



Household Wealth and Fertility Behaviour in Nigeria: The Relevance of Caldwell Wealth Flow Theory

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Abstract

The wealth flow in Nigeria follows the direction of Caldwell wealth flow theory. The poorer the household, the more children on average as it is witnessed in most societies in northern part of the country. Despite the large economy and growth in gross domestic product (GDP) in Nigeria, the country still remains poor in terms of standard of living as these economic growths have not really impacted on health and wealth of its citizens. This study examined household wealth and fertility behaviour in Nigeria in conjunction with the relevance of the Caldwell wealth flow theory in Nigeria through extensive review of literatures. It was deduced from literatures that there is a statistical significance but inverse relationship existing between socio-economic status of women and fertility behaviour in Nigeria in terms of children ever born (CEB). Socio-economic status of women has a significant predicting effect on fertility behaviour. It was concluded that socio-economic status of women needs to be improved as this will have effect in reducing fertility behaviour in terms of children ever born (CEB) of women in Nigeria thereby reducing the high population growth rate witnessed in the country.

Keywords: Household, Wealth flow, Fertility, Behaviour, Nigeria

1.0 Introduction

Fertility level in sub-Sahara Africa countries remains high, (Obiyan *et al.*, 2019; Michael *et al.*, 2025). In many developing countries, population explosion and high fertility rates have been a serious concern to individuals, societies and governments. Nigeria is one of the countries in sub-Sahara Africa (SSA) which has been experiencing high fertility over the last five decades (NPC & ICF International, 2019). There has been much debate on the relationship between population growth and socio-economic development, with main consensus supporting the idea that slower population growth rates promote economic development and lead to poverty reduction. (Miriam, 2018; Bucci *et al.*, 2018). Published evidence suggests that countries which have population policies and sustained family planning programmes have the potential to achieve socio-economic progress and in turn general improvement in well-being of the populace. (Bucci *et al.*, 2018; Bucci & Prettnner, 2020). The demographic dividend can only be achieved with population reduction and socio-economic policies such as increase in per capita income, schooling and employment opportunities. (Njike, 2021; Okereke *et al.*, 2019).

Fertility level in Nigeria still remains high with major contribution from the Northern part of Nigeria (Oluwemisi *et al.*, 2017; Ololade *et al.*, 2018). The social implication of high fertility rate is poverty and unemployment which has accounted for the high number of destitutes in Northern Nigeria; hence the purpose of this study. A rapidly growing population in Nigeria has affected environmental sustainability, resources and well-being of the population. (Ezeh *et al.*, 2020; Ejike, 2021). Population pressure impacts on socio-economic development such as energy crisis, scarcity of mineral resources and low industrial growth in Nigeria. (Ejike, 2021; 2020; Njike, 2021). This is the reason why Nigerian government find it difficult to create jobs for the ever-increasing economically active population and lack of resources to create infrastructure. (Bawole & Adjei, 2020). At individual and household levels in Nigeria, people grapple with socio-economic challenges as a result of the prevailing high fertility. (Bongarts & Casterline, 2013; Kebede *et al.*, 2019).

1.1 Household Wealth and Fertility Behaviour in Nigeria

Despite the large economy and growth in gross domestic product (GDP) in Nigeria, the country still remains poor in terms of standard of living as these economic growths has not really impacted health and wealth of its citizens. Adequate knowledge of wealth distribution in Nigeria will go a long way in informing policy makers in their decision making in order to improve their quality of life. Wealth quintiles were internally coherent. However, there exist wide gap across the wealth quintiles with members of households in lower wealth quintiles having less likelihood 33 percent to receive antenatal care services than those in high wealth quintile recording 91.9 percent and only about 3 percent were reported to have been using modern contraceptives in the lowest wealth quintile. Place of residence in terms of rural or urban locations had influenced household health seeking behaviour to a large extent and that wealth quintile showed a great disparity in standard of living of various households across the various geopolitical zones in Nigeria (Abdullah *et al.*, 2021; Fagbemigbe *et al.*, 2015).

Despite the fact that Nigeria widely known as one of the high fertility countries, little has been known on differences regarding fertility experience of women in rich and poor households in the country. Across the years of survey, percentage of women who had high fertility, mean number of children ever born, and total fertility rate have been consistently high among women coming from poor households than those from rich households; hence, high fertility behaviour was found to be more prevalent among women from poor than those staying in rich households. Even though fertility strategies are necessary, more emphasis should be directed to women that lived in poor household in Nigeria (Adebawale *et al.*, 2020).

There is general consensus on the possibility of improvement in wealth status of couple leading to decline in fertility behaviour even though the possibility of declining fertility leading to improvement in wealth situation of concerned couples remains a subject of contention. The role of fertility behaviour affecting wealth status in Nigeria among men and women is not that important when compared with other spatial, social and economic forces prevailing in the country. There is need to seek adequate explanation regarding the poor wealth condition in Nigeria and other associated factors other than fertility behaviour. There is a statistical significance but inverse association existing between

socio-economic status of respondents and children ever born (CEB) (Aboluwaji, 2021; Onipede & Emmanuel 2016). Socio-economic status of women has a significant predicting effect on fertility behaviour. Improvement in socio-economic status of women will go a long way in reducing children ever born (CEB). Efforts towards reducing fertility behaviour in terms of children ever born must embrace multi-dimensional approach through promoting opportunities that will be aimed at promoting the socio-economic status of women in Nigeria (Alex *et al.*, 2020; Obiyan *et al.*, 2019).

1.2 Caldwell Wealth Flow Theory

John Caldwell in his theory posited that fertility level and rates are often influenced by the direction of wealth flow from generations to another. He was of the opinion that in traditional societies, most especially in countries in sub-Saharan Africa, wealth flows from children to parents, thereby promoting high fertility. However, in modern societies, the wealth flow is from the parents to children; thereby leading to low fertility. His theory is useful in explaining the relationship existing between wealth flow and fertility transition. The theory is very strong in highlighting the importance of wealth transfers from one generation to another, shaping decisions on fertility; that is, intergenerational wealth flow. The theory helps in understanding the direction of wealth flow by identifying the dynamics in wealth flow direction either from parents to children or from children to parents. The theory is useful in social and cultural context by recognizing the role of social norms and culture in determining fertility behaviour and wealth flow. The theory is useful in explaining causes of fertility decline by providing insights into the various causes of fertility transition in developing and developed countries.

The strength of the theory lies in its ability in contextualizing fertility decisions with societal and family structures. The theory is helpful in highlighting various economic motives behind fertility choices and what informed various policies on family planning through understanding the social and economic factors driving various fertility intentions and decisions. In all, the theory is helpful in offering better understanding of complexities in relationship existing between family, wealth and fertility behaviour. However, despite its strengths, the theory may not be universally applicable in different economic and cultural contexts. The theory placed more emphasis on economic factors affecting fertility decisions as it tends to overlook non-economic factors such as healthcare, education and social change as they have the tendency of influencing fertility intentions and decisions.

The theory is faulted with simplifying complex relationships by oversimplifying the complex relationships that tend to exist between family structure, wealth flow and fertility intentions or decisions. There are difficulties in measuring parameters of wealth flow and quantify as wealth flow from generation to another can be very challenging; thereby making it difficult in testing the theory empirically. The theory also has contextual limitations as it was primarily developed on contexts of countries in African countries, most especially countries in sub-Saharan Africa thereby limiting its generalization. The theory lacks consideration for policy intervention as it focused mainly on descriptive analysis at expense of prescriptive policy recommendations. In overall, there is need for further contextualization and refinement of the theory to appropriately capture the complexities of fertility intentions and decisions.

2.0 Methodology

This study employed extensive review of scholarly articles as methodology. Meaning and definition of concepts relating to household wealth and fertility behaviour in Nigeria were accessed from the internet and other electronic search devices. Deductions were made from the literatures and discussions made so far. The author's personal conclusion formed that the last chapter.

3.0 Results

The results of this study were based on findings from empirical review on fertility behaviour in Nigeria considering the various socio-demographic factors that can lead to high fertility behaviour in Nigeria in terms of children ever born. Findings revealed that level of fertility in Nigeria still remain at high level despite various efforts put in place by the federal government in reducing the population growth rate in Nigeria. The total fertility rate, which represents the average number of children attributed to a woman in her life time in Nigeria over the years has been declining. As at 2018, the total fertility rate (TFR) in Nigeria was quite far above 5 children per woman. This declined to 5.38 children per woman in 2019 (representing about 1.28% decline from that of 2018). As at 2020, the total fertility rate (TFR) further declined to about 5.31 children per woman (representing about 1.3% decline from that of 2019). As at 2021, the total fertility rate further declined to 5.24 children per woman (representing about 1.36% decline from that of 2020). As at 2022, the country recorded a total fertility rate of 5.14 children per woman (representing about 1.79% decline from that of 2021) and the decline has been consistent till present (NPC, 2018).

However, despite this general decline in fertility rate in Nigeria, the country still continues to experience increased population growth rate. This is because the decline in the total fertility rate (TFR) varied across regions and sub-regions in Nigeria with the southern part of Nigeria, most especially southwestern part of the country experiencing more decrease in fertility rate when compared to the sub-regions in Northern Nigeria. For example, the north central part of Nigeria had a total fertility rate (TFR) of 4.7 children per woman, the north eastern part of the country recorded a total fertility rate (TFR) of 6.2 children per woman and north western part of the country recorded a total fertility rate (TFR) of 6.3 children per woman when compared with the southern part of Nigeria with south west having a total fertility rate (TFR) of 3.4 children per woman, south east recording 3.1 children per woman and south south with 4.3 children per woman respectively. (NPC, 2018).

Education has been found to be the most significant factor that have sustained the more significant decline in fertility rate in southern part of Nigeria when compared to the Northern part. Increased or improvement in educational enrolment in southern part of Nigeria, most especially the girl child education has led to delay in marriage and has in turn led to prolonged delay in marriages and childbearing. Increased access to family planning services and devices such as contraceptives most especially in the southern part of Nigeria has also led the decline. Urbanisation has played a significant role regarding the shift from rural areas where the fertility rate is high to the urban areas where individual careers and advancements had forced couples to intentionally delay their childbearing (Odusina *et al.*, 2020; Onipede *et al.*, 2010)

4.0 Discussion

The wealth flow in Nigeria follows the direction of the Caldwell

wealth flow, postulating the poorer the household, the more children on average as it is witnessed in most societies in northern part of the country. Also, the richer the household, the fewer the number of children due to modernization and more investment on children as it is witnessed in some southern part of the country such as Lagos state. However, in most societies in Nigeria, religion and societal norms such as culture are playing an intervening role in some of the relationships. Despite the large economy and growth in gross domestic product (GDP) in Nigeria, the country still remains poor in terms of standard of living as these economic growths has not really impacted health and wealth of its citizens. Adequate knowledge of wealth distribution in Nigeria will go a long way in informing policy makers in their decision making in order to improve their quality of life (Aliyu *et al.*, 2020; Fagbemigbe *et al.*, 2015).

In Nigeria, the wealth gap is the engine of demographic transition in Nigeria. Closing the gap in access to health facilities, income and education, the fertility gap will eventually close. Household wealth does not just buy things. It buys fewer, healthier and children that are more educated so that as households' transits from poor to middle class, national fertility will respond by falling. Percentage of women who had high fertility, mean number of children ever born, and total fertility rate have been consistently high among women coming from poor households than those from rich households. High fertility behaviour is more prevalent among women from poor than those staying in rich households. Even though fertility strategies are necessary, more emphasis should be directed to women that lived in poor household in Nigeria (Adebowale *et al.*, 2020).

4.1 Relevance of Caldwell Wealth Flow Theory on Fertility Behaviour in Nigeria

The theory is one of the most cited theories that explains the reasons behind drop in fertility behaviour as societies develops or advances. The core idea of this theory was in direction of wealth flow by proposing that in societies with high fertility, wealth flows upward from children to parents as children were been used for labour and viewed as source of old-age security while in modern low-fertility societies, the flow of wealth is from parents to children to parents; that is, downward flow as parents tend to invest more on children in paying their school fees, healthcare, housing, feeding and as such, the net economic cost of children was so high thereby forcing parents to reduce their fertility behaviour. The theory was proposed and developed by John Caldwell in 1976 and it fits into population trend realities in Nigeria.

In northern Nigeria, the theory explains why the upward wealth flow is still dominant, having high fertility with 6.5 births per woman due to agricultural activities still the main dominant occupation where children are been used for farm labour, early marriage where children start contributing at young age, lack of old age security where there is no pension and as such, children are viewed as old age security for their parents, low cost of children with less formal schooling, home based care and situation where daughters bring wealth to the family through marriage and as a result, children are economic assets with many children leading to increased wealth. In southern part of the country, there is a downward wealth flow with low fertility of 3.8 births as TFR. Some of the reasons are economic costs where parents pay for school fees, high housing and feeding cost, children migrate to

overseas for education, less dependence on children for retirement and women lack work opportunity as cost of time rises; hence, children are economic liabilities leading to demand for fewer but high quality children.

The theory explains why fertility in Nigeria is falling faster in areas where education, cash economy and migration are high such as Abuja, Lagos and why fertility is still relatively high in agrarian, kinship support societies dominated in northern Nigeria. For gender development, when wealth flows downward, parents tend to invest more in girl child education, health instead of having more children. This is the link between the theory, population situation in Nigeria and Goal 5 of the sustainable development goals (SDGs).

5.0 Conclusion

Socio-economic status of women has a significant predicting effect on fertility behaviour of women in Nigeria. Socio-economic status of women needs to be improved as this will have effect in reducing fertility behaviour in terms of children ever born (CEB) that will be attributed to women in Nigeria thereby reducing the high population growth rate witnessed in the country. There is also need for adequate implementation of the 2021 national population policy which focused on harnessing youth potentials in driving demographic dividend for better living conditions of the populace.

6.0 Recommendations/Policy Response to Fertility in Nigeria

In pursuance of this demographic dividend, the federal government with the aid of federal ministry of health (FMH) in Nigeria drafted a robust commitment to family planning (FP 2030) with a vision to making Nigeria a country where everybody will be capable of making informed choices on fertility and have affordable as well as equitable access to quality family planning services and amenities and participate as equals on issues that relate to societal development. They were of the view that if the country does not invest in family planning then, the country may miss the opportunity for accelerated economic growth.

Intersectionality between family planning and the 2021 national population policy (NPP); The 2021 national population policy identified family planning as a very important national agenda. The 2021 national population policy recognized family planning as a very crucial strategy needed by the country in order to realise the various population policy goals on sustainable development and demographic dividend. This national population policy eliminated the fear of some officials in pursuance of allocating country's resources on family planning. This policy also expanded collaborations with other stakeholders, and about one (1) percent of the country's budget on health went to family planning at all levels of government; referred to as the FP 2030 commitment.

The responsibility for implementation of this national policy was viewed to be everyone's concern even though the federal government also took considerations for the poor domestic funding that was apparent in the year. This is because the year this policy was launched no fund was allocated in catering for programmes on family planning in the national budget. There were also difficulties in translating policy to action at all levels of government. As such, there was need to intensify awareness of the policy at subnational levels of the country. There was need to intensify family programmes on planning for adolescents, need for urgent strategies in preventing untimely release of funds that were budgeted for family planning, and ensuring accountability at all levels of government (both at national and sub-national levels).

The national council on population management was established through this policy which was chaired by the president of the country in providing strategic direction and support for policy implementation. The policy is data driven implemented as the policy recognizes the need for reliable, credible and timely data that will be needed in guiding implementation regarding forthcoming censuses; hence, the policy was expected to provide the needed and necessary information. In all, the 2021 national population policy marked significant sustainable and national development with potential implications for positive outcomes in maternal health, adolescent and youth rights and women empowerment. Despite these merits, the policy has its own flaws and weaknesses which had hindered its effectiveness and impact. The policy is confronted with insufficient funds as the success of the policy lies heavily on adequate funding most especially regarding family planning services and Nigerian budgets lacks line item on family planning implementation which has raised concerns on the government commitment on resource allocation regarding this purpose.

There is limited public awareness regarding effective communication and public awareness are very crucial on the success of this policy. The national orientation agency (NOA) and national population commission need to work in hand in bridging communication gaps between end-users and implementation. Challenges in implementation need to be approached on a multi-sectoral dimension that will involve joint participation of government agencies, civil society groups, and other private sector organisations. Coordinating these efforts need to be achieved in order to ensure effective collaboration. The success of the policy also had a shortcoming on heavy reliance on commitment from the national government for sustainable development and population management so that any defect in government's political will or prioritization could lead to adverse effect on the effectiveness of the policy. The policy is also confronted with religious and cultural barriers as diversity in religious and cultural norms of the country posed huge challenge on success of the policy most especially in areas where family planning is not widely accepted. While the policy relied on reliable and credible data, ensuring access to and availability of the data posed serious challenge most especially in rural areas. In all, addressing the potential shortcomings of this policy will be very crucial towards accelerating its effectiveness in promoting sustainable development and managing the country's population growth.

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Conflict of Interest Declaration

There is no conflict on interest whatsoever in carrying out this study. It is a study independently conducted by AKINOKUN, Rilwan Akintayo in the department of Demography and Social Statistics, Usmanu Danfodiyo University, Sokoto and BAH, Abdoulei Musa in the department of Mathematics, Obafemi Awolowo University, Ile Ife, Nigeria.

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