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# Theoretical Perspective of Dynamic Credit Risk Analysis and Lending Model; Effective to Enterprises of Fragile Economy

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"Success in Banking is attained not by avoiding risk but by effectively selecting and managing risk"

## ABSTRACT

There is empirical evidence and objective argument, which justifies the core functioning of money in economic growth, and its correlation to the development of a nation, which equally establishes the reason for the relevant role of Banks in every economy. The underpinning of this study is to bring to bear the causal influence that promotes fragility of the financial system in undeveloped and developing economies, which hampers the smooth operative performances of enterprises in such economies, thereby, granting the author the reason to propose a theoretical perspective of dynamic credit-lending-risk analysis, as an upgrade model over the existing static credit-lending-risk analytical approach, found to be creating challenges to the productive efficiency of enterprises, within the same economies. Hence, destabilises the market power of such an economy, and deny the quality of its welfare State programme, while heightening its unemployment tension.

## *Keywords*: Economics, Banking, Enterprises, Credit Lending, Credit Risk Analysis, Employment

Jel Classification: E2, E5 G23, G24

#### A. INTRODUCTION

For the purpose of inquisitorial exercise required to be carried out by the author, as an indepth analytical study on the subject, with a corresponding theoretical-model proposition; some relevant terminology used herein, lacking precise definition in the taxonomy of economic science, has to be clearly defined in the context of this paper. This has become necessary because such terms has varied definitions adopted by scholars in the economic science community. The two major technical terms, which the paper will heavily depend upon for conceptual argument are outlined below;

i. Fragile Economy

ii. Credit Risk Analysis & Lending

#### i. Fragile Economy

The term is argued to have been coined by Morgan Stanley in (2013), representing emerging market economies that are too dependent on unreliable foreign investment to finance growth ambitions. Bruce & Jennifer (2013), defined the fragile economy as a National economic network to venerable metropolitan economies, consisting of networks of innovative firms, talented workers, risk-taking entrepreneurs, supportive Institutions and associations that cluster together in metropolitan areas and co-produce economic performance and progress. Demirek (2009), almost like the intent of the originator of the word, defined a fragile economy as an environment where firms rely heavily on external funds to finance its operational costs.

However, in the context of this paper, fragile economy will be defined as, "*an economy, experiencing significant weakness in its currency, making it difficult to finance its account deficits and growth projections, thereby contributing to a slow down and vulnerability in its welfare performance*". There are numerous factors known to cause economic fragility of a nation, for instance, weak political institution, poor constitutional functionality, poor governance, poor financial-industrial policies, bad tax regulations, high cost of having a strong balance sheet as an enterprise, poorly developed investment market, high inflationary effect, complex bureaucracy, low capital adequacy of banks, and finally corruption. All the listed factors will be extensively discussed to examine its negative impact, and contribution to a fragile economy as well as its effects on Enterprises operating within such ecosystem. Which will set the tone for the evaluation and analysis of the cost-impact, in terms of the reliance on the use of *'Static-credit-lending-risk-analysis'* model for potential profitable Enterprises that emerge from such economies, and evidences of its huge obstruction to their smooth market performance.

#### **Credit Risk Analysis & Lending**

Kagan (2018) defined credit risk analysis, as a type of analysis that an investor or bond portfolio manager performs on companies or debt issuing entities, to measure the entity's ability to meet its debt obligations. Based on the above definition, the author do concur with Kagan to establish the foundation of his conceptual submissions. Banks remain a major conduit for the transformation of Savings into productive investments. Particular in emerging countries where capital markets are still not sufficiently developed, and where depositors have limited access to direct-credit-risk opportunities. Jonathan & Philippe (2013) state, Banks and Financial Systems should share the blame with profligate politicians, outdated socioeconomic models, and a shift of the 'world's centre of gravity' towards newcomers in the financial-economic warfare. And further argued, Banks cannot survive unless they take risks. The trick for them is to manage those risks without destroying shareholders' value. And from creditworthiness point of view, without endangering depositors and creditors. It must be acknowledged that financial intermediaries like Banks do carry substantial credit, and market risk. They act as the shock absorbers by removing it from their depositors' shoulders and charge a hefty fee for the services. It is observed that no individual with money to spare, that is Savings or Capital, will provide a credit on a commercial basis, unless she believes that the borrower has both the requisite willingness and capacity to repay the funds, advanced. To form such belief rationally, she must be satisfied that, the two questions can be answered in affirmative. Which are;

a) The prospective borrower will be willing, so long as the obligation exists, to repay it?

b) The prospective borrower will be able to repay the obligation when required under its terms?

To respond to these questions, a credit analyst will re-sought to a judgment of probability. Banks acceptance of credit risk, is inherent to their operations, since, the very reason for existence as banks, is the supply of credit through the advance of cash and the corresponding creation of financial obligations. 'Credit Risk' in another perspective will be defined as, "the risk of money loss arising from the default of a counter-party, on a fundamental financial obligation or higher than expected loss of severity, arising from a lower than expected exposure at the time of default". The following is a formulated assessment of credit risk in the framework of which the paper assumed to be the generally accepted tradition of the banking industry;

- (i). Examining the obligator's capacity and willingness to repay credit
- (ii). The country's risk and operational conditions as in its macroeconomic climate, which the obliged is exposed to
- (iii). Examining the attributes of obligation from which the credit risk arises, in the instance of legal or derivative risk, and character of the currency.
- (iv). Assessing credit risk and mitigation such as collateral utilization, pledges, guarantees, and insurance.

The concern herein is not the underlying probability of default, but the degree of uncertainty associated with forecasting this probability. As Hale (1983) succinctly put across, if the pawnbroker lends money against a gold watch, he does not need credit analysis. He needs instead to know the price of the gold watch with respect to time towards the future. The Traditional Credit analysts of the banking sector are best known for sieving through a quantum of data ranging from cash flows, credit history, in its ratio and trend analysis to draw a probability line in terms of exposure to default, the recovery rate, and the loss at a given default target. This defined style of *credit-lending-risk- analysis* model and exhibited as 'Figure E' below in this paper, has become an accepted standard of the Banking practices.

Thereby, in the credit analytical perspective, there are two technical approaches available to the traditional banks in issuing credit support to a firm, which are;

- I. Structural Model
- II. Reduced- form model

The [*Structural model (I)*], considers the 'positions' of stakeholders of the company, meaning their creditworthiness as a base to issue credit support to the company, while the [*Reduced-form model (II)*] seeks to predict as an assumptive analysis, when a default may occur based on observable variables. Which this paper, in conclusion, seeks to critique the stringent application of the model (II) in the context of fragile economy, thereby question the effectiveness and resourcefulness of the *model-II* as a general standard of metric analysis: on

an argument based on *ex-post-facto* observation of developing economies, precisely within the Sub-Saharan Africa.

## **B. EX-POST-FACTO OBSERVATION OF FRAGILE ECONOMY AND SIGNIFICANT EFFECT ON ENTERPRISE PERFORMANCE**

One of the leading literature on the above subject argued on the wide range of factors that affect Enterprises, (Syed Fida et.al 2013) did submit, the causal-based analysis of the observable factors of a fragile economy, which translate into a poor functioning of productive Enterprises, thereby presenting a difficulty to access quality credit facilities, has been briefly outlined by the author below for in-depth literature discuss, laying the foundation for his thesis;

[I] Weak Governance and Political Institution

[II] Poor constitutional functionality

[III] Poorly developed investment market

[IV] Bureaucracy

[V] Corruption

[VI] Banks capital adequacy

## I. Weak Governance and Political Institution

It was suggested by Adji et.al, (1997), as well as Feng & Chen (1997), that a political government, which is an active economic participant, can positively intervene to shape an environment to attract investment. They further argued that lower political capacity, indicate less ability to extract resources, which critically implies higher budget deficits, and an increase in uncertainty. Finally, concluded a lower political capacity governance is more likely to create new taxes or increase existing ones, thereby reducing the return on investments. Which sums up to the fact that a capable government aligns their policies with sound macroeconomic criteria, while weak government's activities imprint political survival, and are mostly exposed to challenges, which becomes a huge economic stress to Enterprise performance within such economy. It must be taken into cognisant that, when political institution formed, is captured as an ideological gloss through which the minority who

exercise real power through the [State] and its monopoly, seek to conceal this fact from the subject population as Lenin (1917), did submit in his paper the 'State and Revolution', then the Institution termed here as central government becomes hopeless in its function, denied in its expected benefit to its citizens, rather serve the interest of the political elite. In such a circumstance, Enterprises not engaging in cronyism, as a means of survival, suffocate in their independent market performance within such an economy, a character popular within the greater part of the Sub-Saharan Africa.

#### II. Poor Constitutional Functionality

In any economy, where the legitimacy of the [State], the nature of its authority, as well as its obligations to its citizens and of its citizens to it, lack clarity, within her constitutional functions in the subject of rule of law, but rather rely on the rule of men, ruled by subjective and arbitrary will of particular men instead of objective determinant of general and public laws, as Kant (1724-1804) asserted, "for a strong constitution, is a union of an aggregate of men under rightful law". In such a circumstance, the labour of men through their enterprises to serve the market as well as to generate private property are easily undermined, and mischievously destroyed in the spirit of plundering, which weakens and threaten innovation, creativity and sacrifices required of an entrepreneurship efforts for economic growth.

#### III. Poor developed Investment Market

Poorly developed investment market could be defined as an economic environment, whereby either bank-based or market-based financial system is poorly developed in promoting longrun economic growth. Stiglitz (1985) argued that well-developed financial markets quickly and publicly reveal information, which reduces the difficulties and the cost for individual investors to acquire information, hence, becomes an incentive to attract investors to such environment easily. While Boot et.al, (1993) acknowledged, Banks reveal of information is slow to the public due to its long-term relationship with firms. However, Boot & Thakor (1997) added to the debate that, a coordinated coalition of investors with the Bank is better than lack of coordination within a given economic market, where monitoring of firms and reducing post-lending moral hazards is weak. Bhide (1993) also posits that liquid markets hold a myopic investor climate, making the bank-based system preferable in policy guide, as well as a reliable theoretical practice. So in a fragile economy, whereby both the Bank-based and Market-based financial system is underdeveloped, it becomes difficult to experience progressive enterprises within medium and long term. It therefore present a general investors risk biased for such environment, even if there are evidence of high market transactional performance, investors commitment in such environment turns to demand a formal political guarantee, which contribute to a slowdown of economic growth, and stiffens innovations in the private enterprise sector.

#### IV. Bureaucracy

As Niskanen Jr. (1990) argued, a large part of our population wants to expand the role of government particularly to alleviate poverty, and improve the environment. Yet, the same population are equally exasperated by the methods of bureaucracy, and dissatisfied by its performance, just as Max Weber (1864-1920) recognized bureaucracy as the characteristic form of public administration for a [State] with extended territorial sovereignty developed, and has become the standard definition guiding this form of organization in our contemporary times. Mises (1944) book 'bureaucracy' discussed the sophistication of bureaucracy negative impact to economic service delivery and did state, which I quote: "bureaus are specialized in the supply of those services, with the 'value' of which cannot be exchanged for money at perunit rate. As a consequence of the above, 'bureaus' cannot be managed by profit goals in the economic calculus, therefore, must be centrally managed by the pervasive regulation and monitoring of the activities of subordinates with the absolute solution, to reduce the scope of government". Enterprise performances and success in any given market depends much on strategic exploring of opportunities within a given time frame. In an advent of competition, time becomes a valuable and scarce commodity relied upon by Entrepreneurs, which most fragile economy found in such complex bureaucracies do undermine 'time' and 'competition' essence, and it relation to transactional performance of firms, as a result, kills most initiatives and innovations of Entreprenuers.

#### V. Corruption

Olken & Pande (2012) posits that, survey evidence suggests that corruption is rampant in the developing world, and more prevalent in developing countries than in rich ones, and justify further, there is a situation where 'bureaucrats' official salaries are less than their market wage in expectation of the corrupt rents, they would obtain. Mocan (2008) finds that the income and education of the individual have positive impacts on the likelihood of being asked for a bribe in developing countries. There are instances, reported by Reinikka & Svensson (2004), using public expenditure tracking survey, they compared the amount of

special education block grant sent down for the Central government of Uganda, with the amount of the Block grant to be received by the schools. They estimated a leakage rate of 87%. Another instance, which Olken (2007) report of a rural road project. He compares the official amount spent on the road to an independent engineer, estimate of what the road actually cost to build, in which engineers dug a core sample of the roads to estimate material quantities, did price surveys to estimate local prices, and interviewed villagers to estimate actual wages paid. It was realized some amount of materials disappeared during construction. And an estimated missing expenditure in respect of the village claim and the engineering estimation to the promoted cost was approximately 24% per average.

Olken & Pande (2012) did further argue that corruption lessens the government's ability to correct an external challenges. If someone can bribe a police officer or a judge instead of paying an official fine, the marginal cost of breaking the law is reduced from the official fine to the amount of the bribe. Furthermore argued, if the police officer extracts the same bribe regardless of whether the person has broken the law, the marginal cost of breaking the law falls to zero, and the law ceases to have a disincentive effect altogether. An environment which has a strong network of corruption, driven in complex innovative dealings, any honest transactions, which is expected as a hallmark of any successful and credible enterprise, becomes difficult, as a result, a long term progression of such a venture in competition against its counterpart in a strong economic environment becomes almost impossible.

#### VI. Capital Adequacy of Banks

In the studies of Inoue et.al (2019) on lending behaviour of Banks, they submitted, when a substantial adverse shock hits the economy and many borrowers become insolvent and banks face impaired capital. There are two types of lending behaviour observed, which are, stagnant lending in a capital crunch environment and forbearance lending. With the stagnant lending in a capital crunch, the banks decrease credit to borrowers, irrespective of whether they are good or bad borrowers. While that of forbearance lending, the Banks conduct window-dressing to avoid the realization of capital losses and thus allocate more credit to insolvent borrowers, with the hope that their situations will improve, and a premise that, the impaired Banks adopt this lending behaviour as a considerable effort to avoid further deterioration of their balance sheets. In practice, it implies the stagnant lending in a capital crunch, involves the issue of overall credit under-supply to all borrowers. Whereas forbearance lending, involves the issue of credit allocation to low-quality borrowers to revamp the productive

performance of the enterprise, which the author categorize such a method as a significant element in proactive lending model for fragile economy.

Diamond (1984), and Calomiris & Wilson (2004) argued that, in the models of Banking, under asymmetric information, the emphasis lies on the potential conflict of interest, which is between the Banks and depositors. And such an informational problem, encourages the Banks to offer short-term-low-risk debt, concentrating mostly on the balance sheet risk of their capital, and thus insulating depositors from this risk. Therefore, it is important to determine whether Banks are well capitalized enough to absorb their balance sheet risk and as well stabilize the Banking system. Since the theoretical proposition of the paper on dynamiccredit-risk analysis and lending is established on the premise of a vibrant Banking sector within fragile economy, this does then promote a debate on signals of an economy to serve as a predictive power for Banks failure. (Haldane, 2014; Bulow & Klemperer, 2015) pointed out that regulatory measures of Bank Capital do not necessarily have predictive power for Bank failures. Empirically, (Haldane & Madouros, 2012; Sarin & Summers, 2016) measured Bank risk using both regulatory measures and market measures. And realized, the market measures, which is defined as the Capital ratio in the value of equity relations to total assets has the most explanatory power in predicting Banks failure, then secondly, the regulatory measures of Bank capital in respect to the Basel accord.

At this juncture the limitation of the research is the inability of the author as a matter of indepth study, to examine and evaluates the empirical factors that anchor the vibrancy of an economic market, serving as a fulcrum for Bank operations in credit-lending. For the fragile economy, the arguments of (Khwaja & Mian, 2008; Jimens et.al. 2012; 2014) in studying the Bank loans level data, and firm-level panel data did help to appreciate the omitted variable problems in controlling borrower-side factors in the Bank loan equation, and relied squarely on the theoretical pathway for effective credit-lending for a successful industrial performance and progression. Which, the author believe, further studies in the recommended areas could explore these factors in a deeper empirical perspective.

Therefore, the next subtopics will address into detail the technicalities in the various credit risk analytical models through its application, including its observable constraint to Enterprises, and additional feasible models for adoption as a recommended methods, which takes into consideration the environmental circumstances for application.

## C. EVALUATING CREDIT RISK ANALYSIS & LENDING MODELS

This section of the paper seeks to analyzed the current used method of credit-risk-analysis, which is relied upon by the traditional Banks for credit lending, and define such method in the context of this paper as *Model* 'E', with the focus in arguing on the inefficiency of such method process, and it utilization in a fragile economy of Sub-Saharan Africa. As well as a proposition of an alternative, as an upgraded model termed by this paper as *Model* 'D', which seeks to resolve the weaknesses of *model* 'E' application in fragile economy.

In the theoretical framework of application with *model* '*E*', it is observed in practical experience that, this kind of methodical tool is only useful and applicable to firms having historical operational existences, and a track records of financial performance in a given economy, which the model effective application mostly depends on an averagely three (3) years historical financial data records, based on operational performance, as a criteria for credit application and approval. And then followed with other risk-metric assessment, and analytical tools via questionnaires.

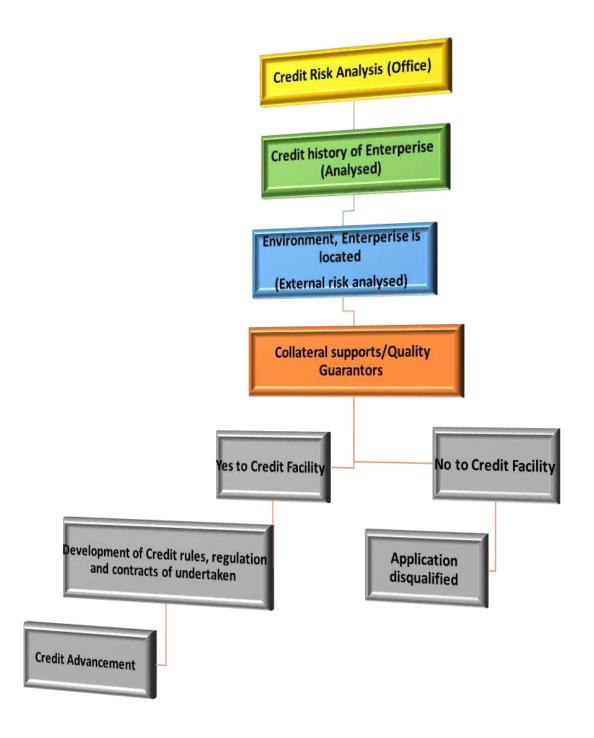
Enterprises chosen and analyzed on the scale of probability forecast on this credit-riskanalytical method are expected to meet at least the four major required criteria outlined below as a parametric conditions;

- i. The Enterprise is assured of profitability for short, medium and long term.
- ii. The Enterprise has passed, a credibility test
- iii. The Enterprise has successful historical data of operational performance.
- iv. The Management credibility and integrity test

When these parameters are met, then, the actual credit risk analysis of the Banks or other form of Financial Institution is generally observed to follow the model below in a diagram format, defined by the paper as 'Static Credit Risk Analysis'.

Fig. A1. Model 'E'

How the Credit lending analysis of 'model E' is applied by the Traditional Banks



E. T. Senzu (2020), Credit-Lending- risk analysis model structure

In the evaluation of the efficiency of *Model 'E'*, an empirical examination to the old Banking approach to credit-risk-analysis, from six (6) chosen countries were relied upon as a sample population to represent an idealized fragile economy, and the name of the chosen countries used for the experimental test are outlined below. The author reason of using these few selected countries as a representative of Sub-Saharan Africa region, was not necessarily in population size, but meeting the required characteristic trait in the experimental demand, for instance, passing the fragility test of their financial system in the structural context of their macro economy within a given period of time; with some of these countries meeting the criteria of underdeveloped economy status by World Bank rankings, and prevailing ranking conditions discussed under the introduction heading of this paper as a promoting factor to fragile economy within the stipulated time period of study.

(i.) Ghana (ii.) Nigeria (iii.) Uganda (iv.) Liberia (v.) Zimbabwe (vi.) Sierra Leone

On the field survey, a total of three hundred (300) Enterprise owners, and managers in the Industrial business community were interacted with in the selected six countries, and proceeded to examine their book records of capital raising, thereby adopting a case study approach as a method of empirical design in accordance to Best and Kaln (1998), as they argue that, case study method probes deeply and analysed interactions between factors, which explain present status, or influence change. The field research team engaged holistically, a total of five hundred (500) business owners and managers, as an aggregate data collection, but were successful with only three (300) enterprises managers/owners interactions, who were cooperative in terms of making available documents humbly requested for, in exchange for our token of appreciation.

The author believed that the account balance sheet records of an enterprise was sufficient enough to serve as a data inference for empirical deductions. The field survey was also guided with a premise that any of the firms to engage on a case study dimension should have obtain some form of credit facility within the six (6) month period, before the field study exercise began. Though, there were some level of difficulty encountered by the field team based on the non-cooperation of some of the financial institutions to corroborate the efforts of ascertained data from the business community, in a purpose of triangulation, within the allocated year of the project from October 2018 to September, 2019. Finally, in the categorization of businesses engaged within the six chosen countries, which together comprises of the three hundred (300) participants, who served as a representatives of those firms, the researchers contacted and were cooperatively received with audience, is outlined below graphically as Fig 'A2'.

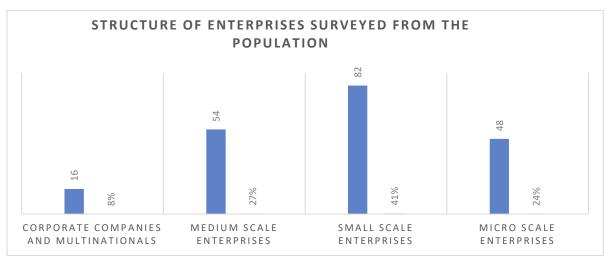


Fig. A2

To examine the efficiency of "Static-*Credit-lending-risk-analysis*" of *Model 'E'* in the chosen fragile economies by the financial Institutions contacted, the following question as 'Q2' below was posed out to the respondents, who served as Credit risk analyst for their Banks;

Q2. How many of the Enterprises, who did applied for credit facility, had their request approved within the six month period?

The computed data out of their engagement response is tabled below as Table 'X1'

Table x1

Company categorizations according to the Banks	The scope of Enterprises engaged in the market (%)	Offered the requested Credit Facility (%)
Corporate Companies & Multinationals	8%	4%
Medium Scale Enterprise	27%	8%
Small Scale Enterprise	41%	3%
Micro Scale Enterprise	24%	0%
	100%	15%

E. T. Senzu, 2020; field Report.

E. T. Senzu, 2020; field Report

In a descriptive summary of the aggregated data relied upon from the three hundred (300) engaged respondents, who served as representative for the varied Enterprises, and the financial Institutions affiliated to these Enterprises within the six (6) countries, which has been tabled as a data-point 'x1' above, the response solicited from the Enterprise owners and managers were (95%) confirmed from their affiliated financial institutions, to serve as a triangulation verification of these data point. While a precautionary steps were taken not to present the identification of the financial institution engaged in the academic exercise on the subject as a caution by its stakeholders.

In the advanced of the study, the credit analysts engaged in the financial Institutions were presumed to be relying on the traditional known Banking credit risk analysis for lending as defined in this paper as '*Model E*', thereby the inquisitorial engagement was to examined, why an estimated of (100%) application for credit facility in general, yet only (15%) went through successfully with their applications by the credit risk evaluation committee of all the Banks consulted, with the obtain data computed in the formula rule of tabled 'x1' above.

This presented the third question for the study itemised as 'Q3' below;

Q3. Why did the credit applications of these 'known' Enterprises disqualified, despite meeting the basic [parametric] requirement?

Table x2.

#### **Reasons behind Credit disqualification**

	General Response	Rate
1	Credit history suffered discrepancies with the reason known to avoid tax burden	34%
2	External pressure, and firm capacity to handle such economic shocks	22%
3	Weak collateralization and guarantors	12%
4	High Interest rate, making the credit facility dis-interesting	15%
5	Unreliable location of the Enterprises	2%
		85%

E. T. Senzu, 2020; field reports

<sup>§ &#</sup>x27;Parametric' requirement used means, enterprises being profitable, credible and having historic data of operational performance and competent management.

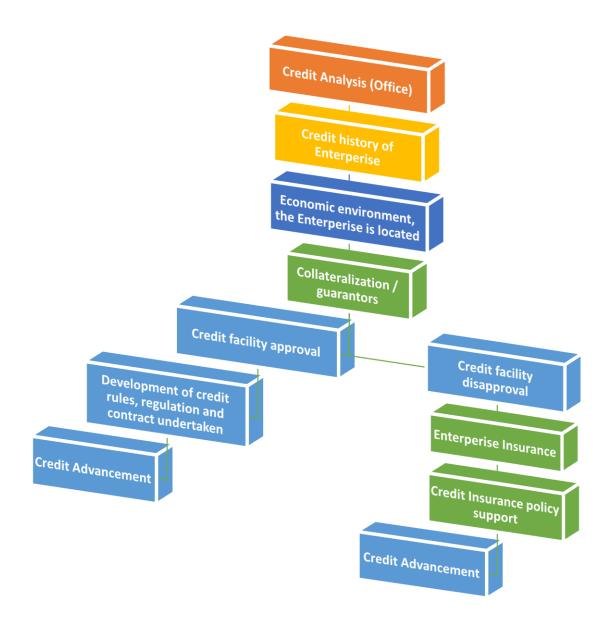
In the summary of table 'x2' above, it became certain that a stringent application of '*Model E*' credit risk analytical framework as labelled in 'fig.A1' above, places much emphasis on peripheral indicative reasons as a risk-factor and a danger signals, being the basis of it general probability analytics and forecast, undermining the evaluation exercise unique to enterprise and it sector performance, credibility, and capacity to honour it debt obligation despite unfavourable circumstantial environment. Such established empirical findings confirms and validate the assumption of the constraint pose by the *Static-credit-risk-analytical* approach to lending of Enterprises in fragile economy.

On the basis of such evidence, did grant a cogent reason for a proposition of alternative model, argued by the author as a proactive method to replace the existing model widely used by the transitional Banks and term that method as *Model- 'D'* framework of *Credit-Lending-Risk-Analysis*. With the *Model 'D'* framework designed below as Fig. 'A3'

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<sup>.</sup> The enterprise classification structure used in the context of this paper, do observe the World Bank standard rules of Enterprise categorization model.

## Fig. A3. 'Model D' Credit Risk Analytical and Lending Method

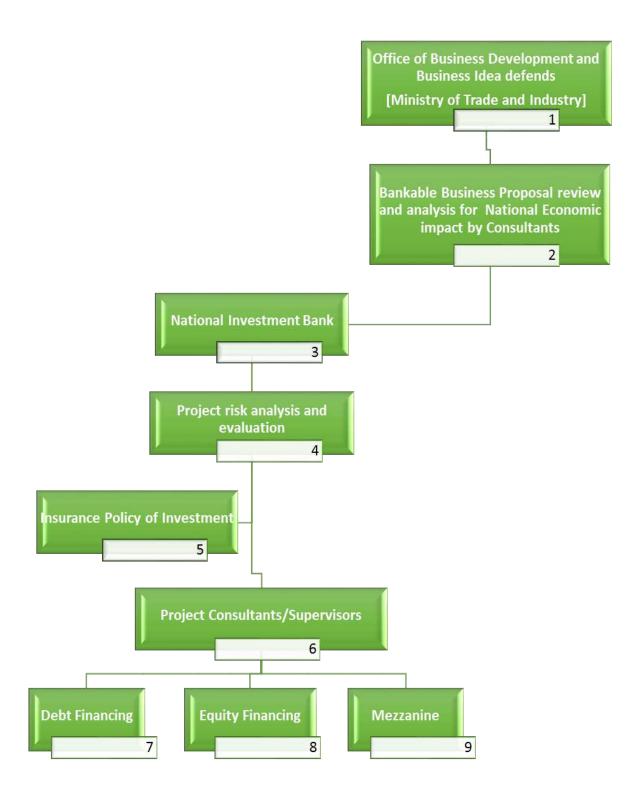


E.T. Senzu (2020) 'Model D'- Credit-Lending-risk analysis structure

The above *Model 'D'* as shown by Fig. 'A3' termed as *Credit-Lending-Risk-Analytical* method, which is stimulatingly prescribed by the author as dynamic and relatively efficient in its structural application, and argued to take into consideration the challenging triggers of a fragile economy, comparable to *Model 'E'* as shown in Fig. 'A1'. And serves as the alternative analytical method of Static-credit-risk-analysis, because of its unique quality as a model of application with emphasis on the basic 'parametric' (§) qualification of an Enterprise, to issue credit facility by financial Institutions. However, the observed weakness of the newly proposed *Model 'D' Credit-lending- risk-analysis*, is its inability to assess start-up ventures or businesses, having zero years of historical operations and performance.

Therefore, to resolve such identified weaknesses in the application of *Model 'D'*, relating to potential profitable enterprises in the quixotic stage; an advanced model structure as a credit risk analytical tool was further formulated, and termed as *Model 'S'*. For a financial Institution within a fragile economy to adopt the methodical application of *Model 'S'*, then the government of such economy, should have an interest in private sector empowerment as an engine of its economic growth, with a sincere policy motivation, to incentivize most of it youthful academic graduates into entrepreneurship, while she depends on the *Model 'S'* credit risk analysis and lending method as a system by her financial institution to cushion the fresh entrepreneurial ecosystem of it economy for a medium and long term sustainable impact, as well as the market empowerment for sustainable economic development.

The success and reliance on 'model S' method in advancing credit facilities requires a subcentral developed financial institution with it credit dispensing character and qualities of an [SME-EXIM-BANK] instituted under a statutory instrument, to guide its operational existence backed by a [State] guarantee, with its source of funding generated by Public-Private-Partnership (PPP) as a basis to guide it successful implementation of the model. In the circumstance of a quixotic stage proposed venture, what will be required as parametric qualification, is the proof of the significant contribution of such an idealized venture impacts on Gross National Products (GNP) of a given economy, when project risk analysis is carefully analysed and quantified. It only on such orientation that the *Model 'S'* framework shown below as Fig. 'A4' will be feasible for application.



## SME-EXIM Bank structure for credit risk analysis and lending

E. T. Senzu (2020) model 'S' credit-lending-risk analysis structure

### **D. CONCLUSION AND RECOMMENDATION**

In conclusion the author argue that over the years, there has been a general impression created by some of the leading literature of political economy on the study of developing countries, arguing on the supremacy of fiscal policies being an effective and solely tool of government, in dictating the success of a welfare [State]. Which this paper critique the exuberant nature of such ideological positioning, and rather assert that beyond fiscal policy interventions of government, an exceptional attention of government need to be paid-on the quality and vibrancy of its Banking system, in the area of credit lending to Enterprises, in developing economies, which is the anchor of a sustainable welfare [State] programmes.

Finally, there are three models, which the paper did present as a means of credit risk analysis and lending by financial Institution within fragile economy, the old traditional Creditlending-risk-analytical approach, adopted as a mainstream accepted practices, generally by the Banking sector, with such a model framework defined by this paper as *Model 'E'* with it weaknesses and application explored, resulting to the introduction of advanced models of credit-lending-risk-analysis termed as *Model 'D'* and 'S' methods, which is structurally defined in the earlier pages for efficient application in fragile economy, depending on the 'life-span' of the venture, either with three (3) or more years historical performance of productive existence, or Zero (0) year productive existence, in other words, a venture in an idealistic stage, for the Banks to re-sought to the use of *Model-S'* or 'D', respectively.

The researcher does recommend, any further research in this focus area should be on lending behaviours of Banks in a fragile economy, approaches, and methods to improve its potency and sustainability in the rudiment of economic crisis.

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