

Supervisor Duration Offer on Payment Relay Complex as Case for Socio-type Risk Studies for Engineers

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Abstract: This paper presents a finance wits basis for duration participation estimation and local governance to assist a multi-linguistic developing country as Nigeria. The background is development indices that point to work and freedom are observable as preferred by leaders as citizenry alike in Nigeria. The aim is to introduce a payment complex relay based characteristic work association index as guide to labour time expectation for a developing country as Nigeria and a design supervision structure to address necessary sociological challenges. Hence, also presented is a case for political design as a sociological subject averse to the idea that 'combining the insights offered by different approaches might be the best way of achieving the goal of understanding and explaining the social world'. A rational basis for labour duration offer is derived based on payment relay mathematics to analyse characteristic association patterning. This is to create a foundational for a lead interest market in place of a perfectly competitive market idea. Consequently, it is shown as interest tends to 40% that uniform weighted trend and marginal annuity trend have no significant difference in derived duration trend (down 4 – 3.65 units on 1:1:1 or 1:2:1 and 4 – 3.41 on 3:3:3 or 3:4:3 designs). For a present focus, loading the weighted trend is of no significant relevance rather has a good duration reduction value (down 4 – 3.25 units in 2:1:1 or 4:3:3 designs). Significant relevance of marginal trend is found in future weighted, giving a wider performance trend and likelihood of finance market equilibrium (down 4 – 3.75 on 1:1:2 or 4 – 3.45 on 3:3:4 designs). The fore analysis is suggested as intrinsic for the designing of a design supervision structure for civil works type duties. Based on extracted relevant concepts typical of Marxism and its attendant functionalist's interest perspectives a structure is suggested. Concluding, Nigeria as an example of African state is a decision maker form of government, needing an expanded view of finance and works supervision.

Keywords: Action, Decision, Government, Participation, Relay

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I. Introduction

Nigeria today can be described as a decision maker's form of government. One of her past leaders, Sir Kashim of Borno was of the opinion that forms of government are for fools to debate and the government that governs effectively in the long term interest of the people, which ensures the happiness of the generality of the people, is the best form of government (1). Nevertheless, sociologists vary in their perspectives, methods and values but they all share the aim of understanding and explaining the social world. A classical subject, Mills sociological imagination, is the ability to study the structure of society at the same time as the individuals' lives in it (2). Sociology is one of a number of social sciences which attempt to explain and understand the behaviour of human beings in society.

On the problems with theories of state sovereignty as example of sociological theory, Hoffman (3) stated 'state sovereignty is as illogical and problematic as the state itself'. Then, why are most people so sceptical about the possibility of a world without the state? Part of the reason, it could be argued, is that people think of government as being the same as the state, but if we make a sharp distinction between government and the state, then it can be seen that a stateless society is not a society without government, but rather a society in which an institution claiming a monopoly of legitimate force [is] redundant (3). Hence, putting development and governance to definite mutual understanding in a place like Nigeria requires a calculable discuss focus. We talk of corruption but what is corruption in terms of measuring is not definite. The question is 'what are the discuss topics that are subject to calculable basis that are hindering the development process of Nigeria'. Such calculable subjects for objective arguments on the problems of Nigeria's development over subjective subjects as corruption, bad governance and planning are necessary for development wits. Development can only be effective if the humans have a feel of it. That is, theoretical basis must be a subject the people 'sensibly understand'; it must be a subject that causes a spring out of the case people's political design. Political design can be defined as sociological imagination of financing wits for local governance and characterization. Consequently, how to view this over time becomes a methodological question.

II. Background

Measuring participation in development strides can be done in various ways, covering economics based approaches. Linking the willingness to participate to duration or love to see development arise may not find a common ground on economics theories. Nevertheless, the two share some boundaries at finance as being the basis of financing the life we wish to lead. Herein, basics of Adams Smith's economic theory on labour are mentioned towards classical subjects in development measuring. Then, development is suggested as discuss that is linked to a people's political design. Its characterization in equation is a strategy for measurable duration discuss for duties, case debate and development works discuss. Characterization is necessary for 'what to finance' for engineering similitude work roles.

According to (4), because the term development may mean different things to different people, it is important that we have some working definition or core perspective on its meaning. Without such it will be difficult to know which country is or is not developing. In strictly economic terms, development has traditionally meant achieving sustained rates of growth of income per capita to enable a nation to expand its output at a rate faster than the growth rate of its population. How much of real goods and services is available to the average citizen for consumption and investment is used to measure the overall economic well being of a case population. Monetary growth of GNI (gross national income) per capita minus the rate of inflation is used to define levels and rates of growth of 'real' per capita gross national income. Owing to the narrowness of this definition, development must therefore be conceived of as a multidimensional process involving major changes in social structures, popular attitudes and national institutions, as well as the acceleration of economic growth, the reduction of inequality and the eradication of poverty. Further, Amartya Sen argued that economic growth cannot be sensibly treated as an end in itself, hence, development must be concerned with enhancing the lives we lead and the freedoms we enjoy – the capability to function is what really matters than status as a poor or non-poor person.

Adam Smith regarded every person as the best judge of his self interest who should be left to pursue it to his own advantage. In furthering his own self interest he would also further the common good. Also, in its pursuance each individual is led by an invisible hand (5).

Because the interests of land owners are closely connected with the general interest of society, Smith believed that economic progress involves rise in money as well as real rentals, and a rise in rental share of national income. Taking institutional, political and natural factors for granted, Smith starts from the assumption that a social group as may be called 'nation' will experience a certain rate of economic growth that is accounted for by increase in numbers and by saving. This induces a 'widening of market' which in turn increases division of labour and thus increases productivity. This is the process of growth.

Division of labour is the starting point of Smith's theory. He also emphasized that capital accumulation precedes the introduction of division of labour. Like the modern economists, Smith regarded capital accumulation as a necessary condition for economic development. According to him, investments were made because the capitalists expected to earn profits on them and future expectations with regard to profits depended on the present climate for investment as well as actual profits. Further, he believed that profits tended to fade with economic progress. He said that when the rate of capital accumulation increases, increasing competition among the capitalist raises wages and tends to lower profits. Emphasizing that it is the increasing difficulty of finding new profitable investment outlets that leads to falling profits.

Regarding the role of interest rate in economic development, he wrote that with the increase in prosperity, progress and population, the rate of interest falls and as a result the supply of capital is augmented.

Further he believed it is the scarcity of natural resources that finally stops growth. In such an opulent state, the competition for employment would reduce wages to the subsistence level and competition among businessmen would bring profits as low as possible. Once profits fall, they continue to fall. Investment also starts declining and in this way the end result of capitalism is the stationary state.

This research is intended to introduce a payment relay complex based characteristic work association index as guide to labour time expectation for a works country as Nigeria and a risk philosophy structure to address sociological and supervision challenges.

III. Methodology

The methodology herein adopted is an argument into the aim thus: what constitutes the good life is a question as old as philosophy and as one that must be periodically re-evaluated and answered afresh in the changing environment of world society. The ability to meet basic needs (sustenance), 'to be a person' (self-esteem) and 'to be able to choose' (freedom from servitude) are three core values of development (4). This paper seeks to substitute the concept of 'perfectly competitive market' with 'perfectly lead interest' market, hence suggesting a selective study of market as well as the concept of 'invisible hand' defined as the automatic equilibrating mechanism of the perfectly competitive market tending to maximize national wealth (5). Then a 'perfectly lead interest' market can be defined as 'finance economics governance' based market. The definition

of the trajectory characteristic of the lead-interest becomes an idea of the case political design for a daunting market.

As from Todaro, it is common knowledge that development may mean different things to different people. If we regard development as an evolving definition from basic economics, through victory over poverty, freedom and the quality of life we lead, then we can trend the models of development as concepts forming part of the engine of a development definition. Such engine, as being equations based on development as evolving in definition, will be a basis of understanding the place of a country and its people en route development.

With such equations-system a theory evolves for characterizing the development of a place as is preferred by the people: that is describable as its political design. Such design becomes what the case people can participate in, in its market, finance, governance character, etc, because it is intrinsic to their being and will to take an exploration; see also (6), (7). Following this, given that: Present worth, P = Cost Initial Value (Corporate Lend Price), Future Sum F = Cost Consequence Value (Future Gauge Price) and Annuity A = Cost Return Value (Set Duty Price), then the following Table 1 becomes a typical layout for characteristic political development design for a three parts of governance relevance:

Table 1 Political Design Characterization

| Case Model | Private Market (1) | | | Public Office (2) | | | Resources Existence (3) | | |
|-----------------------------|--------------------|---|---|-------------------|---|---|-------------------------|---|---|
| | P | F | A | P | F | A | P | F | A |
| Completely Complex | P | F | A | P | F | A | P | F | A |
| ... e.g. Development Theory | - | F | A | P | - | A | P | F | A |

Stating the following notation...

α_i = fraction of total program duration, n that is offered as operational time units n_x for the case project period, n_i

a_a = cost return proportionality weights

a_f = cost consequence proportionality weights

a_p = cost initial proportionality weights

A = Budget-Type Annuity Value (Set Duty Price)

n = Total Program Duration Values, (Time Unit)

n_i = Specific Project Durations Values, (Time Unit)

n_x = Operational Annuity Durations Values, (Time Unit)

F_x = Consequences Future Value (Future Gauge Price)

P_x = Present Worth Value (Corporate Lend Price)

Interpreting the characterization as a complete payment relay PRM complex case (compare (8)) gives:

$$An = P_1 + F_1 + An_1 + P_2 + F_2 + An_2 + \dots \tag{1}$$

Hence the general equation is:

$$An = \sum_1^x P_x + \sum_1^x F_x + A \sum_1^x n_x \tag{2}$$

Converting the PRM to duty set price equivalent(s) as objective parametric subject and assigning offer ratio(s)/factor to reduce converted PRM to objective duty set price is thus:

For a specific case scenario on a unit division given $n_x = \alpha_i n$; and n_i = effective duration for the expressing of case interest and A value represents the effective average annuity:

$$An = a_p P_x + a_f F_x + a_a An_x \tag{3}$$

$$nA(1 - \alpha_i a_a) = a_p P_x + a_f F_x \tag{4}$$

$$nA(1 - \alpha_i a_a) = a_p A \left[\frac{(1+i)^{n_i} - 1}{i(1+i)^{n_i}} \right] + a_f A \left[\frac{(1+i)^{n_i} - 1}{i} \right] \tag{5}$$

$$n(1 - \alpha_i a_a) = a_p \left[\frac{(1+i)^{n_i} - 1}{i(1+i)^{n_i}} \right] + a_f \left[\frac{(1+i)^{n_i} - 1}{i} \right] \tag{6}$$

$$n = \left[\frac{(1+i)^{n_i} - 1}{i(1 - \alpha_i a_a)} \right] \left(\left[\frac{a_p}{(1+i)^{n_i}} \right] + a_f \right) \tag{7}$$

This equation depicts the political design character adaptable to a people association analysis as finance market concept. The numbers a_p , a_a and a_f are the cost initial, return and consequence weights of a case precinct population. And α_i is the fraction of total program duration, n that is offered as operational time units n_x for the case project period, n_i . These generate the discussions as follows.

IV. Result and Discussion

Deductions from a completely complex political design characterization is as shown in Figs 1 to 4, targeted at a maximum of 4 units total duration and $\alpha_i = 2\%$. It can be seen in all the figures that size of the numbers of the coefficients a_p , a_a and a_f , as the base interest increases, means lesser duration requirement in line with the loaded coefficients. Nevertheless, this does not apply to weighted marginal zeros design which remained flat at zero except in figure 4 that has only future consequence coefficient operating.

Fig. 1 and Fig. 2 show there is practically no investment difference for a uniform complex scenario and a marginal annuity complex. However, for a marginal present value scenario as seen in Fig. 3, the loading is practically unnecessary. What is essentially achieved is good reduction in time required. For a future consequence personality, there is the pivot hand obtainable (Fig. 4). In this, a weighted 0:0:1 personality has a rising value, creating the existence of market equilibrium and stationary point. The future consequence personalities create the spread out effect on levels of loaded case designs and solo weighted design creates the supply. In other words, an oval market concept is created by a future personality case design.

According to (9), during the 90s societal concern heightened on sustainable development, focusing on the conservation of the environment, the welfare and safety of the individual and at the same time the optimal allocation of available natural and financial resources. Hence, method of risk and reliability analysis began gaining importance as decision support tools in civil engineering. However, their value in connection with the quantification and documentation of risks and the planning of risk reducing and mitigating measures is not fully appreciated in the civil engineering profession at large. Continuing, risk and reliability analysis is in fact a multidisciplinary engineering field requiring a solid foundation in one or several classical engineering disciplines in addition to a thorough understanding of probability, risk analysis and decision analysis.

Further, as a consequence of the tremendous demand for risk based decision analysis in engineering applications and an apparent lack of recognition of risk analysis as a distinct discipline, a rather broad range of practices for risk analysis has developed through the years. Practical experience as well as several benchmark studies has clearly shown that risk analysis may in reality stand for very different things depending on the 'professionals' performing the analysis and the clients requesting them. The absence of this lead Faber to say, 'this situation is not a satisfactory one and the risk engineering profession should make effort to define risk analysis and furthermore to set up a framework for the categorization and standardization of risk analysis'.

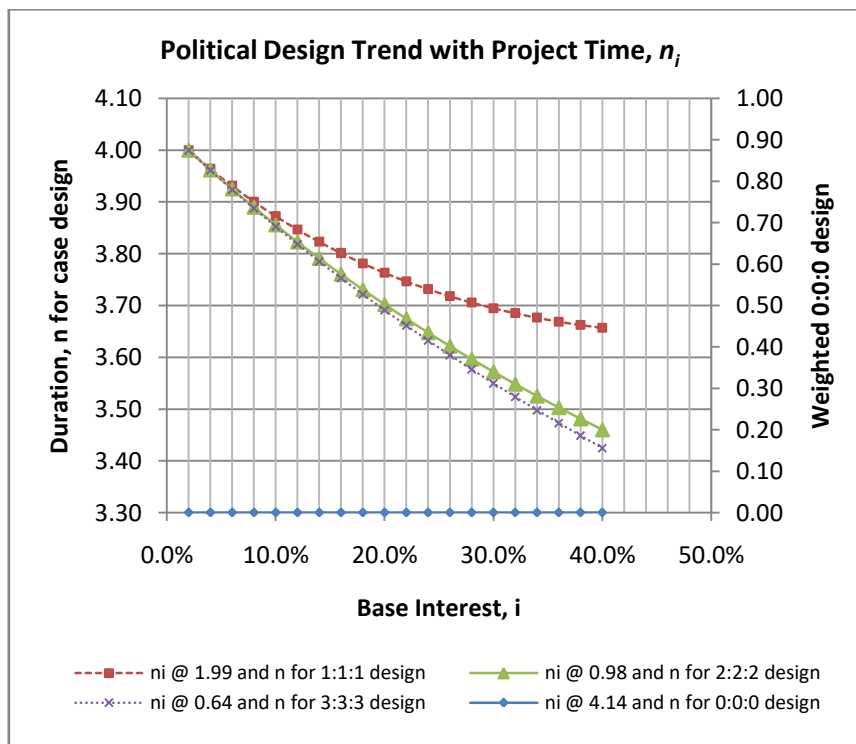


figure 1 emphasizes on equal factors across board

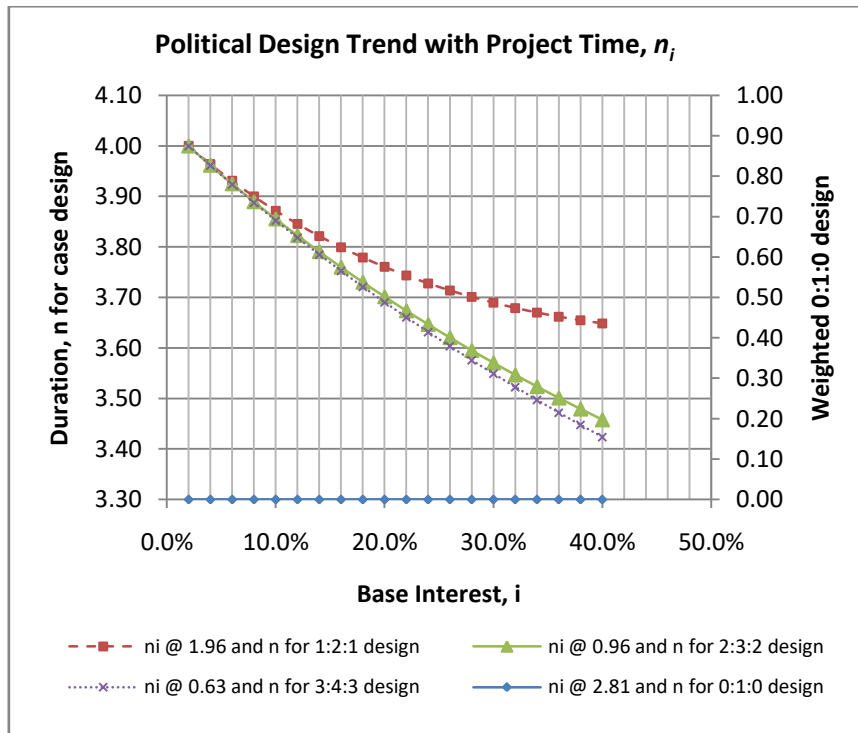


figure 2 emphasizes on annuity value factor

However, risk is a rather commonly used notion and is used interchangeably with words like chance, likelihood and probability to indicate that we are uncertain about the state of the item, issue or activity under discussion. Even though we may understand from the context of discussion what is meant by the different words it is necessary in the context of engineering decision making that we are precise and consistent in our understanding of risk.

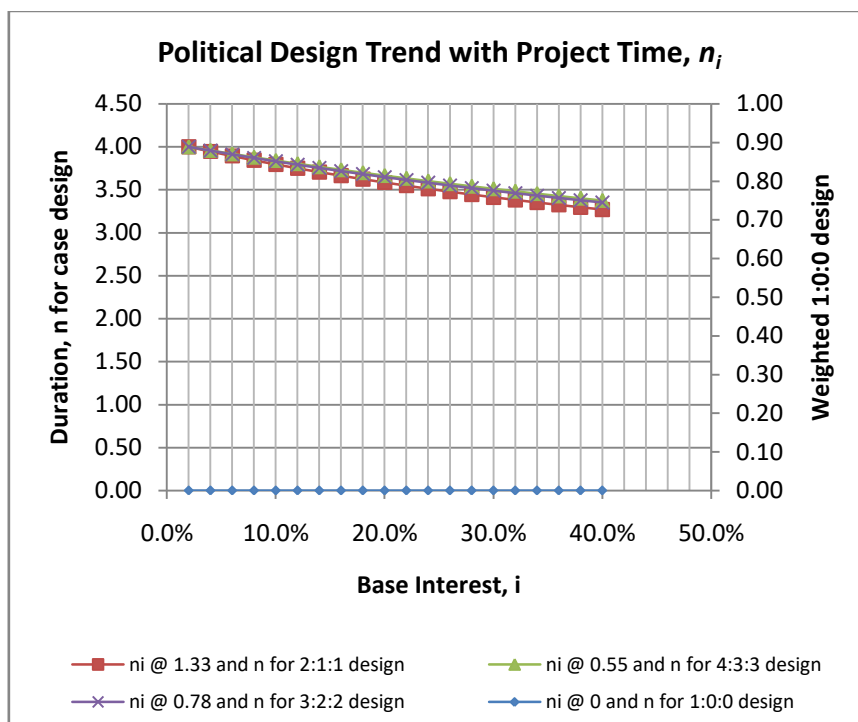


figure 3 emphasizes on present value factor

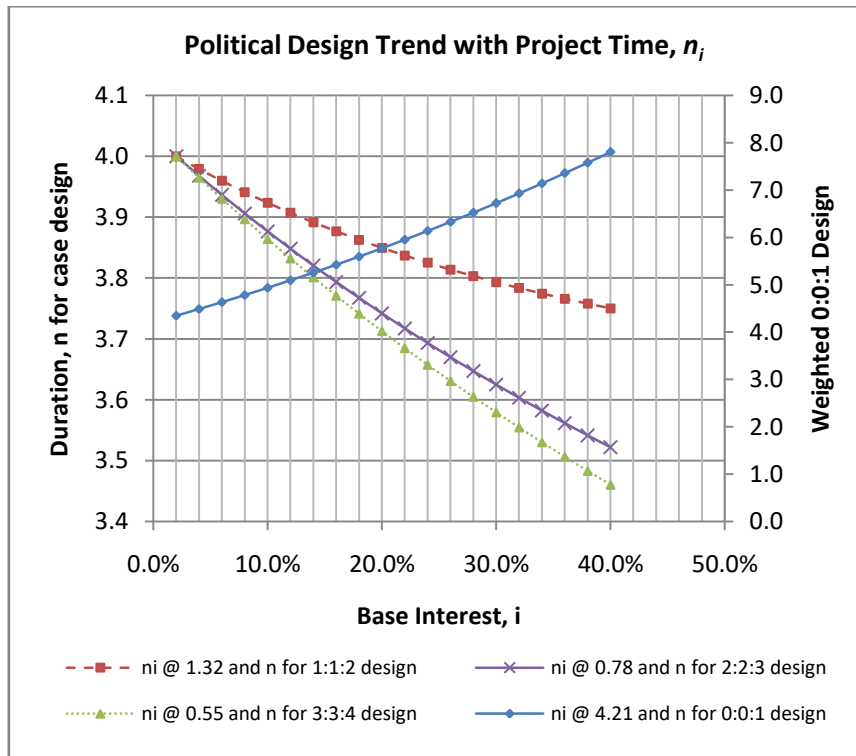


figure 4 emphasizes on future value factor

Technical risk is typically defined as the expected consequences associated with a given activity. Considering a potential risk value R on one activity, it equals the product of the probability P of the event occurring and the consequences C given it has occurred. That is, $R = P \times C$. This definition is consistent with the interpretation of risk in the insurance industry. Risk analysis is not a ‘one-off’ process, but one that may well require regular monitoring and review due to changes in system needs, increased operating experience, accidents and other new information relevant to system performance. One of the first tasks in risk analysis of civil engineering facilities is to identify the potential hazards, that is, the sources of risk. This process plays a crucial part of the risk analysis due to the fact that only the identified potential hazards which are subjectively and objectively known can be taken into account. If all the relevant hazards are not identified then the risk analysis will result in biased decision-making, which in general will be cost inefficient and ultimately could lead to unacceptably high risks to people and the environment.

Risk analyses are typically made on the basis of information, which at least partly is subject to uncertainty or just incomplete. In fact the variables influencing a decision/risk analysis may be subject to several sources of uncertainty. For reliability analysis, it is usual to establish probabilistic models for loads and resistances for instance, including all available information about the statistical characteristics of the parameters influencing these. However, on risk acceptance, the decision making process is a complex one and one that is often entwined with political process. In general on risk based decision analysis, decision making often leads to situations where different attributes need to be considered simultaneously, e.g. costs, loss of life, community disturbances and/or damages to the environment. Furthermore, different interest groups may have different objectives or preferences and thus in effect, value the combined effect of the attributes differently. A distinction is often made between individual and societal risks. Individual risks are expressed in terms of fatalities per year of exposure, whilst societal risks are typically represented in terms of cumulative frequency and number of fatalities.

The ways that risk is presented can well affect risk perception. Further on Feber, it is worthwhile to recognise that the problem concerning risk acceptance has a fundamental and philosophical bearing to the rights of human beings. These characteristics fore-described form the underlining philosophy for works type supervision duration offering based on payment relay complex trend. Given an understanding of them, applicable sociology based concepts for typical works supervision skills can be suggested.

From (2), there are a wide variety of sociological theories that can be grouped together according to various criteria. One of the most important of these is the distinction between structural perspectives and social action perspectives. Structural or macro perspectives analyse the way society as a whole fits together. Social action or interpretative perspectives usually reject the view that society has a clear structure that directs individuals to behave in certain ways. Some social action theorists do not deny the existence of a social structure

but see the structure as rising out of the action of individuals. Inter-fitting extracts and propositions from Marxism and functionalists to create a workable duty question structure of ‘who actions what level of risk, benefits or payment?’ in place of group theory (such as questions of linguistic groups); gives a place for social action interest and its attendant political or politics expression platform.

Further, Marx regarded people as both the producers and the product of society. That is, people make society and themselves by their own actions. However, fundamentalism views society as a system, that is, as a set of interconnected parts which together form a whole. In this, the basic needs or necessary conditions of existence are sometimes known as the fundamental prerequisites of society. Nevertheless, Marx argued that the source of change lies in contradictions, that is, in the economic system in particular and in society in general. His view of history is based on the idea of the dialectic. Dialectical movement presents conflicts as the source of change because it provides the dynamic principle required in struggles characteristic of opposites and conflicts of contradiction.

Parallel to this, the concept of ‘function’ in fundamentalist analysis refers to the contribution of the part to the whole. Following, on material basis of social life, history begins when humans actually produce their means of subsistence; that is, having ability of nature and control. Marx argued, ‘the first historical act is therefore the production of material life’. At this point cooperation is required. Fundamentalist analysis has focused on the question of how social systems are maintained. The focus has tended to result in a positive evaluation of the parts of society. With their concern for investigating how functional prerequisites are met, functionalists have concentrated on functions rather than dysfunctions (the effect of social institutions which distract from the maintenance of society). The major contradictions that propel change are found in the economic infrastructure of the society.

Finally, it is noted that alienation is a situation in which the creations of humanity appear to humans as alien objects. Consciously, this situation requires to be avoided as it creates people subject to the controlling power of their creations.

V. Conclusion and Recommendation

The political design is defined herein as a subject domicile in the concept of sociological imagination but covering challenges as aspects of financing and local governance. It is stated that the case challenges depict trends that are similar at equal weight of complex personality-view values and marginal annuity instance. Nevertheless, for a present marginal value, there is little need for loading, as such has little variation in trend consequence. However, marginal future-view personality has a significant influence on the equilibrium point and the existence of a turning point in the general trend resulting from a complete based pattern, as a guide to the trends. The concept of duration offer is necessary for a supervision structure to maintain decision-making framework that allows focus on different objectives and preferences that may be characteristic of different interest groups.

Following becomes a list of suggested structure for works type risk studies mobilization for duties, debate and discuss, in sociological imagination:

1. Purpose and Associated Infrastructure Debate: Sociological Theories such as of languages, religions, companies, etc.
2. Risk Perception Delimiting: Producers and Product Debate
3. Decision Maker Hosting: Hosting a set of interconnected parts which together form a whole: (System Decisions Hosting Game Action)
4. Sensitivity Calculations: Needs, Necessary Conditions of Existence and Prerequisites of Society
5. Exposure Calculations: Contradiction Analysis and Economic System Design
6. Vulnerability Calculations: Analysis of the Contribution of the Parts to the Whole
7. Robustness Calculations: History Discuss on Nature and Controls
8. Construction Management: Fundamentalist Actions Discuss
9. Laboratory: Economic Infrastructure on Contradictions Discuss
10. Workmen in General: Non-alienated Work Men Duty Discuss

Nigeria as an example of African state is a decision maker form of government, needing an expanded view of finance in the brain and works supervision for the hands.

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