# THE ROLE OF CO-OPERATIVES IN CAPITAL FORMATION: EVIDENCES FROM AFIKPO NORTH LOCAL GOVERNMENT AREA OF EBONYI STATE, NIGERIA.

[1]EBUE M. I., [1]ONYEZE C. N., [1]OKONKWO P.C. AND [2]UGWA TOCHUKWU NONYELUM

1Department of co-operatives and Rural Development faculty of Management Sciences, Enugu state University of Science and Technology, Nigeria.

2Department of Public Administration, Federal polytechnics Uwana, Ebonyi state, Nigeria.

**Introduction:**

The nature and role of capital in cooperatives has been of interest ever since modern cooperatives were first established. The subject has an inherent fascination because it illuminates a distinguishing difference between cooperatives and other forms of business organizations, i.e. as member user-owned rather than as investor-owned firms. Capital Formation in Cooperatives is important because the accumulation of financial capital is one of the vital foundation stones for sustainable economic growth. Many cooperatives and even entire movements may lack the financial base required for growth and sustainability. Undercapitalized societies face an additional disadvantage in surviving and prospering in an environment that includes commercial, political and public policy risks. Liberalization of markets through structural adjustment is changing the competitive environment in which cooperatives operate. At the same time it was increasingly clear that donor funding for cooperative development is likely to diminish. The entire economic, social and political environment within which cooperatives operate – at least in developing and transitional economies –has been undergoing dramatic change as governments reduce subsidies and supports to the agricultural sector, forcing many cooperatives to look for other sources of capital, especially from their own members, to finance growth.

Some regard capital as the "Achilles' heel" of cooperatives. According to these, the current challenge facing farmers and their cooperatives is to mobilize enough funds to meet the growing demands of capital-intensive investment in leading edge technology. Either farmers generate enough funds to acquire and use it or they are simply forced out of business.

A major weakness of agricultural cooperatives, particularly in developing countries for instance, has been the tremendous problems they have faced in mobilizing capital for investment and growth. In the past, many relied heavily on government and outside donors for support. These "partners" were often all too willing to supply their capital needs, as this provided them the leverage to influence or even control the cooperative movement.

The net result of these "easy money" policies often leads to dependencies which actually undermined, rather than strengthened cooperative self-financing capacities and member service orientation. Cooperative business efficiency and member participation in these "pseudo cooperatives" suffers greatly.

But now that external sources of funding are drying up, these weakened cooperatives must learn how to survive on their own. The problem is that many simply do not know how to do so! Long accustomed to receiving cheap capital infusions from the outside, many are hard-pressed to ask their members to contribute.

At least in theory, increased member equity capital involvement in cooperatives should help to build up each member's "financial stake" in the group enterprise. This would serve as a type of "glue," binding members together and strengthening group commitment and solidarity which is so essential in obtaining cooperative economies-of-scale. Increased member capital should also help improve management accountability and could lead to better and more efficiently-provided member services, since it follows that when you are paying part of the bill - and know you are paying – you tend to demand better cooperative business management and services!

However finding solutions to this problem is not easy because cooperatives are different from normal businesses. They are – or should be - democratically controlled, collectively run member enterprises. Unfortunately, their unique "one person one vote" and "limited return on capital" principles have discouraged the accumulation of member capital. Their member clientele orientation also tends to make them more "inward- looking" and less interested in courting non-member investors.

Cooperatives have the capacity to create infrastructure that in many cases appears unlikely to be constructed by others, at least within a reasonable time horizon. Inattention to member capital formation can retard or preclude such development. Hence, this research effort is aimed at identifying successful strategies for mobilizing cooperative capital to finance cooperative business growth. However, while the reality of mobilizing co-operative capital investment in the West has been studied extensively, little attention has been paid to the situation in developing countries. Almost two decades ago, motivated by the financial crisis faced by farmer co-operatives in many developing countries, FAO in collaboration with the COPAC launched a research program on examining agricultural co-operative capital formation in three developing countries (Guatemala, India and Kenya). But nowadays, less effort has been made. Against this background, this research aims to fill this gap by providing empirical evidence from Afikpo North, Ebonyi State.

**Statement of the Problems:**

There have been concerns about co-operative capital formation. For instance, observers in Food and Agricultural Organisation (FAO), Committee for the Promotion and Advancement of Co-operatives (COPAC), International Labour Organisation (ILO), the World Bank and other agencies had noted that capital formation is at times a major challenge for cooperatives, which often appear to be undercapitalized (Von Pischke: 1993)[1]. As member-driven business organizations, traditional co-operatives primarily rely on member contributions in terms of shares, fees and business transactions. But in today's competitive market, finding capital is still one of the most prominent challenges they face (Von Pischke, 1993[1]; Harris et al., 1996) [2]. Therefore, they need to mobilize both more member contributions and outsider finance to fund their growth without threatening their co-operative character. Without adequate capitalisation, the co-operatives would find it difficult to thrive and survive in the competitive business environment brought about by liberalization, commercialization and policy changes. More so, donor funding for co-operative activities has been drying up, even as government subsidies are being withdrawn. Co-operatives are forced to look for other sources of capital, especially from their own members, to finance growth. There is the need to consider whether empirical research into cooperative capital formation could provide an opening for new initiatives in cooperative promotion, focusing on capital formation as a means of increasing member participation and control. Member participation and control occurs through patronage, general meetings, committee work and audits.

**Objectives of the Study:**

The general objective of this study is to ascertain the role of cooperatives in capital formation. The specific objectives are to:

i. identify the sources of cooperative capital formation,
ii. determine whether higher levels of capital formation stimulate or are associated with cooperative growth,
iii. determine whether higher levels of capital formation stimulate or are associated with greater member participation and control,
iv. Make relevant recommendations based on findings.

**Research Questions**

Given the peculiar nature of co-operative business (member user-owned rather than as investor-owned firms), the following research questions are pertinent:

i. What are the sources of capital formation?
ii. Do higher levels of capital formation stimulate co-operative growth?
iii. Are capital formation, commercial performance and participation linked?

**Statement of Hypotheses:**

The following hypotheses would be used to test relationships between capitalization, commercial performance and member participation and control.

i. $H_o$: Higher levels of capital formation are not associated with cooperative growth,
ii. $H_o$: Higher levels of capital formation are not associated with greater member participation and control.

**Review of Related Literature:**

The review of related literature on the role of co-operatives on capital formation would be done on three major sub headings, namely, Conceptual Framework or Review, Theoretical Framework, and the Empirical literature review. We now undertake the reviews.

**Conceptual Framework or Review:**

**Role of Co-operatives:**

Generally, a cooperative may be defined as an association of persons who pool their resources together on mutual basis to solve specific socio-economic problems, which may include income generating activities. A cooperative may also be defined as a self-help organization. These associations may be formed by either producers or consumers. Since its creation, the ICA has been accepted by co-operators throughout the world as the final authority for defining cooperatives and for determining the underlying principles, which give motivation to cooperative enterprise. The International Cooperative Alliance (ICA) in its Statement on the Cooperate Identity, in 1995 as reported in VCN (1995)[3], defines a cooperative as "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise." It is a business voluntarily owned and controlled by its member patrons and operated for them and by them on a non-profit or cost basis (UWCC, 2002)[4].

In 1844 the Equitable Pioneers of Rochdale Society (EPRS) was formed. With the goal of social improvement, twenty-eight unemployed community members saw the opportunity to pool their limited resources and attempt cooperation for the good of the group. Even though co-operatives appeared in the century previous, Rochdale is seen as the first 'modern' cooperative since it was where the co-operative principles were developed ( Gibson, 2005; and Abell, 2004)[6].

Cooperative principles on the other hand, are guidelines by which cooperatives put their values into practice. The principles rest on a distinct philosophy and view of society that helps members judge their accomplishments and make decisions [3]. Before 1995, the ICA has made two formal statements of the cooperative principles, in 1937 and 1966. In 1995, the ICA redefines, restates and expands the cooperative principles from six to seven in order to guide cooperative organisations at the beginning of the 21st century. The principles are: Voluntary and Open Membership; Democratic Member Control; Member Economic Participation; Autonomy and Independence; Education, Training and Information; Cooperation among Cooperatives; and Concern for Community. The import of the above principles is that cooperatives are voluntary organisations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination. They are democratic organisations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership. Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing their cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership

Cooperatives operate very much like other businesses: they must serve a market efficiently and effectively, they must be well managed, and they must survive financially [7]. However, there are important distinctions that make cooperatives unique. Laidlaw (1974 as cited in Bello, 2005)[7] examines the difference between cooperatives and other businesses in relation to three main groups of people responsible for bringing them into existence and keeping them in operation. The three groups are: the persons who own them (the shareholders, the investors), the persons who control them (the effective decision makers) and the persons who use them (the customers). According to him, in typical capitalist business, especially large enterprise and multinational corporations, these three are separate and distinct groups. In small private business the situation is generally much better because of the close connection between shareholders (investors) and control. In a small retail business, for example, the first two components are often identical, but still the users, the customers, are a separate group. In a cooperative, all three come together to form a unity: those who own, those who control, and those who use are one. Cooperatives are community-based, rooted in democracy, flexible, and have participatory involvement, which makes them well suited for economic development [4].

**Member Patronage and Control:**

In co-operatives, there exists a unique relationship between equity and ownership. Generally defined, equity is what belongs to the owners of an enterprise after the debt and other obligations have been paid. Ownership is determined by equity capital contributions, which give control rights and claims to residual equity. In the case of a co-operative, however, the relationship between equity and ownership is more complicated, because member ownership and control is also tied to active patronage. Financial participation in the co-operative is a patron member responsibility, and is consistent with co-operative practice (Royer, 1992)[9]. Co-operatives have a long history [5] of retaining a portion of net margins allocated to members based on patronage, so that active patron members could provide ongoing equity financing to their co-operatives in proportion to their patronage. Co-operatives are organized to provide goods or services to their patron member owners, not financial returns to investors. According to [10], the co-operative's primary value to its patron members is transactional. While the co-operative operates at cost to deliver this value, as a business it also requires ongoing sources of capital for financial stability, and for investment that allow it to continue to meet patron member needs. Unique co-operative financial practices have evolved to manage capital requirements while maintaining patron member control. Reflecting its "at cost" service orientation, a co-operative may annually allocate any remaining net margin or profit to patron members in proportion to their use of co-operative services as "patronage". However, so that patron members can contribute to meeting the capital needs of the co-operative, a portion of each individual's allocated patronage may be retained. These retained patronage allocations are treated as patron equity investment on the co-operative's balance sheet.

The strategic management of retained patron equity, including the possibility of eventual redemption, is a perennial issue for co-operatives (Pitman, 2015)[10]. Practices for revolving or paying out these patron equity accounts vary widely, and been influenced by legal and tax requirements, capital needs, history, and expert opinion. Early co-operative leaders often did not recognize the extent to which the co-operative membership might change, and the implications that this changing base of patron members had on retained equity. Newer patron members with smaller equity contributions benefited from the equity contributions that had been made over time by inactive or retiring patron members. Democratic control of the co-operative might not align with the levels of retained patron equity held by inactive, nonvoting members.

**Capital Formation:**

The economic view of capital as expressed in Mankiw (2000)[11] is dual. On the one hand, capital is the stock of equipment and structures used in production. On the other hand, capital can be seen as the funds to finance the accumulation of equipment and structures. In a similar vein, Varian (1996)[12] stated that capital is used to describe the money used to start or maintain a business. This view of capital he termed financial capital. He reserved the term capital goods or physical capital for produced factors of production.

Almost all economists lay emphasis on capital formation as the major determinant of economic growth. The meaning of capital formation according to Jhingan (2003)[14] is that society does not apply the whole of its current production activity to the needs and desires of immediate consumption, but directs a part of it to the making of capital goods. The essence of the process then, is the diversion of part of society's currently available resources to the purpose of increasing the stock of capital goods so as to make possible an expansion of consumable output in the future. This definition relates only to the accumulation of material capital and neglects human capital. A proper definition must include both material and human capital. Capital formation consist of both tangible goods like plants, tools and machinery and intangible goods like high standards of education, health, scientific tradition and research.

The process of capital formation involves three steps: (i) increase in the volume of real savings, (ii) mobilisation of savings through financial and credit institutions, and (iii) investment of savings. Thus an inquiry into the role of co-operatives in capital formation has to consider how to increase the propensity to save of the people and how to utilize the current savings for capital formation.

**Challenges in Capital formation:**

The process of capital formation involves three distinct, if interdependent, activities. One is saving, the activity by which claims to resources, which might be exercised in favour of current consumption, are set aside and so become available for other purposes. A second is finance, the activity by which claims to resources are either assembled from among those released by domestic saving, or obtained from abroad, or specially created, usually as bank deposits or notes, and then placed in the hands of investors. The third is investment itself, the activity by which resources are actually committed to the production of capital goods. The volume of capital formation depends on the intensity and efficiency with which these activities are carried on. The rate of capital formation is low in developing countries in general and in Nigeria in particular. The identified reason for this challenge (see Jhingan, 2003:322)[13] is that the developing countries lack those factors which determine capital formation. Capital formation depends on savings, on the institutions mobilising these savings and on the investment of these savings. The failure of these three stages of capital formation to operate properly is, according to Jhingan [13], responsible for the low rate of capital formation in such countries. He identified the main reasons for the low rate of capital formation in the developing countries to include among others: low income, low productivity, demographic reasons, lack of enterprise, lack of economic overhead, lack of capital equipment, small size of the market, lack of financial institutions.

**Sources of Capital Formation:**

The sources of capital formation identified in the literature are classified as domestic and external. The domestic sources from which savings can be mobilised for capital formation as enumerated in Jhingan (2003)[13] includes among others, increase in national income, reduction in consumption, savings drives, establishment of financial institutions, etc. Commenting on the establishment of financial institutions, [13] noted that to stimulate small savings among the masses, attention should be paid to opening up of savings banks and mobile banks in rural areas, and promoting savings through co-operative societies, including the establishment of service co-operatives and strong apex institutions like the central and state co-operative banks.

The external sources of capital formation are: foreign capital, restriction of consumption-imports and favorable terms of trade.

**Theoretical Framework:**

Theoretically, the process of capital formation involves three steps: (i) increase in the volume of real savings, (ii) mobilisation of savings through financial and credit institutions, and (iii) investment of savings [14]. Thus, the problem of capital formation becomes two-fold; one, how to increase the propensity to save of the people in the lower income groups, and two, how to utilize current savings for capital formation. Cooperatives may have a role to play here. It has been noted (Bello, 2005)[7] that regardless of the type, size, geographical location or purpose, cooperatives provide a unique tool for achieving one or more economic goals in an increasingly competitive global economy. These goals include achieving economy of size, improving bargaining power when dealing with other businesses, purchasing in bulk to achieve lower prices, obtaining products or services otherwise unavailable, obtaining market access or broadening market opportunities, improving product or service quality, securing credit from financial institutions and increasing income [5]. Capital acquisition has long been cited as a problem for co-operatives (Helmberger, 1966)[14]. The difficulties co-operatives face in raising funds is receiving increasing attention as co-operatives diversify their operations to include further processing activities (Harris et al., 1996; Cook and Iliopoulos, 2000)[2]. Generally speaking, co-operative capital comes in two forms: equity and debt. Equity capital is the internal sources provided by the members who invest in the co-operative to get needed services. It is also referred to as ownership capital, member's share, patient capital, member funds, net worth or risk capital. Equity capital includes initial capital investment (membership fee or share, common stock, preferred share/stock or investment share, etc.), and capital obtained through operation (for example, retained patronage refunds). Correspondingly, there exist patron-members and investor members in co-operatives. Debt capital means borrowing funds from external sources including non-member investors and the investing public (who may invest capital in the co-operative to earn dividends), and loans from such lending agencies as a cooperative bank or a commercial bank. They are therefore non-member investors or creditors. In most cases, a successful co-operative adapts a judicious mix of equity and debt capital which will make it possible for the co-operative to meet its present goals and objectives and those that might be anticipated (McBride, 1986, p. 169)[16].

It has been posited that the nature and role of capital in cooperatives has been of interest ever since modern cooperatives were first established (COPAC, 1995)[17]. Capital formation is regarded as one of the important and principal factors in economic development. It has been claimed (Jhingan, 2003)[13] that the vicious circles of poverty in underdeveloped countries can be broken through capital formation. Investment in capital equipment not only increases production but also employment opportunities. It provides machines, tools and equipment for growing labour force. Capital formation leads to the expansion of market. It helps remove market imperfections by the creation of economic and social overhead capital, and thus breaks the vicious circles of poverty.

Co-operative capital it has been argued (Von Pischke, 1993)[18] has a qualitative dimension. The customary view of capital is quantitative; viewing capital as funds measured in the fungible currency units used to measure commercial performance. The qualitative dimension is based on the proposition that different types and sources of capital have different degrees of what might be called "cooperative power". Some types and sources of funds do a better job of promoting cooperation and empowering cooperative societies to achieve that mix of ideals, democratic processes and commercial performance that constitutes the promise of cooperation and that creates the epic of member controlled self-help activities. It has been proposed (COPAC, 1995)[17] that the qualitative aspect could be expressed, at least for analytical purposes, by a weighting attached to accounting quantities in different balance sheet accounts. The system proposed assigns weights to the liabilities and net worth side of the balance sheet based on perceptions of the extent to which each source or form of funding is related to member commitment or loyalty. Member commitment is implied by the terms and conditions attached to various forms of capital.

The COPAC concept paper viewed collectively-owned non-refundable capital ("institutional capital") as embodying the highest level of commitment to the cooperative in view of its source, which is the members and their decisions to retain funds, and its terms and conditions, which make it withdrawable only in liquidation. Institutional capital was accordingly viewed as having the highest possible quality. The next highest quality was member subscriptions that could be withdrawn upon a member's termination of membership, followed by reserves held for specific purposes and having a long life. Members' funds placed temporarily with their cooperative, such as deposits, credit sales and allocations not paid immediately in cash were considered the lowest quality member capital.

In addressing the question of the direction of causality between co-operatives and capital formation COPAC, 1995 noted that a priori and in the long run, capital formation is the result of good commercial performance which generates the surplus from which capital can be retained and which attracts additional resources. A strong capital position may attract members to a cooperative if it permits more efficient and dynamic provision of services. But capital may also encourage member participation that is "rent-seeking," an economic term for behavior that does not contribute to the productivity. This may occur if members seek to capture the surplus for themselves individually rather than collectively for the business of the cooperative. Collective rent seeking may take the form of demanding higher payouts that are not consistent with the long run financial health of the cooperative. Individual rent seeking can lead to defaults by members on amounts due their cooperative, for example.

These considerations suggest that member education for participation may be the key element in commercial success and survival, which would be consistent with traditional cooperative principles and practice. Without participation, there can be no cooperation. However, the nature of participation is critical. Commercial success and capital formation appear to require a relatively long-term perspective that would encourage members to leave funds with their society. This can occur only when members do not extract the greatest or most prompt possible payout or demand the lowest possible prices, or even impossible prices, for the goods they purchase from their cooperative. In a similar vein, Pitman (2015)[10] posits that co-operatives have patron equity redemption cycles that can range from several to 25 years or more. Some cooperatives only revolve out retained patron equity at patron retirement, or as part of an estate settlement. The longer the cycle to redeem equity, the less a revolving fund meets its goal of aligning patronage and equity participation, and the more the retained patron equity functions like permanent equity

**Empirical Review of the Literature:**

Empirical works on the role of co-operatives on capital formation in developing countries are at best few. A possible reason could be unsettled question of how co-operative financial performance should be measured. It is often maintained that conventional financial analysis as applied to for-profit enterprises is not appropriate for measuring the commercial performance of cooperatives (See, for example, Deshayes: 1994)[19]. Performance measurement can be ambiguous for non-profit organizations. In this context, for example, good business performance may consist of the ability continually to attract subsidy from governments at home and abroad so that activities enjoyed by beneficiaries, i.e., members, staff, regulators and promoters, can continue. The debate on measuring cooperative business performance has traditionally focused on the difference between the surplus captured by the members individually and that retained by the cooperative as an entity distinct from its members. Of course, an important strand in cooperative thinking has been that the cooperative has no commercial existence separate from that of its members, that agricultural cooperatives are in fact extensions of members' farms.

[16] Aim to fill this gap with his empirical work in China. The work looked at capital formation and new co-operatives in China: policy and practice. Following a brief theoretical overview concerning co-operative multi-stakeholdership and capital acquisition and constraints, the method used in the work involve analyses of both the rules-in-form and rules-in-use with respect to the co-operative stakeholders' capital involvement in China.

By doing so, it presents the main findings of capital formation and investment in a small sample of horticulture shareholding co-operatives in rural China, because shareholding co-operatives, as one best example of new multi-stakeholder co-operatives in China, have become a vehicle to mobilize additional resources. To better understand shareholder co-operatives' stakeholder heterogeneity, two main groups of stakeholders are identified, namely, member stakeholders (investor-members and patron-members) and non-member stakeholders (non-member investors and non-member donors/grant-givers). Cases studied indicate a hybridization feature of the co-operative capital base, including members' contributions, public subsidies, and income from the market sale, institutional capital and social capital in the form of donations over time. In these multi-stakeholder co-operatives, two stakeholder groups, namely, core members and government agencies as non-member stakeholders appear to be the main contributors to co-operative capital formation.

In a case study of Temidere-cooperative and Thrift- societies, Ijebu-ode, Ogun state, Kareem, [5] investigated the impact of co-operative societies on capital formation. The method they employed involved the use of structured questionnaires as primary source of data while corroborative evidence was obtained from the statement of account of the society. The researchers adopted a non-parametric method of analysis which involved Chi-Square method, descriptive statistics and correlation analysis. The correlation matrix shows a high positive relationship between amount of deposit by the co-operators and the amount of loan given out by the cooperative society.

The work concluded that co-operative societies have effect on member's welfare and that the role of co-operative societies in poverty reduction and capital formation cannot be overemphasized in the development process of any country particularly Nigeria. The study also noted that the major way by which cooperative societies increase co-operators capital formation is by granting credit services and the problem mostly faced by co-operative societies is the problem of capital.

However, Kareem, Arigbabu, Akintaro and Badmus in their study failed to specify any explicit hypothesis on the role/impact of co-operatives in capital formation (which is the object of their study). Rather, they tested the hypothesis that co-operative has no significant effect on members' welfare. And following a Chi-squares test that rejected the null hypothesis, the researchers asserted that "it can be inferred that co-operative society plays a significant role in capital formation…" In essence, their study failed to empirically test for the role of co-operative in capital formation.

Bello (2005)[7] in a descriptive survey posits that for over 160 years cooperatives have been an effective way for people to exert control over their economic livelihoods as they play an increasingly important role in facilitating job creation, economic growth and social development. The paper concludes that to be effective and successful, cooperatives must continuously achieve two inter-related goals: enhance viability and improve ability to service its members; and remain an economically viable, innovative and competitive enterprise.

Empirical studies from Guatemala, India and Kenya by Von Pischke (1993)[18] were commissioned by the Committee for the Promotion and Advancement of Cooperatives (COPAC)[17] to test hypotheses that the level and accumulation of the capital of cooperative societies is positively related to their growth, member control and participation, and ability to manage risk. This paper summarises research on co-operative capital formation in developing country agricultural co-operatives based on fieldwork in Guatemala, India and Kenya. Research findings indicate that these variables are not closely related, but that correlations vary greatly from case to case and from country to country. This, according to the research, appears to arise from differing conditions in cooperatives and in the markets and regulatory regimes that shape them. Patronage appears to be the operative focus for growth. Capital, it was noted, is likely to assume greater importance as cooperatives operate in increasingly competitive markets.

Statistical correlations and multiple regression of Indian data supplied by 923 individual interviewees indicate that relationships between member funding and clusters of member control and patronage variables are positive and significant, although not always very strong. Member funding also correlates positively with patronage and satisfaction. These findings are consistent with and support the possibility that member funding leads to member control which encourages usage and produces satisfaction. Curiously, a cluster of member control variables correlated negatively with member satisfaction, possibly signifying that control rises when members are not satisfied.

Analysis of financial data for the 30 Indian cooperatives also generally confirms the research hypotheses. Good coops are more profitable and employ much more capital than bad ones, and member funds constitute a higher proportion of their capital. Good coops tend to grow faster than bad ones. This implies that greater profits permit greater retentions and attract more funds.

The Guatemala study found a positive relationship only between the proportion of member funding and revenue. It concludes that member funding is important to assure financial strength, and that increases in member funding quality and quantity are unlikely without growth and profitability.

A study in Kenya did not provide conclusive evidence of any positive correlation between growth, capital or control. Kenyan cooperatives have successfully increased their capital through deductions from payouts to members. Capital is increased to finance investment, from which members expect enhanced income and service, which implies growth. The study indicates that an improved capital position is not a major reason for the growth of a cooperative and that balance sheet indicators cannot be used as proxies for member control and participation. The Kenya study concludes that patronage is the primary avenue of participation and control. The Indian study concurs, with the observation that while paddy coops have more member capital they tend to be unprofitable. This may indicate that service to members is a more important factor than profitability in attracting member patronage. Patronage, in turn, is generated by attractive prices, promptness of payments and service that is competitive with alternative suppliers or buyers. The Kenya study posits that because efforts to secure patronage put pressure on prices, increases in turnover do not ensure a surplus or a better capital position. This conclusion may in part reflect the difficult environment in Kenya created by price controls and specification that 80% of the value of produce processed must be returned to members.

Another empirical work in Nigeria by [6] looked at the sources of capitalization of cooperative societies in Ebonyi State. The work made use of both primary and secondary data. Secondary data were comprised of registered cooperative societies across the 13 Local Government Areas of the State obtained from the Department of Cooperative, Ministry of commerce and Industry while primary data sources on perceptions and challenges faced by cooperative were for cooperative officials. The method employed involves the use of multistage sampling technique in drawing a sample size of 130 cooperative societies in Ebonyi State. Data were analyzed with the use of tables, percentages, frequencies and pie charts. The major finding is that sources of capitalization of cooperative societies were mostly equity-based. The authors concluded that cooperative financing remains the vibrant economic technique of capital formation, wealth creation, job creation and business financing.

From the fore-goings, the place of co-operatives in capital formation has not received adequate research attention in Nigeria. While the reality of mobilizing co-operative capital investment in the West has been studied extensively, little attention has been paid to the situation in developing countries. Almost two decades ago, motivated by the financial crisis faced by farmer co-operatives in many developing countries, FAO in collaboration with the COPAC, launched a research program on examining agricultural co-operative capital formation in three developing countries (Guatemala, India and Kenya). But nowadays, less effort has been made. Against this background, this research aims to fill this gap by providing empirical evidence from Afikpo North, Ebonyi State. This work is part of the effort towards deepening the existing literature.

A summary of the empirical literature is given in the table below.

**Summary of the Reviewed Related Literature:**

| Author(s) | Year | Topics | Place | High Points of Findings | Similarities | Differences |
|---|---|---|---|---|---|---|
| Von Pischke | 1995 | Capital Formation in Agricultural Cooperatives in Developing Countries: Research Issues, Findings and Policy Implications for Cooperatives and Donors | Rome. | Research findings indicate that the variables: capital accumulation, growth of the co-operatives, , member control and participation, and ability to manage risk are not closely related, but that correlations vary from case to case and from country to country. This, according to the research, appears to arise from differing conditions in cooperatives and in the markets and regulatory regimes that shape them. Patronage appears to be the operative focus for growth. | The methodology for the research exercise design involved the collection of quantitative and qualitative data precise quantitative treatment of data wherever possible, supplemented by interviews. Case studies were carried out in Guatemala, Kenya and India | This is a cross-country research. |
| Dogarawa Ahmad Bello | 2005 | The Role of Cooperative Societies in Economic Development | Ahmadu Bello University, Zaria-Nigeria | For over 160 years now cooperatives have been an effective way for people to exert control over their economic livelihoods as they play an increasingly important role in facilitating job creation, economic growth and social development. | Descriptive survey | Not a localized case-study |

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|---|---|---|---|---|---|---|
| Zhao, L. | 2011 | Capital formation in new o-operatives in China: Policy and Practice | China | Cases studied indicate a hybridization feature of the co-operative capital base, including members' contributions, public subsidies, and income from the market sale, institutional capital and social capital in the form of donations over time. In these multi-stakeholder co-operatives, two stakeholder groups, namely, core members and government agencies as non-member stakeholders appear to be the main contributors to co-operative capital formation. | Employed case study and sample survey and descriptive statistics. | The work considered the issue of shareholder co-operatives' stakeholder heterogeneity: namely, member stakeholders and non-member stakeholders |
| Kareem, R.O; Arigbabu, Y.D; Akintaro, J.A & Badmus, M.A. | 2012 | The impact of co-operative societies on capital formation using a case study of Temidere-cooperative and Thrift- societies | Ijebu-ode, Ogun state | C-operative societies have effect on member's welfare | A case study, employed non-parametric statistics and descriptive statistics | Considered only a single co-operative society. |
| Uduma, S. I, Enimu, S. & Akanu, O | 2012 | Sources of capitalization of cooperative societies in Ebonyi State | Ebonyi State | Sources of capitalization of cooperative societies were mostly equity-based | Localized case-study, use of descriptive statistics | Looked at so many co-operatives at a time |

## Methodology:

### Study area:

Afikpo, also known as "Ehugbo", is a town and the second largest urban area in Ebonyi State, Nigeria. It is the headquarters of the Afikpo North Local Government Area .Afikpo North is one of the 13 Local Government Areas in Ebonyi State, located in South East geopolitical zone of Nigeria. It is situated in the southern part of Ebonyi State and is bordered to the north by the town of Abomege, to the south by Edda in Afikpo South LGA, to the east by the Cross River and to the west by Akaeze. Ebonyi State is primarily an agricultural region. It is a leading producer of rice, yam, potatoes, maize, beans, and cassava in Nigeria. Afikpo North is home to Akanu Ibiam Federal Polytechnic Unwana. Its headquarters is in the town of Afikpo. Important cities in Afikpo North are Itim, Ohaisu, Nkpoghoro, Ugwuegu/Amaizu, Ozizza, Amasiri, Ibii/Akpoha and Unwana city. It has an area of 240km and a population of 156,611 at the 2006 census.

### Sources of data:

This study is based on secondary data collected from published documents, reports, journals etc. Primary data were obtained through in-depth interview with officials of various types of Cooperative Societies in the area of study on the role of co-operatives in capital formation while secondary data where sourced from previous studies.

### Sampling Technique:

A frame of registered cooperatives in the Local Government was obtained from Cooperative Department in the State Ministry of Commerce and Industry. The number of registered cooperative societies in Afikpo North as obtained from the State Ministry is 851, distributed over four types of cooperatives. Using a sample size of 50, we employed multi-stage simple random sampling technique.

### Method of Data Analysis:

Data obtained would be analyzed using, percentages, pie charts and bar charts. To test for the statistical significance of the proportions, the z-score test would be employed.

**Discussion, Conclusion and Recommendations:**
**Data Presentation and Data Analysis:**

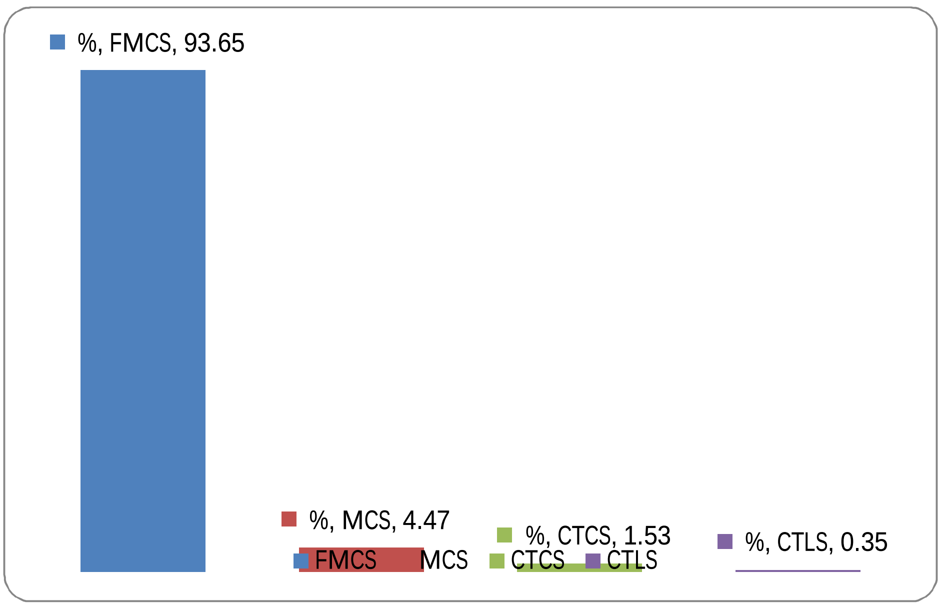
To test the research hypotheses, we make use of the data contained in the following tables and charts:

**Table 1: Distribution of Registered Cooperative Societies in Afikpo North Local Government by Type**

| Type | FMCS | MCS | CTCS | CTLS | TOTAL |
|---|---|---|---|---|---|
| No | 797 | 38 | 13 | 3 | 851 |
| % | 93.65 | 4.47 | 1.53 | 0.35 | 100 |

Source: Source: Adapted from Uduma, S. I, Enimu, S. & Akanu, O. (2012)

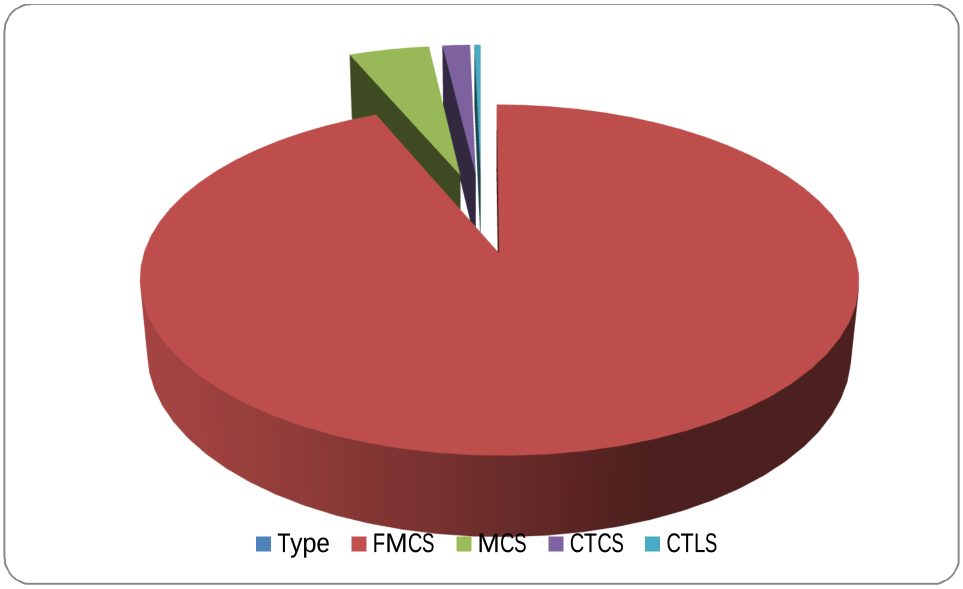
**Figure 1: Distribution of Registered Cooperative Societies in Afikpo North Local Government by Type:**




Source: Authors computation based on Table 1

**FMCS** = Farmers Multipurpose Cooperative Society; **MCS** = Multipurpose Cooperative Society; **CTCs** = Credit and Thrift Cooperative Society; **CTLS** = Cooperative Thrift and loan.

**Figure 2: Distribution of Registered Cooperative Societies in Afikpo North Local Government by Type**




Source: Authors computation based on Table 1

**FMCS** = Farmers Multipurpose Cooperative Society; **MCS** = Multipurpose Cooperative Society; **CTCs** = Credit and Thrift Cooperative Society; **CTLS** = Cooperative Thrift and loan

A total of four types of registered Cooperatives were identified within the Local Government, namely: Farmers Multipurpose Cooperative Society (FMCS), Multipurpose Cooperative Society (MCS), Credit and Thrift cooperative Society (CTCS) and Cooperative Thrift and Loan (CTLS). The distribution of these cooperatives show that Farmers Multipurpose Cooperative Society (FMCS) accounted for 93.65 per cent, Multipurpose Cooperative Society (MCS) accounted for 4.47 percent, Credit and Thrift cooperative Society (CTCS) accounted for 1.53 per cent, while Cooperative Thrift and Loan (CTLS) accounted for 0.35 per cent. This composition is in line with the characteristics of the State in general and Afikpo North in particular. Ebonyi State is primarily an agricultural region. It is a leading producer of rice, yam, potatoes, maize, beans, and cassava in Nigeria (Uduma, Enimu & Akanu, 2012)[20].

**Table 2: Sources of Capitalization of Cooperatives Societies in Afikpo North, Ebonyi State.**

| Sources | Frequency | Percentage (%) |
|---|---|---|
| **Equity** | | |
| Common stock | 10 | 20 |
| Preferred stock | 5 | 10 |
| Membership fees | 50 | 100 |
| Membership certificate | 50 | 100 |
| Capital certificates | 0 | 0 |
| Deferred patronage | 30 | 60 |
| Retention (UR) | 30 | 60 |
| Per unit capital retains | 0 | 0 |
| Revolving Funds | 40 | 80 |
| **Sample size** | **50** | |
| **Debts** | | |
| Cooperative Bank | 0 | 0 |
| Commercial Bank | 5 | 10 |
| Government Agencies | 10 | 20 |
| Individuals | 0 | 0 |
| MFBs | 5 | 10 |
| Insurance companies | 0 | 0 |
| Regional Cooperatives | 0 | 0 |
| Foundations | 0 | 0 |
| Private Grants | 0 | 0 |
| Depreciation of Reserves | 0 | 0 |
| **Sample size** | **50** | |

Source: Adapted from Uduma, S. I, Enimu, S. & Akanu, O. (2012)

**Sources of Capitalization of Cooperatives:**

Capitalization of Cooperatives can be achieved through several sources as shown in Table 2. These sources could be broadly classified as equity (internal sources) and debts (external sources). It was observed that all the Cooperatives Societies sampled derived funding mostly from Equity.

**Test of Hypothesis:**

Two hypotheses are considered in this research work.

A. **To test the hypothesis that higher levels of capital formation are not associated with cooperative growth.**

We consider Revolving Funds in Table 2 above. Revolving funds are accumulated as the co-operative grows.

Using the z score given by

$$z = \frac{P-p}{\sqrt{pq/N}}$$

Where P is the proportion of success in a sample and p is the population proportion of success and N is the sample size and q = 1-p (the proportion of failure)

From the table, P = 0.8 and q = 0.2. N = 50 while p = 0.5 (assuming a fair sample).

$$z = \frac{0.8-0.5}{\sqrt{(0.8)*(0.2)/50}}$$

$$z = \frac{0.3}{\sqrt{0.0032}} \quad z = 5.303$$

At 5% level of significance, the z- score is 1.645 and at 1% level of significance, the z-score is 2.326. Since the $z_{cal}$ is greater than the $z_{tab}$, we reject the null hypothesis that higher levels of capital formation are not associated with cooperative growth.

**B. To test the hypothesis that higher levels of capital formation are not associated with greater member participation and control.**

We consider deferred Patronage and Retention in Table 2 above.

Both has P, the proportion of success to be 0.6 and q = 0.4.

Using the z score, we have

$$z = \frac{0.6-0.5}{\sqrt{(0.6)*(0.4)/50}}$$

$$z = \frac{0.1}{\sqrt{0.0048}} \quad z = 1.443$$

At 5% level of significance, the z- score is 1.645 and at 1% level of significance, the z-score is 2.326. Since the $z_{cal}$ is less than the $z_{tab}$, we do not reject the null hypothesis that higher levels of capital formation are not associated with greater member participation and control. However, the actual level of significance is less than 10%. The z tab at 10% α is 1.282. Using the 10% level of significance, we would reject the null hypothesis and conclude that higher levels of capital formation are associated with greater member participation and control.

**Table 3: Challenges of Capitalization of Cooperative Societies in Afikpo North, Ebonyi State.**

| Challenges | Frequency | Percentage (%) |
|---|---|---|
| Mismanagement of cooperative funds | 10 | 20 |
| Poor cooperative education | 20 | 40 |
| Difficulty in obtaining loans | 25 | 50 |
| Wrong choice of investment projects | 5 | 10 |
| Poor attitude towards consumption | 10 | 20 |
| Poor infrastructure | 25 | 50 |
| Illiteracy among co-operators | 0 | 0 |
| Political instability | 10 | 20 |
| Poor attitude to loan repayment | 10 | 20 |
| Poor patronage of existing coops | 0 | 0 |
| Diversion of farm inputs | 0 | 0 |
| Poor IT | 15 | 30 |
| **Sample size** | **50** | |

Source: Adapted from Uduma, S. I, Enimu, S. & Akanu, O. (2012)

Table 3 shows that most of the co-operators agreed that capital (both debt capital: loans, and infrastructure) were the most serious problem facing co-operative societies with particular reference to co-operatives in Afikpo North Local Government Area of Ebonyi State. This result is an indication that inadequate capital is a major challenge confronting Nigeria, a developing economy

**Discussion of Findings:**

The first major finding is that all the co-operative societies sampled drive most of their capital from equity. From the tests of hypothesis, a major finding is that higher levels of capital formation are associated with cooperative growth. In other words co-operatives play significant role in capital formation. However, this association may not imply causation. An inquiry into the direction of causality between co-operatives and capital formation is a ground for further research.

Though higher levels of capital formation are associated with co-operative growth, patronage and retention, individually, appear to be weak channels for that role. However, considering that poor patronage did not feature as challenge of capitalisation in co-operatives in Afikpo, we may want to base our conclusion based on the 10% level of significance.

**Summary, Conclusion and Recommendations**

This work set out to explore the role of co-operatives in capital formation with evidence from Afikpo North Local Government Area of Ebonyi State. The review of relevant literature highlights the paucity of empirical work in the subject matter in developing countries, more so, Nigeria. Using both descriptive and inferential statistics, our major finding is that co-operatives play significant roles in capital formation via patronage and retention. It was established that inadequate capitalization is a major challenge confronting the co-operatives in Afikpo North Local Government Area of Ebonyi State. To overcome this, co-operatives in Afikpo North derive most of their funding internally from member equity.

It can therefore be concluded that co-operatives financing remains the vibrant economic technique of capital formation, wealth creation, job creation and business financing. Institutional and member capital are the lowest risk, safest forms of funding and should be the first choice in most cases. These types of funding are sometimes not enough, or are not available at the time when they are needed. Effective cooperative education and necessary supports by government, banks and NGOs are imperative to grow Cooperatives through funding from external sources at lower costs in order to ensure optimal capital structure.

We therefore recommend the following:

- Government should expedite actions in providing an enabling environment for Public Private Partnership Initiatives in infrastructural development. This is important because no amount of efforts made in funding cooperatives would yield the expected impacts if the problem of infrastructure is not addressed holistically.
- That relevant stakeholders namely: Government, Banks and Non- Governmental Organizations perform their roles in line with global practices to enable Cooperative Societies in the study area and Nigeria generally meet their capital needs. This is the only way they can cope with the changing socio-economic environment.
- That as government through the CBN recapitalized the banking sub-sector; the cooperative sub-sector of the economy should be recapitalized to prevent more crises in the sector.
- Above all, we recommend sound co-operative education. Cooperative education is pivotal in addressing the issue of funding and capitalization of Cooperatives in the local government in particular and in Nigeria in general.

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