the health of the women since it is

recognised that women under the age of eighteen years is one of the four groups of women with higher risk of morbidity and mortality during pregnancy and childbirth.

Despite the pertinent findings of this study, a number of study limitations can be identified. This include not identifying people who have achieved their desired fertility and those who have not and conducting in-depth interview with them to gain greater insight into their fertility decision-making, desire and behaviour. This aspect requires further detailed investigation.

A number of programme, policy and research recommendations are made based on the findings of this study.