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Catallactics misapplication: it impact on Africa's economy  
revised edition

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## **1.0 ABSTRACT**

The paper seeks to solve the macroeconomic error that emerged from the dispensing of the monetary policy by the Central Banks of Africa. These monetary policies is unable to address the desired economic growth expected by individual developing and underdeveloped economies. It conclusively present a simple mathematical model to measure the exact health status of an economy in developing and underdeveloped countries in Africa.

**Keywords:** Monetary Economics, Monetary Policy, Fiscal Policy, Macroeconomics, Developmental Economics

**JEL Class.:** E2-E23, E5-E51-E58, O2-O23

## **2.0 INTRODUCTION**

The research study and purpose of this paper is to contribute to the knowledge body in this faculty of studies and help improve on the error which emerged from the careless use of imaginary construction in the direct and indirect exchange activities of the market and it methodological application by the Central Banks in Africa to dispense their monetary policy. This result in fallacious economic predictions and policy constructions directed to the future of the market. The latter result, is the frustration of the employment of capital and labour for the development of the economy of Africa. Blanchard (2003) posited ‘Monetary policy can have large and long lasting effects on the real interest rates and the implication on activities.’ She further indicated this assertion, in her Conference paper presented in honour of James Tobin at MIT School, which state that, “the large empirical literature based on structural VRA, suggests that the effect of an innovation in money on activity peaks after a year or so. ‘The large theoretical literature based on an equation for inflation derived from Taylor-Calvo foundation gives roughly the same results,

neither literature is totally convincing' (p.1). Finally stated "we need to rethink fiscal policy and redesign automatic stabilizer because fiscal policy suffers from schizophrenia (p.9)". However for this paper to be able to present its argument coherently and deal with the complex variations of definitions governing monetary policy, it has to constructively redefine this concept. The redefinition is for the purpose of setting up clear parameters to guide the ultimate deduction which this paper seeks to achieve, hence will define monetary policy as "all actions of governments, central banks, and other public authorities that influence the quantity of money and bank credit. It therefore embraces policies relating to such things as choice of the nation's monetary standard; determination of the value of the monetary unit in terms of a metal or foreign currencies; determination of the types and amounts of the government's own monetary issues; establishment of a central banking system and determination of its powers and rules for its operation; and policies concerning the establishment, regulation of commercial banks and other related financial institutions". I therefore posit under the subject of **Element of Monetary Policy** and emphatically state that "like all economic policies, monetary policy has three interrelated elements: selection of objectives, implementation, and at least an implicit theory of the relationship between actions and effects. All these three elements present problems of choice and are continuing subjects of controversy. "To examine the gravity of the error in the current monetary policy dispensation to address the current macroeconomic challenges, we need to first observe the evolution of monetary policy objective in modern sense, it is just a deliberate and continuous management of the money supply to promote selected social and economic objectives, which is largely a product of the twentieth century, especially the decades since World War I. In the earlier period, when most countries were on either gold or a bimetallic standard, the primary and overriding objective of monetary policy was to maintain and redeem the ability of the nation's money in the primary metal,

both domestically and internationally. A decline of the nation's metallic reserves to dangerously low levels, or any other threat to redeem ability, became a signal for monetary and credit restriction, to avoid whatever might be its other economic effects. When redeem ability seemed secured, monetary policy was used to promote other objectives to deal with panics, crises, and other credit stringencies and even to expand money somewhat, when businesses were depressed. But such intervention was sporadic rather than continuous and its purposes limited rather than ambitious. The international gold standard of the pre-1914 period was not purely automatic, but it was managed only marginally".

Many forces have contributed to the change and growth of monetary policy since World War (I). One set of forces includes the breakdown of the international gold standard and other changes and crises in monetary system's-inflation during and following World War (I) and the long period of suspension of gold redeem ability in most countries, the change and insecure nature of the gold and gold exchange standards re-established in the 1920s, the renewed breakdown of gold standards during the great depression of the 1930s, and world-wide inflation during and following of World War (II). All these had profound effects on attitudes toward monetary policy. Both countries that had too little gold and those that had too much shifted to the view that the state of their gold reserves was no longer an adequate guide to policy and that new objective and guides should be developed. Monetary actions became increasingly less sporadic, limited, more continuous and ambitious in scope.

Acknowledging the weaknesses of current monetary policy and its effect on real market globally is some of the concerns the paper seeks to expose, while the paper never ignores the current progress in macroeconomic studies and its monetary policy formulation to address some of these fundamental flaws in the neo-liberal regime. It further stresses the extent of standard deviation, of

the impact of monetary policy on the material market of developing and under-developed economy. The adoption of monetary policy by the Central Banks was to solve the following in the real market problems through its control on the supply of money, often targeting an inflation rate or interest rate to ensure price stability and general trust in the currency with the major goals as follows;

1. Economic growth and stability
2. Lower Unemployment
3. Maintain predictable exchange rate which fall within the scope of Keynesian school of thought

Measuring the Economic Outlook of some of the selected developing and under developed countries, based on their gazetted analytical records and open review published papers of the actual performance of their material economic market, triangulating it with primary data report of field observation and analysis, indicated a contradictory nature of the monetary policy proposals and real sector economic impact in time series from the year 2010- 2014. This development seem to undermine the efficiency of the whole concept of 'Fisher effect' (Mankiw, 2012, p.111) in economic market context of Africa, which complement the studies observed by (Boyd and Jalal, 2012)

This presents a worrying situation, such that continual undermining of the role of inefficiency of the monetary policy to the material market is the continual cause of poor economic development and growth within developing and undeveloped countries as the studies deduce.

### 3.0 THEORY AND LITERATURE

In theory, the ontology of economics, was to address scarcity as problem of a market phenomenon, therefore, if a monetary economics and it policy as a faculty of studies, fail to address the market challenges for developmental agenda as one of its major reason of existence; it raised critical questions for its essence and application in Africa economic market context, a means to pave the way of it re-development as a subject of applied science, to address current crises. Monetary theory and it policies under an accurate forecasting is expected to be efficient in addressing unemployment, manage inflation to the large extent of addressing scarcity and drive value in both nominal and fiscal in metrical terms, furthermore to stimulate economic growth. Poole (1993) “ The notion that Central Banks can provide a low-cost, over-the –counter ‘aspire-in’ that will alleviate almost any ill that society face is no longer credible.” The submission of this paper is to empirically argue on the causing factors, resulting in the policy incredibility especially within developing economy and alternative solution to resolve it. (Meltzer 1993, p.233) emphasize on “the role of judgement and discretion in the conduct of monetary policy”. Which complement the argument of this paper on the call for the Central Banks to be more innovative in dispensing it monetary policy taken into consideration it jurisdictional territory of operations. To address the gap between the monetary policy and it impact on economic development, requires a critical investigation into the market phenomenon, to construct an applied theoretical formulae for developing economy, paving the pathway to make good use of majority of it labour force, not ignoring the facts that majority of it active labour force is found in the informal sector as well as having a literary malfunctioning of it micro economy. The scope of theory and literature of this paper, is examined under the following subtitles, to establish the grounds for empiricism.

- i. Market phenomenon
- ii. Scarcity and value
- iii. The error in capital market forecasting
- iv. The Challenge of ignoring the labour effects in monetary policy

### *I. Market Phenomenon*

“There has never been any doubts and uncertainties about the scope of economic science, ever since people had been eager for a systematic study of economics or political economy, all have agreed that it is the task of this branch of knowledge to investigate the market phenomena” Mises (1973).

To define the market phenomena, simple equations below could be derived, which is expected to guide the realistic application of monetary policy to it targeted market, to achieve the intended result drawn out from the monetary policy objective.

1st

$$\text{Market Phenomena (MP)} = \text{Market Exchange (ME)} + \text{Catalactics}$$

2nd

$$\text{Catalactics} = \text{Money Price (Px)} + \text{Economic Calculation (EC)}$$

First derivation

$$\text{Market Phenomena} = \text{Market Exchange} + \text{Money Price} + \text{Economic Calculation} \dots \text{Eq.1}$$



The following are critical questions that arise when analyzing the above equations stated above:

1. Is the dynamics of market exchange in the context of developing and underdeveloped economy well understood in the sphere of economic science for accuracy in monetary policy application?
2. The premise, upon which the economic calculation is derived, in the context of developing and underdeveloped countries economic market, accurate?
3. The structural operating mechanism of the market phenomenon in African context well understood by the Central Banks to guide monetary policy applications?

The three outlined questions above, if not accurately addressed, result in the default towards the understanding of the economic market operational frame work, which is noted by this research studies to be the major cause of failures encountered through the economic developmental projects instituted by World Bank and its allies for Africa, as well as other failures in scientific predictions in political economic development in Africa over the past two decades. Experience of today and historic fact vindicate these assertions. (Ayittey, 2002) “Failure of World Bank policies in Africa”.

To address such questions, and for the error to be corrected, “Value” was redefined for the purpose of this paper as an ‘Intrinsic quality inherent in things and not merely the expression of various people’s eagerness to acquire them’ (Mises 1920). The paper further establish, the linkage between

“Value” and the cultural behaviour of a society and the correlation on development impact on an economy. This establishes the argument, which respond to the question (1), which state:

*“Is the dynamics of market exchange in the context of developing and underdeveloped economy well understood in the sphere of economic science for accuracy in monetary policy application?”*

(Mises, 1920) “Action man” is always concerned with both “material” and “ideal” things. Hogan (2006) classifies and defines “Value” as means-value and ends-value. “Means-Value” is object or action and the “Ends-Value” is the feelings associated with the means value or actions. He further classifies “Ends-values” into the categories of “attraction-values” and “avoidance-values”. Examples of attraction-values are love, happiness, security, ecstasy, freedom. Examples of avoidance-values are depression, anxiety, fear, boredom, sickness. Anthony (1987) asserted that we want or seek certain things or conditions in life (means-value) because of the state we think they will give us (ends-value). With the fore mention assertions, this easily deduce that an action man definition of value in a society in terms of economic actions and interest will be highly influenced culturally. When such is applied beyond an individual but to a group of people within a certain defined jurisdiction, it plays a cardinal role in what motivates the action man or a group of people to engage in a market exchange. The paper argue that the concentration and effectiveness of the “exchange mechanism” is driven by the Value-focus of a group of people or the action man. For example, if a group of people believes so much in a “means-value” of investing in building houses to exercise certain “ends-value” like prosperity, prestige and many other interrelated web-links of “ends”, such will drive the intensity of exchange in architectural constructions to develop private property in Real Estate Ventures to the satisfaction of consumers. According to the studies, this will steer the advancement of market phenomenon cum economic development in that sector

as the major drive of economic growth of such group of people, with the other sectors of their economy acting in complimentary.

Comparative case study of economic development of Africa historically presented, in the era of BC and AD, justify with clear evidence through historical records; that the Africa of AD has deteriorated in its true economic advancement despite its exhibition of modern edifice and infrastructural development. The evidence of this analytical study depicts clearly that, the continent is operating on a displaced economic and market exchange “value”. Since “value” is the cardinal pillar of market phenomena per this argument, a technical displacement of it as a result of a missing link to the people culture, causes a very complex problem that disconnect the majority of the labour force to relate meaningfully to the dynamics of the market exchange. Africa’s current socio-economic developmental examination depicts a clear disconnection of its larger labour force, identified in the informal sector to its endogenous economic market. This informal sector supposed to be the power house of efficient production in the exchange market to cause economic development. However combined effect of labour misalignment to the material market and scarcity, cause a special dysfunction to the market. Thus, majority of the supposed market players (grassroots circle) have lost meaning of their existence to the ecosystem to contribute meaningfully to the development of the market structure and its exchange circle within this geographical area. In such a socio-economic experimental situation, all government fiscal policies, no matter how scientific they are constructed, will fail to achieve their intended purpose because they misalign with the true market structure and its system of the targeted group of people. It has to be further realized, when the construction of a policy is in error, it loses its meaning of a win-win situation.

A brief historical record of African economy and the linkage it establishes between “value”, “culture” and the “market phenomenon”, led to the booming of its economy in the early 5200BC.

Archival reports assert that earlier Africans were hunter-gatherers, living in small family groups even though there were considerable trade that could cover a long distance. Archaeologists have found evidence of trade in luxury items, like precious metals and shells across the entirety of the continent, which were the main items of trade. Some people, such as the Berber, lived in dry areas and became nomadic herders while in the Savannah grasslands, people cultivated crops and thus permanent settlements were possible. Agriculture supported large towns and eventually large trade networks developed between towns as early as 5200BC, In Nubia and Ethiopia, iron trade and agricultural surpluses led to the establishment of *cities* and *civilization*. (Wikipedia, 2014; Economic History of Africa)

The above assertion compliment the argument that, a clear defined market exchange built on value of the people and driven under the influence of culture behavior has strong impact in economic development.

## II. Scarcity and Value

“Acting and thinking man is the product of a universe of scarcity in which, whatever well-being can be attained, is the prize of toil and trouble of conduct, popularly called economics” Mises (1920). Scarcity has become a major challenge of man to address. This demands the compulsory knowledge of economics to minimize the effect and impact of scarcity for man’s welfare and development. This does not correlate my ideas in support of Karl Marx’s school of thought, Marx New world Encyclopedia (1948) which believes that scarcity could forever be eradicated by the abolition of private property. From my perspective such an intellectual opinion is radically ambitious and does not hold the solution to the problem under debate, taking in context the “Value” of man and attitude to power of control, on the grounds of historical evidence, (Ayttey, 1992)

Africa betrayed. The relationship between scarcity and Value within the context of developing and underdeveloped economy and the impact to growth present the foundation of a new argument to respond to the question two (2) stated below;

*“The premise, upon which the economic calculation is derived, in the context of developing and underdeveloped economic market, accurate?”*

In response to the definition of ‘value’ by this paper; it argue that, the labour function of the fiscal space need to operate in a manner to minimize the existence of scarcity, hence call for an action that establishes an inverse proportional relationship between ‘value’ and ‘scarcity’, that hold against the popular notion and the orthodox mathematical view of direct proportional relationship between ‘scarcity’ and ‘value’, which is traditionally perceived as profitable in sense of capital market operations and development.

In the nutshell, the defined ‘Value’ of this paper will be subjected to theoretical derivation using Mises (1949) theoretical framework for the gradation of ‘ends’ from ‘means’ in his publication entitled: *The Human Action*. He asserted that “Gradation of the means is like that of the ends, a process of preferring “a” to “b”. A manifestation of judgment that “a” is more intensely desired than is “b” is equal as “b” to “c”. This opens a field for application of ordinary numbers but does not open to application of cardinal numbers and arithmetical operations based on them. The immediate goal of acting is frequently the acquisition of countable and measurable supplies of tangible things. Acting man then has to choose between countable quantities which he prefers, for example, “y” to “x”; but if he had to choose between “x” and “z” he might prefer “x”. We can express this state of affairs by declaring that he values “z” less than “x” but higher than “y”. This is tantamount to the statement that he prefers “a” to “b” and “b” to “c” but the substitution of  $y=a$ ,  $x=b$ ,  $z=c$  changes neither the meaning of the statement, nor the fact that it describes”.

It certainly does not render reckoning with cardinal numbers possible. It does not open a field for economic calculations and the mental operations based upon such calculations. The elaboration of this economic theory in the framework of monetary policy is heuristically dependent on the logical process of reckoning to the extent in which “Value” is derived from an acting man or group without undermining the role its culture plays in the context of desire. This is what most monetary economist had failed to realize as the fundamental problem involved in the method of economic calculation. They are prone to take economic calculation in market phenomenon as a matter of cause; they do not see that it is not an ultimate given but a derivative, requiring reduction to more elementary phenomena.

They take their calculation as a category of all human action and ignore the fact that it is only a category inherent in acting under special conditions. They have to come to the realization that the interpersonal exchange and consequently market exchange are affected by the following intermediary of common medium of exchange; that is money and cultural influence on value. This deduce that monetary price built within a policy will not and could not be the only vehicle of economic calculation. This reveals the fallacies implied in the ideas about economic calculation by many eminent economists, which shows how modern theory of “value” and “prices” dictate the choices of individuals, their preference of some things at the expense of other things, result in the sphere of interpersonal exchange and the emergence of market price. These masterful expositions are unsatisfactory in some minor points and disfigured by unsuitable expressions but essentially irrefutable.

In order to trace back the phenomena of the market to the universal category of preferring “y” to “x”, the elementary theory of “Value” and “Price”, is bound to use some imaginary constructions to which nothing corresponds in reality, is an indispensable tool of thinking. No other method

would have contributed something to the interpretation of reality until the most important challenge to such a science, which is the fallacies in its imaginations employed for such constructions, is avoided. And rather begin to analyze the market in the view point of human action, as well as its cultural influence. The only reason to have the premise of economic calculation accurate in the framework of developing and underdeveloped economy.

### III. The error in capital market forecasting

‘Adaption Expectation’ theory hypothesized that, people form their expectations about what will happen in the future based on what has happened in the past, and computed it into an equation as below;

$$Pe = Pe_1 + \lambda(P - Pe_1)$$

However the theory chose to blame the error that emerge from forecasting, as stochastic shocks in the capital market. This resulted in the development expectation theory, Muth (1961). This theory presented a new mathematical model for a systematic predictions but was also noted to have a similar error, by ignoring the cultural behaviour that drive the value of the exchange market, hence failed woefully to make a meaningful formula for applied capital market analytics and accurate forecasting into the future market for appropriate policy constructions.

The difficulty, was the attempt to resolve macroeconomic developmental problems by resorting to a theory and model that calculate prices changes solely, ignoring labour computation into the economic calculation; the axiom, that drive the micro economy (grassroots) of most of the

developing and underdeveloped countries. This establish the intellectual grounds to examine the third question which state:

*The structural operating mechanism of the market phenomenon, is it well understood in African context by the Central Banks, to guide monetary policy applications?*

The paper argue that, the use of forecasting as a methodological tool used by the Central Banks in monetary policy and decision making has not been effective and efficient in its application, which will be proven empirically by this paper, and further propose that, monetary policy development that innovatively takes into consideration the culture behaviour of the exchange market to derive ‘value’ defined by the people, could be assured and guaranteed of accurate forecasting and reliable decision making.

#### IV. The challenge of ignoring the labour effects in monetary policy

Rationalization of labour efficiency in the market phenomenon is mostly based on quality formal education without considering the stratification of the market system within a geographic area. This has mostly resulted to an error of misalignment in the ‘value’ of the exchange market and effective utilization of labour. Not all labour efficiency depends on formal education to derive the kind of arithmetic computations that form the foundation of labor economic theory on productivity and efficiency. When autocorrelation test was conducted, to measure most of the ‘causes’ exude by the labour economist as the root of labour efficiency and impact to macroeconomic growth, the following list of variables were adopted for the experiment and observed from studies as listed by Hashin (2012) as Education, working conditions, time to act, information, tools etc., It evidentially established that, the cultural behaviour of the people in a



certain geographical area held a very strong influence in the labour performance and efficiency comparable to the popularly known causes that produce high labour productivity and efficiency in the causal relation analysis.

Purposive sampling technique was used to select both developing countries based on the nature of their economic market structure. It was further realized that effective operational mechanism of micro-economy of a nation, has a lot to do with a country economic developmental agenda. From the studies it was established, whenever a functional economy has a problem of misalignment of productive labour at the micro level to feed the macro economy (from down to top approach), the investment of monetary capital is bound to be wasted. This deduce that, any formal education that produces human capital for a particular market has to take into consideration, its cultural philosophy as the foundation to construct its training materials for the development of its labour force, beyond these conclusions, there was a likelihood of dysfunction of the labour market, to be meaningful to its market ecosystem and operate as the engine of industrial growth.

#### **4.0 METHODS AND DATA SET**

This paper adopted series of methods to empirically argue the disconnection between monetary policy and its economic impact in developing economy. Praxeology was one of methodical tools used, due to the intent of this paper to derive practical correlation of human labour input in micro level and its correlation effect on macroeconomic aggregation measurement for easy analysis. “Praxeology is a deduction of human action based on notion that human engages in purposeful action behaviour” Mises (1949). It further used the Case study method to analyze the current

monetary policy impact on microeconomic activities in developing and underdeveloped countries. “Case study aims to analyze specific market within the boundaries of specific environment, Situations or organization” Dudovskiy (2016). According to Best and Kaln (1998), the case study probes deeply and analyze interactions between factors that explain present status or influence change or growth. Thus, data can be gathered in this regard through interviews or by observations of the researcher. Feldman (1996), states that in contrast to survey in which many people are studied, a case study is an in-depth study, intensive investigation of individual or small groups of people.

The target population of a survey is defined by Lavrankas (2008) is the entire set of units for which the survey data are to be used to make inferences. Frankel and Wallen (2000), states that the population is a group to which results of the study are intended to apply. That is the target population to which the researcher is interested in gaining information and drawing conclusion. Thus, the target population defines those units for which the findings of the survey are meant to generalize. This included the owners of micro/small scale enterprises, government employees, private corporate employees, informal sector workers and youth with a demographic age range of 20-35years.

Correlation Analysis was used as another tool to examine the impact of the monetary policy to the actual market performance or real economic outlook of a developing countries which was used to create the sample frame work using a sample size of 10,000 to analyze the state of economic outlook among the Seven (7) chosen sovereign state in Africa. The Sample size is the number of observations used for calculating estimates of a given population (Smith, 2010). The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In practice, the sample size used in a study is

determined based on the expense of data collection, and the need to have sufficient statistical power. Fowler (2002) admits that the size of a sample is one of the most common questions posed to survey methodologists. To him, one familiar misconception people have is that, the adequacy of the sample size depends heavily on the population included in that sample. Fink and Kosecoff (1998) also stated that, the size of a population from which the sample of a particular size is drawn has virtually no impact on how well a sample is likely to describe a population. The appropriate sample size is influenced by your purpose in conducting the research. If your sample size is too small, you could miss important insights. But if it's too large, you could waste valuable time and resources.

This was done by relying on credible secondary and primary data report from the past 5 years to the current using non-probability sampling method; specifically purposive sampling technique to extract information through the administering of the questionnaires to the targeted population in the individual countries listed as follows; Ghana, Kenya, Nigeria, Benin, Uganda, Zimbabwe and South Africa on a field survey report.

The study used a sample size of ten thousand (10,000) respondents from the targeted nations. However nine thousand (9,000) questionnaires were returned. This resulted in a response rate of ninety percent (90%). This was in accordance to studies by Mitchell (1989) and Evans (1991) which argues that a survey response rate should be calculated as the number of returned questionnaires divided by the total sample who were sent the survey initially and that getting a high response rate (>80%) from a small, random sample is considered preferable to a low response rate from a large sample. To have such a large sample, yet with a high response rate was creditable effort, with a guarantee of findings having high effect to the circumstance of the material world and with high statistical confidence to support the argument and analysis deduce quantitatively.

The Objective of the survey was to analyze, the effect of the monetary policy to the micro economy. Below is the table of respondent of the sample size indexed as Table A.

Table A. Category of Respondents

<i>Population Sample (Countries chosen for the survey)</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Ghana Benin Kenya Nigeria Uganda Zimbabwe South Africa</i>	Owners of micro/small Enterprises	600	6%
	Government Employees	1500	15%
	Private Corporate Employees	1200	12%
	Informal Sector workers	1920	19.2%
	Youths (20-35)	3780	37.8%
	Non-Respondent	1000	10%
<i>TOTAL</i>		10000	100%

*Source: Field work, 2013/2014*

The empirical work seek to establish a clear distinction of our respondent deep understanding of their socio-economic activities independent of political biases, taken into consideration of the past and the current, to avoid responses driven under political interest and biases instead of basic understanding into general economic performance and issues. It was further assumed that, there is a possibility that; as at the time the survey is been conducted, a new political party would have assume office as a central government within the chosen country for survey in replace of the formal. This could have some level of impact in the accurateness of the response from the respondent, when he/she is politically biased. The precept behind the design of the questionnaires

especially question (1), was to draw the mind of the respondent historically to the state of their economic life style in the past three years to make a comparative analysis to the current and deduce whether social life is in a state of upgrading or degrading. As a result, the below question was asked and tabled as ‘B’ as shown below to act as an exhibit.

*QR 1. What has been the state of your socio-economic activities as at 2010-2012?*

Table B: State of economic outlook 2010-2012

<i>Variable</i>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Owners of micro/small enterprise</i>	A. Best	10	1.7%
	B. Good	40	6.7%
	C. Bad	400	66.7%
	D. Worst	150	24.9%
<i>Government Employees</i>	A. Best	5	0.3%
	B. Good	70	4.7%
	C. Bad	1250	83.3%
	D. Worst	175	11.7%
<i>Private Corporate Employees</i>	A. Best	15	51.3%
	B. Good	85	7.1%
	C. Bad	920	76.7%
	D. Worst	180	14.9%
<i>Informal Sector Workers</i>	A. Best	3	0.2%
	B. Good	21	1.9%
	C. Bad	700	36.5%
	D. Worst	1196	61.4%
<i>Youths(20-35)</i>	A. Best	89	2.4%
	B. Good	110	2.9%
	C. Bad	3100	82.0%
	D. Worst	481	12.7%

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*Source: Field work, 2013/2014*

General analysis across the variables as Table ‘B’ empirically justify that, there was a deep understanding from the owners of micro/small scale enterprises, government employees, private corporate employees, informal sector workers and the youth on their socioeconomic activities, which the data deduction of the state of economic performance from 2010 to 2012 was seen as bad. Because about 66.7% of the micro/small scale enterprise owners confirmed it in their response, which was recorded as the highest in their category on the state of the economy towards the kind of business they do. The government employees, recorded 83.3% as the highest in their category confirming that the state of the economy was bad. Private corporate employees responded same as a confirmation with 76.7%, having the informal sector recording 61.4% as the highest in their category concluding that the economy move from bad to worst in the same period towards their ventures. Finally the youths affirmed the bad state of the economy with 82.0% which depict about 3,100 respondent.

Confirming the deep understanding of our sample size population, towards their own socioeconomic activities, it setup the foundation to proceed with the question two (2) stated below as

*“What is the impact of monetary policy by the Central Bank on their socio-economic operation on 2013/2014?”*

Table C: Impact of monetary policy in socioeconomic life

<i>Variable</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Owners of micro/small Enterprise</i>	A. High	-	0.0%
	B. Marginally	15	2.5%
	C. Insignificant	585	97.5%
<i>Government Employees</i>	A. High	-	0.0%
	B. Marginally	80	5.3%
	C. Insignificant	1,420	94.7%
<i>Private Corporate Employees</i>	A. High	-	0.0%
	B. Marginally	51	4.3%
	C. Insignificant	1149	95.7%
<i>Informal Sector Workers</i>	A. High	-	0.0%
	B. Marginally	-	0.0%
	C. Insignificant	1,149	100%
<i>Youths (20-35)</i>	A. High	-	0.0%
	B. Marginally	-	0.0%
	C. Insignificant	3,780	100%

*Source: Field work, 2013/2014*

To empirically examine the impact of Central Bank Policy in socioeconomic life of the targeted sample population, the data depict the extent of how the policy is seen as insignificant in their economic activities. The owners of small and micro enterprises responded with 97.5% indicating the policy effect of Central Bank been seen as insignificant towards their business activities, Government and private corporate employees with their respondent data pegged around 94.7%

and 95.7% respectively, which equally indicated the insignificant of the central bank policy in their daily economic transactions, while informal sector workers and the youths had 100% of its category affirming to the Insignificant effect of the central bank policy in their daily activities, implying, before and after the policy of the Central Bank, there is no evidence of positive economic growth affecting their economic transactions.

Analyzing from the above data Tabled as ‘C’, the researcher further wanted to find how these people in the sample size deeply understand the role of central Bank in the economic growth of a nation, hence the third question was developed and administered as stated below

QR 3. *Do you understand the role of the central bank in economic growth?*

Table D: The role of Central Bank in economic growth

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Owners of micro/small enterprises</b>	A. Yes	120	20%
	B. No	480	80%
<b>Government Employees</b>	A. Yes	200	13.3%
	B. No	1,300	86.7%
<b>Private Corporate Employees</b>	A. Yes	180	15%
	B. No	1020	85%
<b>Informal Sector workers</b>	A. Yes	-	0
	B. No	1,920	100%
<b>Youths (20-35)</b>	A. Yes	780	20.6%
	B. No	3,000	79.4%

*Source: Field work, 2013/2014*



According to the data from Table D. depict clearly, the general understanding and effectiveness of the central bank role in domestic economic growth, is perceived to be insignificant or very minimal. The percentage of micro/small scale enterprise owners, who concur that the central bank has a role in domestic economic growth was only 20%, while government and private corporate employees had only 13.3% and 15% respectively acknowledging that the central bank has a role to play in economic growth. While only 20.6% of the youth believing and concurring with the other category of variables that the central bank has a role to play in economic growth. Yet the informal sector category did not have any respondent to acknowledge the role of central bank in economic growth. Which simply imply that the current role of central bank in developing economy is not feasible enough, for it to be acknowledged by the operational market and its active players on the role in economic growths and stability, which was not encouraging. Therefore to empirically examine and confirm such a gap between the monetary policy and fiscal market, the final question that forms the fourth question, sorts to narrow respondent opinion on Central Bank role towards the domestic market, by asking the question, which is stated below;

*QR4. What is your experience of 2013/2014 monetary policy effect in your country on employment, exchange rate and growth?*

Table E.

## Impact of monetary policy 2014

<i>Variable</i>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Employment</i>	A. Excellent	100	1.3%
	B. Good	220	2.8%
	C. Bad	7,680	95.9%
<i>Stimulation of Economic growth</i>	A. Excellent	20	0.3%
	B. Good	180	2.3%
	C. Bad	7,800	97.4%
<i>Stabilization of fix exchange</i>	A. Excellent	15	0.2%
	B. Good	210	2.6%
	C. Bad	7,775	97.2%

*Source: Field Work, 2014*

Analytical review to the data from Table E. depict, a high percentage of the population size that could not connect the monetary policy to its core objective as set out by the Central Banks, and it reason of existence. About 95.9% of the respondent could not connect monetary policy effect to employment, about 97.4% also could not link Central Bank policies towards stimulation of economic growth as well as it impact on stabilization of fix exchange, which was recorded as 97.2% of respondent view. This largely depict how Central Banks in developing economy is disregarded on any effective role towards sustainable economic growth by majority of its population size. Which this paper seek to argue from theoretical perspective, as the lack of Central Banks deep understanding of the developing economy market phenomenon as a result misapplying the tool of catallactics.

The primary data collection and inferences was further triangulated with the secondary source of data from the chosen sample population. At this final stage was to gather historic information from credible secondary data source of the market on the actual economic outlook for the past three (3) to four (4) years after monetary policies were implemented. This was done to serve as a second source for triangulation as (Kane 1985:51) posit “if you have to stake your life on which of these is likely to represent the most accurate complete research information, you would choose the center of the overlap in which you got the information through interviews, questionnaires, reinforced it by observation and check it through documentary analysis”. This secondary source of data relied upon, were government statistical report from chosen country which presented the state of economic outlook in this selected number of years from 2010 – 2015. GSS (2015) Gross Domestic Production Growth is captured as ‘Table 3X’ as below. This data was used as a secondary source for my correlation test on the condition that GDP Growth is used as a macroeconomic indicator that represents the state of economic growth and the status of the economic health of a country.

**Macroeconomic Indicator**  
Ghana Statistical Data Report (2015)

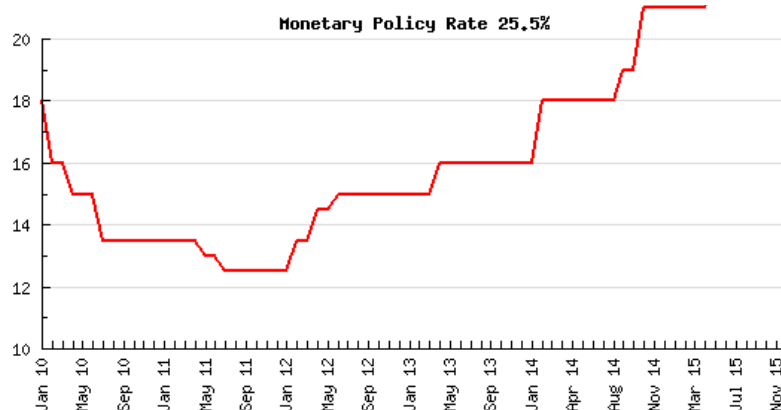
Table 3 X.

Years	2010	2011	2012	2013	2014
Real Gross Domestic Production Growth in Percentage	25.8	29.9	25.9	24.0	21.3

**Note:** This is a Government of Ghana statistical report in it Real gross domestic growth in percentage wise from 2010-2014, which was then available when this studies was on-going, as the only figures to depend upon within the stipulated period the studies seek to acquired authentic data report.

Conducting a comparative analysis with the graphical data of the Bank of Ghana policy in that same period projected below as Fig.A

Fig. A  
Credit to BOG.



**Note:** The Bank of Ghana Monetary Policy rate Graph from January 2010 to January 2014.

Analyzing the exact impact of the graphical data analysis from Fig. A in the time period of 2013 to 2014, it will require the paper to delve deeper on how the Bank interpreted the policy actions above with macroeconomic event which are outlined below to complement analysis and deductions

During September 2013, Bank of Ghana monetary policy public released overview report on domestic economic growth in Ghana is stated below;

*“An update of the Bank’s Composite Index of Economic Activity (CIEA) in July 2013 suggests a modest pickup in economic activity alongside positive consumer sentiments about job prospects. These developments were partly attributed to growth in private sector credit though at a slower pace, improved sales of key manufacturing companies and increased*

*industrial consumption of electricity. In the third quarter however, consumer confidence waned as a result of worsening economic and financial situations. In the outlook, the economy is projected to expand moderately supported by positive developments in the CIEA, the credit stance of Deposit Money banks and increased oil production.”*

BOG Monetary Policy Report Vol. 6 No. 4/2013

Another report of Central Bank of Ghana monetary policy overview on the real sector economic development in Ghana on November, 2013, just after the September press release is captured below as:

*“Real GDP growth for 2013 is provisionally estimated at 7.4 percent compared to 7.9 percent growth in 2012. The provisional growth estimates for 2013 reflected positive growth in the sub-sectors though the services sector remained the key drivers. The provisional Bank of Ghana Composite Index of Economic Activity suggested some pickup in growth. During the survey period, businesses expressed optimism about growth prospects in the fourth quarter of 2013. However, the upward adjustment in utility prices in October 2013 weighed down on overall business and consumer confidence”*

November 2013 Vol.6: No.5/2013

The final report captured by this paper from the Bank of Ghana after the November 2013 released report was the February 2014 edition as the final secondary data source relied upon for this correlational analysis to present a coherent argument to that effect, below is the captured text of the over view report on real sector economic development in Ghana

*“The latest Real GDP growth numbers from Ghana Statistical Service puts the third quarter year-on-year growth at 0.3 percent (0.5% sa) for 2013, compared with 7.0 percent in the third quarter of 2012. On a quarterly basis, real GDP growth recorded a 17.4 percent growth in the third quarter of 2013, compared with 24.1 percent quarter-On-quarter growth in the same period of 2012. These suggest that the Ghanaian economy slowed down significantly in the third quarter of 2013. In terms of sectors, Services registered the highest growth of 6.7 percent, while agriculture and industry contracted by 3.8 percent and 11.8 percent respectively. Provisional estimates of the Updated Bank of Ghana Composite Index of Economic Activity (CIEA) suggest a pickup in economic activity in the fourth quarter, following a significant downturn in the third quarter of 2013”*

February 2014 Vol 6. No. 1/2014

Critically examining all the three projected overview text extracted from the Central Bank of Ghana archive in quarterly reporting order, comparing to the primary source of data obtained, indicate a contrary view of the people to what the central bank staffs seek to project. Furthermore the press release tone on a certain pattern of historical analysis of the status of domestic economy in figures but denied of clear impact to the economy of today and what is to be expected in the near future within a specific time frame. This kind of monetary policy press release character is observed among all the Central Banks found within developing and underdeveloped countries. They tone on a pattern of defining why the policy decision is taken, on the bases of historic account and never define it realistic socio-economic impact and growth per the current circumstance of domestic economy and the impact of the new policy enactment towards the future in real sector economic growth through accurate forecasting.

Table 3X, Fig A, Table B. and Table E. were empirically examined, if there is any relationship between the monetary policy implementation, impact within the set period and the real GDP growth scientifically, a means to define a reliable relationship and trends that could support a scientific deduction on the state of economic growth and development of a nation by its monetary policy transmission. Unfortunately no trend and statistical relationship was deduced from the various categories of data.

However Arto Kovaven (2011) observation on macroeconomic performance of Ghana as a research project under IMF, concluded that “monetary policy transmission and interest rate channel never works, indicating that the monetary policy is losing its credibility on the grounds that, it has failed to achieve its intended purpose of existence. He therefore strives further to propose the cause for such dysfunction of the policy, and assert that “the effects of the shocks or

deviation of monetary policies may be amplified by illiquid or shallow financial markets” in developing economy like Ghana. When a general observation was held across the twenty four nations that form part of the continent of Africa, the challenge of Central Banks policy deviation to the proposed expectation was very common yet in different degrees of impact in the chosen sovereign nations. Which the paper seek to attribute such failures to lack of understanding by the monetary regulator on structural operation of the market phenomena of developing economy. Which the ultimate purpose of this paper is to respond to such standard deviation; a means to exude a macroeconomic formula that will be able to measure the true health status of developing economy.

## **5.0 FINDINGS, RECOMMENDATION & CONCLUSION**

### **5.1 Findings**

- i. There was no correlation of monetary policy and rise in employment in developing and under developed countries
- ii. There was no correlation of monetary policy and realistic stimulation of economic growth in developing and under developed countries
- iii. There was no direct correlation of monetary policy and stabilisation of fix exchange of currency in developing and underdeveloped economy
- iv. Majority of the market actors hardly accept there is a significant role played by the Central Bank in economic growth in developing and underdeveloped countries which further indicate that, if even there is, their current performance deny the feasible nature of their effort.

### **5.2 Recommendation**

*Derivation of Macroeconomic Formula as a model to determine the True state of Health of an Economy classified as developing economy*

The paper in both empirical and theoretical analysis strive to present relevant economic variables that are required in the calibration of the true health status of an economy in developing countries. The objective of this formula is to assist the monetary regulator to understand the behavior of the market through the culture value of the people as a means to guide the designing of it policy for implementation.

Based on the formulation of equation (1) from above, the equation (2) was derived as stated below with it definition in section (5.2.1) outlined

### 5.2.1 Defining the equation with symbols

$$MD = ME + C (MV) \dots\dots\dots \text{Eq.2}$$

(MD) Represent “Gross Domestic Production” of a country with the symbol ( $\Theta$ ) to use in the equation

(ME) represent “Domestic Market Exchange Index” with the symbol ( $\beta$ ) to be use in the equation

(MV)- represent “Market Value Point Index” of a specific geographical area with the symbol ( $\alpha$ )

C- Represent “Mass labour efficient index” ( $\lambda$ )

$$\theta = \beta + \lambda\alpha$$

- I. ( $\Theta$ ) As the symbol is defined by this calculation as the **macroeconomic development aggregation** of a nation, replacing the role of Gross Domestic production computation
- II. ( $\beta$ ) As a symbol in the formula, measuring all sectors of the economy that contribute to the **Gross Domestic production (GDP)**.



- III.  $(\alpha)$  As a symbol in the formula, measuring the exact sector of the economy that contribute highest to the GDP of a country's economy.
- IV.  $(\lambda)$  – As a symbol in the formula, measuring the labour force engaged by the sector of the highest GDP contributor within a particular period

Considering the complication of data computations and clarity of deduction in the data analysis deriving it from the formula proposed above, one country was chosen among the selected countries and used for the analytical computation to establish a grounds of easy experimental test, to validate or nullify the hypothesis in a descriptive manner. In this instance Ghana economy was used to perform the test.

#### 1<sup>st</sup> Hypothesis

**H<sub>0</sub>:** A sustainable GDP growth is obtain from a highly performing sector of that same economy, which has connection to the cultural value of the people in its geographical zone

**H<sub>1</sub>:** Is the negation of H<sub>0</sub>.

#### 2<sup>nd</sup> Hypothesis

**H<sub>0</sub>:** A highly contributing sector that fail to engaged high volume of labour force in developing economy will fail to cause growth in GDP

**H<sub>2</sub>:** Is the negation of H<sub>0</sub>

The Study adopted the GDP of Production Approach Measurement

Table of (β)

Details	2010	2011	2012	2013	2014
AGRICULTURE	12,909.6	14,154.8	16,668.0	20,232.0	23,278.0
Crops	9,421.6	10,649.9	12,525.0	15,742.0	18,144.0
o.w. Cocoa	1,391.6	1,995.7	1,869.0	1,981.0	2,409.0
Livestock	873.0	1,003.8	1,162.0	1,223.0	1,318.0
Forestry and Logging	1,614.2	1,549.2	1,880.0	2,019.0	2,537.0
Fishing	1,000.8	951.9	1,102.0	1,249.0	1,279.0
INDUSTRY	8,294.5	14,274.4	20,438.0	25,113.0	28,767.0
Mining and Quarrying	1,012.7	4,689.9	6,961.0	8,503.0	8,640.0
o.w. Crude Oil	177.5	3,746.3	5,649.0	7,441.0	7,793.0
Manufacturing	2,941.5	3,842.5	4,263.0	4,800.0	5,342.0
Electricity	266.0	279.7	332.0	393.0	443.0
Water and Sewerage	368.3	467.4	511.0	568.0	576.0
Construction	3,706.0	4,994.9	8,370.0	10,848.0	13,766.0
SERVICES	22,183.6	27,422.7	35,837.0	44,964.0	56,248.0
Trade; Repair of Vehicles	2,701.0	3,282.3	4,060.0	5,222.0	6,085.0
Hotels and Restaurants	2,592.8	3,007.4	3,517.0	5,256.0	6,099.0
Transport and Storage	4,578.4	5,996.9	8,041.0	10,149.0	13,351.0
Information and Communication	831.1	988.9	1,590.0	1,572.0	2,441.0
Financial and Insurance activities	2,239.9	2,465.9	3,452.0	5,885.0	9,115.0
Real Estate, Professional, Administrative & Support Service activities	1,944.8	2,590.6	3,502.0	3,485.0	3,894.0
Public Administration & Defence; Social Security	3,023.6	3,896.8	4,952.0	5,305.0	5,843.0
Education	1,876.9	2,306.6	3,101.0	3,248.0	3,883.0
Health and Social Work	673.6	728.5	921.0	956.0	1,091.0
Community, Social & Personal Service Activities	1,721.5	2,158.7	2,701.0	3,886.0	4,445.0
FISIM (Financial Intermediation Services Indirectly Measured)***	1,511.6	1,457.7	2,317.0	2,919.0	4,354.0
GROSS DOMESTIC PRODUCT at_basic_prices	41,876.1	54,394.2	70,627.0	87,390.0	103,939.0
Net indirect Taxes	4,166.0	5,422.1	4,689.0	6,026.0	9,404.0
GROSS DOMESTIC PRODUCT in_purchasers'_value	46,042.1	59,816.3	75,315.0	93,416.0	113,343.0

*Senzu (2015) Assisted primary data from Ghana Statistical Service from 2010 to 2014*

*Actual contribution of the major and sub sectors to GDP (Gh¢ Million) in Ghana*

Table of (α)

Highly contributing sectors to GDP growth	Actual Contribution in 2012 in Ghc(Million)	2012 Contribution in %	Actual Contribution in 2013 in Ghc(Million)	2013 Contribution in %	Actual Contribution in 2014 in Ghc(Million)	2014 contribution in %
Agriculture	16,668	10.70%	20,232	10.49%	23,278	10.07%
Service	35,837	23.01%	44,964	23.30%	56,248	24.33%
Industry	20,438	13.12%	25,113	13.01%	28,767	12.43%
Other minor sector combined	82,778	53.16%	102,650	53.20%	122,848	53.15%
GDP	155,721	*100%	192,959	*100%	231,141	*100%

*Senzu (2015). Actual contribution of highly contributing sectors to GDP growth in Ghana*

Table of (λ)

Highly Contributing Sectors to GDP growth	Labour engaged from 2012 to 2014	Percentage of Labour engaged
Agriculture	59,893	0.73%
Services	2,708,796	33.12%
Industry	3,383,206	41.36%
Informal Sector	2,027,880	24.79%
Total	8,179,775	*100%

*Senzu (2015). The labour engaged by highly contributing sectors to GDP growth in Ghana*

Table of  $\Theta$ 

## GDP growth rates

Year	GDP at current market prices	GDP at constant 2006 prices
2010	25.8	7.9
2011	29.9	14.0
2012	25.9	9.3
2013	24.0	7.3
2014	21.3	4.0

*GSS (2015). GDP growth rates*

## 5.2.2 Deduction

According to the data from the Alpha Table, it indicate a steady rise in “Service” from 2012 to 2014. There was a hike from 23.01% in 2012 to 24.33% in 2014 an estimate of 1.32 percentage rise, while Industry and Agriculture were in a decline state. Industry as at 2012 was contributing 13.12% to GDP growth and by 2014 has declined to 12.43%, an estimate of 0.69 percentage fall. Agriculture as at 2012 was contributing 10.70% and at the end of 2014 had declined to 10.07%, an estimate of 0.63% percentage fall. In a comparative study to the state of GDP growth in the same period that is 2012 to 2014 from the theta Table, there was a percentage decline of 4.6 which validate the first hypothesis which state that, any sector of the economy performing very high in GDP contribution with no connection to the cultural value of the people, could not affect it GDP growth positively. Which in this circumstance, the rise of the service sector in the detriment of the Agriculture sector growth and it related Industrial impact to the Ghana’s economy affected it sustainable macroeconomic growth.

Based on the data from the Lambda Table deduce that, from 2012 to 2014; Service sector engaged about 33.12% of labour force, while the declining Agriculture and Industrial Sector engaged 0.73% and 41.36% of Labour force respectively within the same period. This validate the second hypothesis, which state that, a highly contributing sector that fail to engage high volume of labour force in developing economy will fail to cause a sustainable growth in GDP.

Service sector was in a steady rise, while Agricultural and Industrial sector were in a steady decline, yet industry employed about 8.24% labour force higher than the service sector. This confirm the de-link of the service sector impact on developing economy and the danger it impose, as a guide to the monetary regulator to note that, the attempt to undermine sectors that are really linked to sustainable GDP growth by ignoring the designing of policies that will cause credit expansion in those areas, to create room for employment and absorb the greater part of the labour force in such economy has a great negative effect on it sustainable macroeconomic growth and development.

### 5.3 Conclusion

The paper in its conclusion argue that, it is very relevant for the monetary regulator in this instance the Central Banks in developing economy to have a quality understanding in the behavioral patterns of the market it serves, to identify sectors that has significant effect on sustainable economic growth and those that act as complimentary sectors to design it monetary policy programmes effectively. When sector contribution categorization is well understood in any market phenomenon, it assist to correct monetary policy implementation and impact deviation.

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## 7.0 APPENDIX

- I. ***Catallactics***: *Is a theory of the way the free market system reaches exchange ratios and prices. It aims to analyse all actions based on monetary calculations and traces the formation of price back to the point where an agent makes his or her choices.*
- II. ***Praxeology***: *Is the deductive study of human action based on the notion that humans engage in purposeful behaviour*
- III. ***Informal Sector***: *It is a category of the economy neither taxed or their activities monitored by any form of government*

- IV. **Private Corporate Employees:** *These are type of employees, who work in business companies owned neither by non-governmental organisations nor by a relatively small number of shareholders which does not offer or its company stock to the general public.*
- V. **Government Employees:** *These are employees of the State, which is classified under this studies as purely civil servants*
- VI. **Owners of micro/small scale enterprises:** *These are category of business owners, who run their enterprise with the primary interest of earning a living to support themselves and their family.*
- VII. **Sector:** *A distinct part of a nation's economy that contribute to it GDP growth*