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ABSTRACT

It is empirically argued that economic development largely depends on an increased productivity, the mitigation of income inequality, reduction of dependency on natural resources, improvement of health outcomes, quality enhanced environmental settings, and most importantly a sustained economic growth. It is further established that all the above stated developmental indicators within a market economy do require a quality financial system, which collects information to facilitate an ex-ante evaluation as well as ex-post monitoring of investment opportunities, to ease information asymmetry, which is a known market problem. Furthermore, to facilitate an efficient allocation of resources to drive innovative projects, which will produce quality products and services. The postulation presented herein is empirically established to derive its success from a sustainable financial inclusion, which the paper is to advance a conceptual proposition towards an effective and efficient financial inclusion of a fragile economic setting, and its underlying policy architecture to sustain performance effects, in both medium and long term purpose.

Keywords: Financial Inclusions, Financial ecosystem, Policy, Central Bank, Fragile Economy

Jel Codes: E2, E6, G23, G28, H5
A. BACKGROUND OF STUDY

The term 'financial inclusion', was succinctly defined by Sapre (2021) as the ability of individuals and businesses to access useful and affordable financial products and services that meet their needs, transactions, payments, savings, credit and insurance delivered in a responsible and sustainable way. ‘Financial Inclusion’ became a subject of serious national concern after the three (3) days international conference on ‘Finance for development’ at Addis Ababa, Ethiopia on July (2015) by the United Nations, Department of Economic and Social Affairs.

When the summit was launched, the intent was to adopt a technology facilitation mechanism based on multi-stakeholder collaboration between member states, civil society, the private sector, the scientific community, United Nations entities, and others, to compose an inter-agency task team on sustainable development goals to initiate the process for full and equal access to formal financial services for all. While member [States] will adopt or review their financial inclusion strategies in consultation with relevant stakeholders, which will consider including policy objectives in financial regulation in accordance with national priority and legislation.

Prior to the United Nations Conference, (Khan, 2011) had argued that more accounts and digital payments in the process of financial inclusion, encourages banks to lend to more individuals and businesses. Prasad (2010) had made an argument on a basis of empirical that ‘Savings’ initiated through financial inclusion reduces reliance’s on foreign countries funding dependency, thereby promotes project financing through local investment, and improves stability, which augments the theoretical postulation of Senzu (2018) of the acts of domestic Savings, becomes the investment backbone of the economy, and a stimulator of capital deepening capacity, towards optimal industrialization.

Hannings and Lansen (2010) did state that when the lower-income adults, who are more prone to economic problems than the general population, start by participating in the financial industry, the financial system becomes more resilient to the economic cycles.

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\* The consistent adoption of the word ‘Fragility’ or ‘Fragile Economy’ in the context of this paper is employed as in the definition proposed in the work of (Senzu, 2022b)
Morgan and Pontines (2014), established from their study that, financial inclusion, improves small and medium scale Enterprises credit lending, as well as helps to achieve non-performing loans (NPLs) and default risk. Mehrotra and Yetman (2014) did further observe that the volatility of consumption is lower for countries, where their level of financial inclusion is higher. In addition, Bachas et.al (2017), did state that debit card usage accounts, on a regular basis, leads to an improvement in Savings, and enhanced trust in the financial system. Han and Melecky (2013) adduced, to achieve a higher level of Bank deposits through financial inclusion, helps stabilize the financial system, owning to an increase in the share of stable funding. In the argument of the relevance of financial inclusion via technology (Karlan et. al, 2014: Demirgue-kunt et. al, 2017) posits, in the act of shifting from cash transactions to digital transfers, individuals create a payment history that could be analysed, when they apply for credits.

Financial Inclusion has become a subject, which draws an undivided attention to members of the United Nations as a herculean task to resolve among countries with fragile economic settings. When Danisman and Taraz (2020) established their empirical findings of financial inclusion and banking at the European Union area, they find out that, ‘Financial Inclusion’ through more accounts and digital payments leads to a significant reduction in Bank default risk. And concluded, financial inclusion leading to a 1% increase in digital payment resulted in a decrease in the financial system and Bank default risk at 1.2%. In their extension of argument, did state, 1% increase in digital payments leads to a reduction of 1.5% in leverage risk and 0.8% decrease in portfolio risk to the Commercial Banks. And finally concluded, in that studies, that the positive influence of financial inclusion is higher on financial stability of an economy, especially when the targeted population for the financial inclusion, is focused on the disadvantaged individuals, who are more difficult to screen and whose inclusion might add more value in terms of information processing; by effective screening through account ownership and digital payment history.

Sapre (2020) argued, mere provision of access to the financial system may not necessarily ensure adequate financial inclusion, but the products and services should be customised to people’s needs. Therefore, having a Bank account, may not be an inadequate measure of financial inclusion, but transactional ease, insurance and access to short and long term credit are equally vital. However, he further acknowledged that the journal publication of articles on financial inclusion has risen from seventy-seven (77) in 2015 to three hundred and fifty-six (356) in 2020. And categorised the submission of authors into two (2), researchers identifying
the key determinants of financial inclusion, and the second group seeking to examine, whether expansion of the financial sector results in financial inclusion that drives development. Which, the theoretical foundation of this paper is to unify the two established premises into a single conceptual framework and proposed policy design architecture best fit for the fragile economic system.

**B. METHODOLOGY OF THEORETICAL DESIGN**

A stratification method was applied into an ideal socio-economic system to establish a class structure of an 'open-type' in accordance with the definition uphold by the sociological scientists. And on that basis relied on the phenomenology method to arrive at the conclusion in the knowledge development. As Armstrong (2005) argued, Phenomenology counts on the task of the philosopher to describe the structures of experience in a particular consciousness, the imagination, and relations with other persons. Phenomenological theories of literature regard works as mediator between the consciousness of the author and the researcher, as an attempt to disclose aspects of the being of humans and their world as submitted by (Edmund Hursserl, 1859 – 1938), which was further extrapolated by (Heidegger Martin, 1889-1976) on the description of consciousness; as the understanding is always ‘ahead of itself’. Thus projecting expectations, thus interpretation then makes explicit, which concludes “Understanding” and “Interpretation” in Being and Time. (Heidegger, 1927) further argue, inherent in understanding is a “fore-structure” of 'assumption' and 'beliefs' that guide interpretation. Merleau-Ponty (1945) argued on the subject of Phenomenology of perception, he situates consciousness in the body and argued it always ‘incarnate’ or else will lack situation through, which to engage the world.

Roman Ingarden (1989 -1970) did submit, the phenomenological work, is an inter-subjective intentional object. It has its origin in the acts of consciousness of its creator, which are preserved in writings or through other physical means, and these acts are then reanimated by the consciousness of the reader. And not reducible to the psychology of either, the author or the reader, because it has a history that goes beyond the consciousness that originated it. And concluded such literary work is a stratified formation, comprising of four (4) related strata, each of which has its own characteristics of ‘Value qualities’; (i) Word sounds (ii) Meaning units (iii) Schematized aspects (iv) Represented Objectives. Which the strata combined to form a unified whole that provides a “polyphonic harmony of value qualities.
Meinong (1902) did also submit on the subject of ‘Assumption’ that the objects remain objects and have definite character and properties, even if they have no being. Saunders, et. al (2012) explicitly defined the basis to adopt philosophical realism, as a method in scientific study or knowledge development, which they adduced that, theoretical development relies on the idea of independence of reality from the human mind, which guides knowledge development through scientific process. However, the author took into cognizant the strength and weakness of the methods adopted for the study in the context of critical and direct realist basis of observation to a phenomenon. Effort was drawn to minimise the extent of the errors, noted as the weak side of the varied methodical application.

The subsequent sections under this very paper does treat the theoretical works into two major categories. One of the sections is categorised as ‘C’, with the sub-titled ‘Propose Financial Inclusion and Structural architecture’ in the objective of the author to specifically address the structural model of financial inclusion of any stratified ideal national economy as perceived in both ‘Agency’ and ‘agents’ engagement of market interaction process. Then the other part sectioned as ‘D’ will explore the philosophical conceptualization of the inter-relationship process of the ‘Agents’ and the ‘Agencies’ under a sub-titled “Conceptual Framework”. Aftermath will lay-out an axiomatic postulation to propose policy infrastructure design, and probable anticipating challenges under a sub-titled, “Propose policy formulation structure” coded as Section ‘E’. Finally, draw basic conclusions and recommendations to be sectioned as ‘F’.

C. PROPOSE FINANCIAL INCLUSION AND STRUCTURAL ARCHITECTURE

This section of the paper seeks to structurally model from abstract what an ideal financial inclusion society should be perceived in terms of Agency inter-connectedness and engagements, as well as Agents inter-related activities in an open-class society. Which is labelled below as Figure (x1.) and (x2.) respectively;
Fig. x1.

Proposed Financial Inclusion Stratification Agency; a structure for fragile economy

Central Bank of a Sovereign nation

Interoperability Station

Fin-Tech Card Issuance and PoS Machine System

Urban Banks

Telecoms [Fin-Tech]

Wholesale and Retail Banking

Mobile Wallet Management Center

Rural/Development Banks

Micro-Finance Banking
Fig. x2.
General Socio-economic Stratification system of fragile economy, to design financial inclusion

Open Class Society

Affluent Class

Middle Class

Marginalised Class

Bounded Demographic Class

Semi-Urban and Rural Class

Lower Class

Age Class

Uneducated Class

Sex Class

Vulnerable Class

Health Class

§ Whereas the labelling in the modelling structure upholds standard sociology definitions, those that deviate from orthodox definitions are carefully defined at the appendix section.

E.T. Senzu (2022)
D. CONCEPTUAL FRAMEWORK

In a careful observation of the proposed model structure labelled as Fig. (x1) under the section ‘C’ above, empower the Central Bank as the lead agency of the financial system to promote the financial inclusion programme in fragile economies through the formal establishment of Interoperability Centre to serve the financial market on a national capacity. Which the ultimate task of this Centre under the supervision of the Central Bank is to become the hub for all firms of on-line financial transactions, as in the inter-agency payment/transfer accessibility management programme.

This enables easy money transfer from telecom-mobile wallets to customers' bank accounts, as well as deposits redrawn from the bank account to mobile wallets as on-line transactional records, without the present of the beneficiary of the services at the door of any of the agencies offices. And conducts all kinds of on-line payment transactions at ease without recourse to errors of debit balance sheet, delays or disappointment.

A full operation of the Interoperability Centre should be capable to engage in fin-tech card issuance for on-line transactions as an intra-country project, whereas citizens within the economic zone with lack of access to portable mobile phones for on-line transactions could rely on intra-country universal debit card usage for payment system both on-line or any Point of Sale or Point of Purchase terminal machine point.

The model structure further advocate for Urban Banks formation, which in most cases are domestic Commercial Banks and International Banks holding Universal licence in such fragile economic settings. Then do advocate for Rural Banks and Developmental Banks formation, which both system modus operandi will be captured in the subsections below.

i. Urban Banks

The structural formation of these Banks licensed in fragile economic system, should be required to aggressively promote Automated Teller Machine (ATM) Services, and Mobile wallet interoperability payment system, which are fin-tech products highly needed in urban areas for quick and easy access to credit for transactions. Businesses in urban areas have a common challenge of traffic congestion issues, and long queues at the Banks, as a common concern, affecting time efficiency towards productivity, especially for most of the private sector Enterprises, which operate with time as a competitive business strategy.
Furthermore, most of the affluent class of the society, aspire for financial services that takes into consideration time efficiency, and easy accessibility to credit when there is the need for transactions, with less cumbersome procedural. The above submission takes into account all the sub-economic classes of individuals within the urban centres, from the affluent, middle and lower class economic status, as a model structure, which fig. (x2) detail depicts and upholds the assumption that the standard literacy at the Urban Centre, offers an estimate of 95% agents ability to understand the practical usage of on-line financial transactional services in terms of the use of mobile wallets and debit cards products popularly used in developing and underdeveloped nations.

ii. Development / Rural Banks

The *modus operand* of Development and Rural Banks becomes a requisite condition to be stationed in semi-urban centres and rural areas in a fragile economic system. With the expectation to uphold a technical mandatory role to step-up their operations of innovation towards the marginalised class, made up of informal workers and businesses, uneducated, the vulnerable, the handicapped, and the aged. This category of socio-economic class of people and the reasons behind their desire towards financial services unlike the affluent class are outlined as follows (a) Reliability of financial services offered (b) Confidence to be granted credit facility upon request (c) incentives associated with financial deposits (Senzu, 2018) (d) Soft-accounting services, as a supports for the SMEs at an affordable cost by financial institutions (Senzu, 2020).

If financial institutions at the Rural and Semi-urban Centres are able to uphold the four cardinal services qualities outlined above, it offers such agencies over 85% capacity to draw above 97% of the marginalised into the formal financial system as a financial inclusion programme. The performance measure of the Rural Banks are to attract the informal businesses, into the formal Banking services. Banking services requires not merely the introduction of Micro-Finance Institutions, rather the promotion of innovative Micro-Finances products in the retail centres of the Banks, with services that thrive to cut-down bank services charges to the minimal rate, which becomes an extension cost to the customers, discussed herein as the marginalised class. In this kind of economic class, they are very sensitive to rampant bank services charges on their deposits. The lesser the banks in rural areas reduce their services charges against their customers, the higher their financial
developed products becomes attractive to this sector of the market, for banking services engagement.

Secondly, the ability of such Rural Banks and Development Banks to engage their kind of customers, by adopting the interoperability transfer and payment on-line services with relatively minimised Bank services charges, as well as granting high volume of on-line payment transactions in favour of their customers' businesses, are key services demands expected by the informal businesses and working staffs. Which furnish the bank access to transactional historic data of customers, and in one way or the other, may have been very difficult to ascertain from their financial credit track records for easy rating, in other to design appropriate credit facility to their favour.

Thirdly, banks in rural areas and semi-urban centres should have required innovative output to handle businesses and projects at quixotic stages that are potentially viable and less risk to the Bank. It present strong potentials to attract more of the informal market transactions, onto the formal banking services, as argued by (Senzu, 2020). Services from the financial institutions that uphold the four major product services qualities illustrated above, do have high probability to pull the marginalised into the formal financial system. As well as customers' easy accessibility to the Banking services, becomes a prerequisite condition to attract the informal economic market actors into the dealings of formal Banking system. For instance, in such market systems, the introduction of micro-finance institutions as an inter-medial agency cum agent relation does not have much transformative effect than innovative micro-finance products services from the retail centres of the Rural Banks or the Development Banks with a special focus on reduction or application of minimal bank charges shifted as an operative cost to the customers. And the underlying reasons is the sensitivity to charges by this section of the market agents in response to the cost on deposited funds. Rather, an enticing incentives offers on deposited funds of customers in this category of economic class, does play a stimulating environment to attract such category of market agents into the savings-investment books of the Bank.

Fourthly, the technological capacity of such Development Banks and Rural Banks to adopt the Interoperability transfer/payment system on electronic platforms like Mobile wallets, as a means to deposit money into customer’s Bank account and redraw randomly, at any time from the Bank Account to Mobile wallets, toward utility payment without physical appearance to the offices of the financial agencies for clearance assistance, are basic factors
that inspire most of the informal market dealers to associate with formal banking services in accessing such kind of product packages, which is believed to help keep their money safe from robbery and also have easy access to conveniently conduct an emergency payment transactions without constraint or laborious process.

The service package of this kind, also offers the Bank the opportunity to have historic transactional data on such kind of customers, which otherwise would have been difficult to monitor their balance sheet of business transaction, to award appropriate credit facility upon demand. Which do conform to other approaches and methods required to assist enterprises in fragile economies as theoretically posit by (Senzu, 2020), and further argued on the relevant support of businesses at the quixotic stage, which plays a significant role to minimise or eradicate an informal economic market, whose performance operate negatively towards a productive macroeconomic advancement.

iii. National Interoperability Station (NIS)

The paper herein referenced the quality design of a national electronic transfer /payment system structure across board, as a ‘cloud-platform’ for all the agencies and agents’ relationship engagement in the economic market. Which becomes a macro-interoperability cloud station, acting as a hub for all forms of on-line money transfer / payment monitoring system. This makes it easy for Telecommunication Agencies operating in mobile wallet business to easily collaborate with the Banks in all forms of transactional payment system, between mobile wallets and individual or business accounts with the Banks. Without a recourse to errors, delays or disappoint. It is further adduced that the quality of ‘NIS’ in its mandatory delivery could proceed with fine-tech card issuance for on-line transaction as an intra-country project, whereby economic zonal areas with people inaccessible to portable phones to engage such kind of electronic financial transactions will resort to debit card issuance as a payment system on both on-line transactional payment as well as Point of Sale or Point of Purchase terminal system.
E. PROPOSED POLICY FORMULATION STRUCTURE

As Prasad (2010) did argued, in most of the emerging markets, the regulatory challenges of their economies that rises, emanate from underground financial systems rather than risks from sophisticated financial innovations.

Thereby acknowledging that the fragile economies have their own distinct set of challenges, which ranges from the number of varying institutions, and capacity constraint in understanding the underpinning factors of drivers for the shadow market, in other to establish a conduit, which serves as a practical application and a leverage of its policy regulations to enhance the mainstream financial market. Hence, the effort of this study is to address such concern with a general assessment metrics, which will result to the proposition of a flexible and efficient regulatory guide, to become a foundation of a policy framework, which will inspire a quality institutionalization towards financial inclusion. On that premise, four basic principles regarding the required architecture of the policy formulation need to be upheld as follows;

i. Policy design should address optimal regulatory structures to promote financial stability.

ii. Regulatory reforms should address challenges of limited institutional development.

iii. Regulatory reforms should address improvement in financial intermediation by creating space for the development of broader financial markets.

iv. Optimal macroeconomic policy that address a robust monetary regulatory framework.

[i] Policy architecture to address Optimal Regulatory Structure of Financial Inclusion

In promoting financial inclusion and stability of both medium and long term, requires quality design and set-out financial rules for the market under institutional proactive supervision of agency compliance. Secondly, since the effort in promoting financial inclusion, demands innovations and technology, a principle-based regulation is required, which gets regulated to adhere to the spirit of regulation and becomes an effective tool for the market as a policy guide, and grants the financial markets open-up to innovation and risk taking.

The paper therefore recommends a regulatory structure, which is effective, flexible and capable in dealing with financial innovations and systemic risks. The capital requirement of the financial institutions should be designed to protect the stability of the financial system,
not solely the solvency of individual Banking agencies. Furthermore, the nature of the capital
requirement will have to be regularly re-evaluated to ensure that they do not intensify
systemic financial distress. With the regulatory agencies intensifying the monitoring systems
towards the liquidity risk of the Banks. For the insight of regulation in assessing capital
requirements on the basis of risk, it will be important the policy design considers the broader
relationship among credit, liquidity and market risks.

Secondly, the method and approach in assessing institution-specific risk, as well as aggregate
level risks need to be determined. And place measures to avoid financial firms’ strategy,
engaging in regulatory arbitrage.

Thirdly, it is relevant in designing a resolution mechanism, whereby firms allowed to fail,
will take place in an orderly manner that does not involve unwinding of counter party
positions, disposal of assets, and resolution of creditors and other claims.

[ii.] Policy architecture to address challenge of Institutional Development limitation

There is every need for regulators to establish priority to deal with institutional and capacity
constraints that limit effective regulation as well as hinder effective application of such
regulations by firms, which equally resonate to financial instability.

A basis micro prudential regulation and institutional self-assessment and audit towards
financial stability should be a regular process to infuse into it a risk-evaluation and risk-
management practices on their loan portfolios, with a careful monitor of the level of currency
risk. Additionally, the need to strengthen an institutional framework to promote financial
stability with well-carved comprehensive bankruptcy procedures, and a robust legal
framework to enforce property rights consistently and fairly.

Moreover, the need to set-up an oversight institution that effectively coordinates the work of
individual regulatory agencies, if there is many within a developing country.

On top of that, there should be a determined method to assess the regulatory capacity to keep
up with the fast-evolving markets, and the designing of product-services that meet best
international practices, and provide direct guidance in the formulation of codes and
regulations.
[iii] Policy architecture to improve the Financial Intermediation

There is every need for any financial system to have a well-designed and quality financial intermediation, not just for promoting growth, but also for improving the welfare impact of that growth, as well as the regulatory environment facilitating innovation in the financial market, without allowing the financial innovation to go far ahead of regulatory capacity and create systemic risks. The paper further promotes the development of basic derivatives of the market, as well as regulated securities market, to complement main stream domestic financial investment framework. The nature of financial market securitization in fragile economic settings, demands a well-designed technical infrastructure for trading various financial instruments, including equities, bonds and derivatives, which will be congenial to the structural mechanism of the economic market. And the proposal of such policy structure, is to broaden the perimeter of regulation and adaptation, which revolves around international principles of regulations to suit the needs of fragile financial markets and it related institutions.

[iv] Policy architecture to Address Robust Monetary Regulatory Framework

It is observed, that without stable macroeconomic policies, financial development will be difficult to realise. While inefficient financial systems could hamper the effectiveness of policy transmission, with difficulties to execute and manage macroeconomic policies. As argued by Prasad (2020), in the last two decades, many emerging markets started adopting some forms of inflation targeting in other to anchor monetary policy, and move away from exchange rate targets, which have become increasingly unattainable, given that the capital market is becoming more open, with the key debate, whether monetary policy should explicitly strive to manage assets prices. The debate resonance, as in light of criticism directed at the Central Banks that targeted inflation either explicitly or implicitly. In a fragile economy, the basic objective of price stability as a mandatory tasked of the Central Bank is mostly impossible, due to financial underdevelopment, weakness in the monetary transmission mechanism, and often profligate fiscal policies. However, as it was succinctly posit by De Gregoria (2019), the best and only realistic approach for emerging market with their Central Banks, is to focus on an inflation objective, using prudential requirements, and letting the exchange rate serve as the adjustment mechanism.
As thus empirically argued (Senzu, 2021a), the effort of developing and underdeveloped countries to promote macroeconomic stability, in the context of its institution and economic environment is observed to be more of socio-political choice, rather than purely economic decision. Thereby, advanced study analysis, will be required as unique to a particular country to determine whether additional instruments are required of her Central Bank, to be effective and satisfy multiple objectives. Nevertheless, fiscal policy plays a key role in financial stability. Weak fiscal policies create a series of distortions in the economy. And create monetary instability by making it difficult for the Central Bank to anchor inflation expectations in the case of fragile economic settings. Which is also observed to require the skill of the Central Bankers to provide an adequate protection from the volatility of capital flows, and promote stability in the financial market in the must rising trade and financial integration with the global economy and their de- factor open of capital accounts.

F. CONCLUSION AND RECOMMENDATION

In the conclusion of the theoretical propositions of the paper in favour of quality and sustainable financial inclusions, the paper recommends that the success of financial inclusion in fragile economies requires quality investment to the core infrastructure of a digital economy, as well as investment in payment systems infrastructure, not ignoring the complementary infrastructure to enhance access and usage.

Furthermore, it is required that there will be public engagement financial literacy, to facilitate increase in-take of fin-tech product services. With the Central Bankers advancing their skills in deepening the financial markets, strengthening supervision, and regulation of the banks as intermediary.
REFERENCES


APPENDIX

i. **Lower Economic Class**: These kind of social groups of the economic class are found within the middle class but their services earned them very low wage jobs with very little economic security.

ii. **Marginalised Economic Class**: These are groups of economic class, legally, politically or socially excluded or ignored in context, hence, vulnerable to livelihood changes.

iii. **Bounded Demographic Class**: These categories of economic class are socially ignored by virtue of strict demographic conditions like, Age, either old or minor. In terms of ‘SEX’, as in gender priority, perceived in certain cultures as weaknesses associated with female counterpart of male in certain societies. Finally, health conditions, which are associated with certain factors of abnormalities of the human body causing incapability to deliver in a full efficient capacity.

iv. **Uneducated Class**: This is a category of social group within an economic class presume to have no education, to some extent labelled as, non-civilised as in the state of culture and social development.

v. **Vulnerable Class**: The Vulnerable class as a social grouping within an economic class, are people identified, to have their daily income less than the daily minimum wage of a lower economic class.