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THE PRACTICE OF INVESTMENT VIABILITY APPRAISAL IN AKURE, NIGERIA

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Abstract
This paper examines the role played by valuers in choosing the right viability appraisal technique for an investment appraisal. Structured questionnaire was administered on Twenty one (21) registered and practicing Estate Surveying and Valuation firms in Akure out of which fourteen (14) were retrieved and found good for analysis. The data obtained were analyzed using descriptive statistical tools such as frequency tables and weighted mean score 3 and 4-point likert formats. The result of the analysis revealed that Valuers mostly make use of Payback Period, NPV and IRR, which are deterministic in nature. This is as a result of the valuers basing their appraisals mostly on economic and financial criteria only without fully analyzing the various factors such as the prevailing inflation rate in the economy and the level of risk tolerance of their client. The outcome of a good investment appraisal forms the basis upon which any investment decision is based. A good investment is an offset of a good viability appraisal, and the valuers' role is to give such advice that will maximize the benefit's objective of the investor.

Key Words: *Investment, Practice, Risk Tolerance, Valuer, Appraisal Technique, Viability Criteria.*

Introduction

Decision valuation, according to Umeh (1977), is essentially an aid or guide to logical, rational or prudent decision-making. Viability appraisal, which centres on the worthwhileness of an investment, is very important to an investment decision because it determines the extent to which a designed project can survive. In recent time, there have been cases of abandoned and/or non performing projects in cities. These have been attributed to factors such as non-involvement of professionals in carrying out viability study of such projects, and the use of wrong decision-making techniques (Umeh, 1977). Ogbuefi (2002) opined that the stabilisation of the market forces of demand and supply in the property market, increase in sophistication of developments and other forms of investments, recent globalisation of the world's economy, inflation as it affects building cost and other raw material inputs, labour mobility and sophistication, high and unstable interest rates have contributed to a more difficult and competitive investment climate in Nigeria. Therefore, in the face of different investment opportunities open to a prospective investor, viability appraisal is required in order to choose an investment that best meets the objective(s) of the investor.

Ojo (2006) observed that the decision-making techniques used in real property development appraisals, are greatly influenced by the dynamic and complex socio-economic environment in which property development operates. The reliability of development appraisal greatly depends on the ability of the appraiser to accurately estimate the variable inputs used in the appraisal. These variable inputs include

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land price, landholding period, planning/building size, building cost and period, ancillary cost, professional fees, finance cost, lettable space, anticipated void period, rental value, investment yield, and required profit/return on investment. The susceptibility of these variable inputs to change makes the role of a valuer more pronounced.

However, Feasibility and viability appraisals are usually not accorded their critical position in the overall development equation but are only required as 'mere conditions' for meeting either statutory approvals or securing development finance, thus influencing technique(s) employed by valuers in carrying out the appraisals (Umeh, 1977). This often leads to disastrous effect on the overall performance and the final outcome of some projects. Darlow (1990) asserted that there have been criticisms on the development appraisal techniques used by professionals on the basis of their simple assumptions about incidence of cost and finance charges. The risk characteristics and tolerance of investors differs considerably, and where this fact is dismissed, appraisers result will produce perception of risks that deviate from that of their client (Ogunba *et al*., 2005).

Viability study involves highly critical analysis of viability criteria (physical indicator, financial, economic, legal, socio-political and cultural indicators) in order to properly advise prospective investors (Ogbuefi, 2002). Categories of decision required different viability criteria, and the criteria suitable for any decision can only be those which are in consonance with the objectives of the decision-maker. The objectives or set of objectives of a client should serve as yardsticks for the valuer. For instance, Ogunba *et al.* (2005) discovered that most development appraisers that include an analysis of risk in their development appraisal, simply picked the risk analysis approach that suited them (appraisers). It argued that the choice of viability criteria and consequently the appropriate appraisal technique should be based on the perception and tolerance of risk of the investor. The valuer's role is to discover those criteria before selecting the appropriate technique to be used because the main trust of investment appraisal is the examination of costs and benefits that result from an investment. The decisions to invest are of vital importance to all companies, and effective appraisal techniques are most valuable tools to support the decision-making process.

Appraisal techniques can either be deterministic (single point) or probabilistic. Whereas deterministic approach relies totally on the best estimate of all variable inputs for the viability computation perceived from a single-point view, and the result is run once, the probabilistic approach, on the other hand, incorporates risk, which the deterministic approach does not recognize. It hinges on the premise that the expected returns (i.e. best estimate) might not actually be achieved (uncertainty) (Ojo, 2006). The deterministic approach such as residual valuation method, developmental method, break-even valuation, cost–benefit technique, cash flow technique, payback period, Net Present Value (NPV) Method, the Internal Rate of Return (IRR) method, Annuity Method, profitability index, debt coverage ratio etc has been criticized on the ground that it does not incorporate risk in its computation, especially in an economy that is very susceptible to inflationary changes and uncertainty. Therefore, they cannot be relied upon in a situation where the economy is unstable, inflation is high, and there is high interest and exchange rate as is the case in Nigeria. However, even in the face of economic instability, the common probabilistic approaches such as sensitivity/scenario analysis, the risk-adjusted discount rate, risk adjusted cash flows (the certainty equivalent technique and the

weighted average approach), and Monte Carlo simulation are rarely used.

As rightly noted by Ratcliff and Studds (1996), most development appraisals focus more on returns and less on risk analysis, which is why the techniques being used are deterministic in nature and is fast becoming inadequate to take care of today's dynamic socio-economic investment environment. The question then is, what are the factors considered by valuers when carrying out viability appraisals? Do these factors reflect in the appraisal technique(s) employed by them? Therefore, this paper identifies the viability appraisal techniques used by valuers in Akure and the role they play in choosing the right appraisal technique for a particular investment.

Methodology

The data for this study was obtained from the Estate Surveyors and Valuers who are duly registered with Estate Surveyors and Valuers Registration Board of Nigeria (ESVARBON), and have practicing firms in Akure. According to 2012 directory, there are twenty one (21) Estate Surveying and Valuation firms in Akure that are duly registered with The Nigerian Institution of Estate Surveyors and Valuers. Since this is within manageable size, it thus serves as the sample frame. Structured questionnaires were administered on this sample. Out of the twenty one (21) questionnaires administered fourteen (14) were retrieved (representing 66.7% of the sample frame) and analyzed using descriptive statistics. The descriptive statistics computed on sample data provides the basis for additional computation on which inferences was made about the population. In this study, Weighted Mean Score was used. The use of weighted mean score involves assigning numerical values to respondent's rating of factors or phenomenon. This method is used for its simplicity and ease of communicating the result of the research. The evaluation of factors or phenomenon was based on a 3 and 4-point likert scales. The weighted mean score for each factor is determined as follows;

$$\text{Weighted Mean score} = \frac{4n_4 + 3n_3 + 2n_2 + n_1}{n_4 + n_3 + n_2 + n_1}$$

The analysis was structured to examine the types of viability criteria mostly considered by Valuers, the method of appraisal often employed, problems that emanate from wrong choice of appraisal technique, and factors essentially significant to right choice of appraisal technique. The result from the analyses of these data form the basis for inference made in this work.

Results and Discussion

Tables 1 and 2 reveal the number of professional instructions on feasibility and viability appraisal received by Estate Surveyors and Valuers and the source of the instructions. Table 1 showed that 85.7% of the respondents rarely receive instructions to carry out feasibility and viability appraisal while 14.3% never received such instruction. This implies that developers rarely engage the services of real estate professionals before embarking on development projects. Table 2 revealed that majority of the instructions received by the surveyors was from private investors and the lending institutions. Despite the numerous constructions and development programmes on-going in the town (especially government projects), not many of such projects were subjected to feasibility and viability studies. The success of any investment depends to a large extent on whether or not there is a viability appraisal carried out on such investment.

Table 1: Number of Instructions Received by Professionals

Instructions	Very Often	Often	Rarely	Never Received	WMS
Valuations	0.0	100	0.0	0.0	3.00
Agency	28.6	57.1	14.3	0.0	3.14
Management	28.6	57.1	14.3	0.0	3.14
Feasibility and Viability Studies	0.0	0.0	85.7	14.3	1.87

Table 2: Number of Viability Appraisals Carried out by Firm in the Last 10 Years

Types of Investors	1 – 5	6 – 10	11 – 15	Above 15	Mean
Private investors/developers	10	0	0	4	1.86
Public investors/developers	8	0	0	0	0.57
Lending Institutions	10	0	0	2	1.29

Table 3: Viability Criteria Considered when Carrying Viability Study

S/N	Viability Criteria/indicators	Always (3)	Sometimes (2)	Do not Consider (1)	Mean Score	Rank
1	Economic viability criteria	100.00	0.00	0.00	3.00	1
2	Financial viability criteria	100.00	0.00	0.00	3.00	1
3	Technological viability criteria	35.71	14.29	0.00	2.71	4
4	Physical viability criteria	42.86	7.14	0.00	2.86	3
5	Political viability criteria	14.29	28.57	7.14	2.14	6
6	Socio-cultural viability criteria	28.57	14.29	7.14	2.43	5
7	Moral viability criteria	0.00	28.57	21.43	1.57	7

The Economic and Financial viability criteria were majorly considered by appraisers when carrying out viability studies as revealed in table 3. This is shown by a 100% response in favour of these with mean scores of 3.0 each. This is followed by physical viability criteria with a mean score of 2.86; technological viability criteria with 2.71 mean score; socio-cultural viability criteria and political viability criteria have 2.43 and 2.14 mean scores respectively while moral viability criteria was not fully given a thought since it has a 1.57 mean score. This result shows that viability appraisal is mostly an issue of 'cost and benefit' implications of any proposed investment to many. Moral indicator is not usually considered probably because this country does not condone immoral activities or because the indicator is not being given due consideration. This was also noted by Umeh (1977) that as important as moral indicator is, it has not been given due attention in the past.

Table 4 above reveals that the Payback Period, which is one of the traditional methods of appraisal, is the most adopted appraisal technique in practice as can be seen with a mean score of 3.7. This is followed by the NPV and IRR methods with mean scores of 3.4 and 3.1 respectively, while the techniques that incorporate risk were not often used. The implication of this result is that practitioners are still concentrating their practice on the traditional methods of development appraisal. The literature had revealed that these traditional methods might not be in tune with the present day economic reality (Baum and Crosby, 1988; Baum *et al*., 1997; Ojo, 2006). Valuers base their judgement only on the objective(s) of the decision-maker, which is always to maximize profit. The implication of the adoption (by the appraiser) of a more optimistic risk

attitude than that considered appropriate by their clients is that development appraisals might not be adequately addressing the client's lower risk tolerance. In other words, the appraiser using best estimates might recommend a project with high profits but a high standard deviation of returns as viable while their client might not be willing to accept high developer's profits if they are accompanied by a relatively high degree of uncertainty.

Modern methods of appraisal that incorporate measurement of risk and uncertainty such as Monte Carlo Simulation, Risk Adjustment Discounted Rate technique, Certainty Equivalent technique and Sliced Income technique are not yet embraced in practice despite experts' view that these are the best methods that are more applicable under conditions of risk and uncertainty as is experienced in Nigeria today. Ogunba *et al.* (2005) noted that three main stakeholders are interested in the assessment of risk in development appraisal and that the probability weighted cash flows (based on the net present cost technique) is the most appropriate method for the public developer client, Monte Carlo simulation for the private developer client, and certainty equivalent cash flows for clients that are development lenders. These are all modern appraisal techniques, which are not or rarely used by valuers in Akure.

Table 4: Development Appraisal Techniques used by Valuers

Appraisal techniques	Most Often Used (4)	Often Used (3)	Seldom Used (2)	Not Used (1)	Mean Score	Rank
Payback Period	71.43	28.57	0.00	0.00	3.71*	1
Net Present Value	42.86	57.14	0.00	0.00	3.43*	2
Internal Rate of Return	42.86	42.86	0.00	14.29	3.14*	3
Accounting Rate of Return	28.57	42.86	14.29	14.29	2.86	4
Residual Method	14.29	57.14	14.29	14.29	2.71	5
Sensitivity Analysis	14.29	28.57	28.57	28.57	2.29	6
Risk Adjusted NPV	14.29	14.29	28.57	42.86	2.29	6
Weighted Average Rate of Return	0.00	28.57	42.86	28.57	2.00	8
Certainty Equivalent	0.00	42.86	14.29	42.86	2.00	8
Monte Carlo Simulation	0.00	42.86	14.29	42.86	2.00	8

Table 5: Problems of Wrong Choice of Viability Criteria and Appraisal Technique

Problems	Agreed	Undecided	Disagreed	WMS
Actual returns in variance with expected returns	71.43	28.57	0.0	2.71
Difficulty in loan amortization	71.43	14.29	14.29	2.57
Longer void periods in developed properties	42.9	14.3	42.9	2.0
Performance deviating from investor's objectives	42.9	0.0	57.1	1.86
Exposure of clients to more risk	28.57	0.0	71.43	1.57
Foreclosures of mortgage properties by lenders	14.29	14.29	71.43	1.43

Table 5 shows responses to problems resulting from choosing a wrong viability appraisal technique. 71.43% of the respondents agreed with the fact that the problems of actual return varying from the expected return and that of difficulty in the repayment of loans always result from using a wrong viability technique, while 28.57% were in-between the opinions that it could be as a result of the use of wrong appraisal technique or the problem of the client not being able to manage the investment well.

71.43% were of the view that foreclosure of mortgage property was not a result of wrong choice of viability appraisal techniques, while 14.29% saw the problem as partly the result of inappropriate technique and partly the result of the investor's incompetence to handle the situation. 57.1% disagreed with the fact that the deviation of actual performance from the investor's objective is a result of wrong choice of appraisal technique, while 71.43% disagreed that the exposure of clients to more risk were results of wrong choice of viability appraisal techniques respectively. The implication of this is that professionals have not been taking responsibilities for these problems. This may be the reason why many appraisers adopt any technique adjudged good without taking into account the aftermath of such decision. Traditional appraisal techniques were majorly used because the risk tolerance of the investors was not always considered by the valuers, and the fact that the traditional techniques are easy to use and compute.

Table 6: Factors Significant to the Selection of Appropriate Appraisal Technique

Factors	Very Sig (4)	Sig. (3)	Undecided (2)	Not Sig (1)	WMS	Rank
Investor's objective(s)	85.7	14.3	0.0	0.0	3.86	1
Inflationary trend in the economy	71.4	28.6	0.0	0.0	3.71	2
Appropriate viability criteria	57.1	42.9	0.0	0.0	3.57	3
Changes in rate of interest	42.9	42.9	0.0	14.3	3.14	4
Investor's level of risk tolerance	42.9	28.6	0.0	28.6	2.86	5

The significance of the various factors considered by Valuers is shown in table 6 above. The objective(s) of the investor or developer is seen as most significant with a mean score of 3.86, followed by inflationary trend in the economy and appropriate viability criteria and at 3.71 and 3.57 mean scores respectively. Interest Rate Change has 3.14, while Investors Level of Risk Tolerance had the least mean score of 2.86. This shows that Appraisers do not always consider how far their clients (the investors) are ready to take risk in embarking on such investment. As Ogunba *et al*. (2005) rightly discovered, valuers use their own risk tolerance level (optimism) to choose the appraisal technique they consider appropriate for an appraisal instead of that of the client. Some do not even consider risk factors at all as they choose appraisal techniques that are simple and easy to compute (Ojo, 2006). The role played by Valuers in choosing the right appraisal technique is seen in the way they incorporate the functions in the table 6 into their appraisals. Failure to critically look into these functions has led to wrong use of viability appraisal technique.

Conclusion and Recommendation

It is one thing for an appraiser to understand the variety of alternative techniques in development risk analysis and quite another to assess the technique that is most appropriate for each occasion. Most development appraisers, who include an analysis of risk in their development appraisals, simply picked the risk analysis approach that suited them. Viability appraisal, which is the bedrock of any successful investment, should be seriously and accurately handled by the experts. The success of any viability study goes beyond knowing the objective(s) of the investor, but it also involves the knowledge of the criteria upon which those objectives are based, the level of risk tolerance of the investor, change in interest rates as well as the trend of inflation in the economy. This will help to determine the nature of data to look out for and the appropriate appraisal technique to be

employed in order to arrive at a good investment decision. Knowing the right viability criteria for a particular objective will help in advising an investor on a course of action that will best achieve the developer's objective.

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