Economic Analyses of Residential Properties among Private Investors in Ile-Ife and Its Environs, Nigeria

Dr. Agbaje Toyese
Lecturer, Department of Marketing, Obafemi Awolowo University, Nigeria

Abstract:
The study evaluated the economics of residential properties among investors in Ile-Ife and its environs, Nigeria. Primary data that was gathered through administration of structured questionnaire was analysed through descriptive and budgetary techniques. The results indicated that residential properties have approximately five decades as lifespan. Major problems identified were that investors need sums relatively higher than they can easily afford, it was also indicated by most respondents that residential properties do not payback its value during the life time of the primary investor. Among the leading reasons for investing in real estate property is that it was seen as a means of tying down money for a later time return. Likewise, respondents indicated that such investment does not crash. It was also considered as a form of inheritance for their children. When budgetary analyses were conducted, all the types of houses; self-contain, bungalow, block of flats were able to pay back the nominal value of the house but none of them had positive value when time value was included at 13.5%. This then bring to conclusion that investment in residential property is not a profitable venture. It was concluded that government should show strong commitment to the issue of residential property. It is hoped that such gesture will bring about good and affordable housing for the people, at the same time discourage investors from investments that cannot guarantee the cost of investing

Keywords: Residential, payback, lifespan, non-profitable, investors, stepwise, incremental

1. Introduction

Housing is one of the most important items along the pyramid of needs for man irrespective of class and status. This was clearly illustrated in Abraham Maslow's hierarchy of needs theory (Maslow, 1943). Since residing in a house is a must for all human beings, it becomes imperative to look at how this very important item of need is being provided. Occupancy of a house can either be owner occupier or rental occupier. Many factors such as income and stage in human lifecycle relate with status to play role in deciding the type of personal house to reside in. This then implies that some people will have house for their occupancy (owner occupier) and others will pay at regular intervals usually yearly (rental occupier) for the use of the house they reside in. One of the single largest financial commitments that can pool out money from an individual is buying or building a house. For the decision to rent a house, someone must have built in excess of what he or she will reside in with an intention to realise a sum that is not less than the property value. When a house is built and sublet to people who do not have a personal house to themselves, owner(s) of such house receive a regular income at a pre-determined interval of time, usually one year in Nigeria. People who build houses for rent do so for a clear motive of having these houses as investment opportunity. An investment is any economic adventure that generates future incomes whose sum of discounted future values less the initial outlay is expected to be higher than zero.

Recent economic realities in Nigeria have made the demand for housing to increase beyond supply. This is the case with most developing countries which are experiencing rapid growth in population and urbanization of the cities. Population has been growing rapidly at the rate of 4.5% in Nigeria (CSD, 2008). There has been an increase in rural-urban drift in Nigeria over time (Diogu et al, 2010). The last two decades has witnessed a tremendous expansion in the construction of residential homes by individuals. This is due to failure of government to provide the needed housing infrastructure throughout the five different national housing plans (PHC, 2010). It can be seen that almost all the communities that distinct themselves around Ile-Ife (Modakeke, Kajola, Akiile, Eleweran, Osu, Moro, Edunabon) are now closely interwoven to the extent that it becomes difficult for a non-native to observe any line of discontinuity. In fact, Gbongan, a town that is more than 25 kilometres from the Obafemi Awolowo University Campus is also gradually being linked on the continuous stretch. All these observations are due to the recent trend in housing investment. Although kilometre distance does not portray these locations to be farther from each other per se, but little or no investment in housing infrastructure has left the various locations independently over the past years as opposed to the current trend. The idea might have borrowed from an improvement in economic and business activities. For instance, in 2019 eight of the existing deposit money banks in Nigeria have their branch on the campus of Obafemi Awolowo University as well as within the town. In addition, three other deposit money banks have their branch within the community. This brings the total of banks in the study location to 11 out of a total of 23 deposit money banks in the country. By juxtaposing this with what was obtainable in 2000, only two out of the then 89 banks in the country had branches in the whole of Ile-Ife and its environs. The agglomeration of all employees of these corporate workplaces together with ever increasing pool of
businessmen and artisans has been responsible for the increasing need for decent and up to date accommodation which investors are tapping into. In the same vein, employees on Obafemi Awolowo University campus and students have continually been on the increase. The population is also corroborated by the emergence of a private university and a private polytechnic in Ile-Ife in the last one decade. This has also added to the significance of housing need in the study area. This study therefore seeks to look into the business idea of housing provision and its attendant benefits to investors and potential investors.

2. Literature Review

During the 1980s there have been notable researches on housing developments. Later along the line, focus was given to housing tenures other than ownership, and in particular to analyse renting (Gilbert and Varley, 1991). Since the late 1970s there has been growing recognition and consensus that while self-help housing offers use value to residents and users, it also has an exchange value. Exchange value is the value that it would command were it to be sold. Exchange value is generated as the house and its constituent elements (land, dwelling structure, services, location, security) are given value through the efforts of the household and other actors who intervene in the production and commercialization of the residential unit. Thus, housing is a commodity which is given value according to the mode of production of which it forms an integral part. Although there is disagreement on matters of detail as to what constitutes a mode of production, the term is usually used to designate a particular combination of the economic structure with a political and ideological superstructure, and which is conducive to the smooth operation and reproduction of the productive system (Wolpe, 1980; Peet, 1985). The state's role is to facilitate that process; be it capitalist or socialist, and the actual form through which state intervention is expressed will vary according to the nature of the state itself, and according to material conditions at different historical conjunctures. Natural or precapitalistic modes of production are those which formed before the expansion of western capitalism (Wolpe, 1980; Taylor, 1979). As capitalist modes expand, they penetrate and transform or destroy the existing precapitalistic mode (Bradby, 1980). There is considerable debate about both the nature and final outcome of this process, and especially whether the displacement process is total, or whether different modes of production may continue to coexist alongside each other (McGee, 1979; Alavi, 1982). The way in which these modes of production are joined and expressed is through a process of articulation by economic, political and ideological practices.

Costs influence rent in the building investment industry. This is because cost is associated with the input for the production of building; the output value is therefore the returns on the investment, which is the rent that the building will be commanding. Olusegun (2000), Rees (1980), Briton & Davis (1980) thus observed the concept of cost-in-use as the technique applied at the preliminary stages of a development or building projects to assist in the determination of the best materials to be incorporated in the development. Each item is considered in terms of its initial cost; annual maintenance cost, and expected life span. This is summed by Olusegun (2000) to be the present value of all cost over the life span of the building. Therefore, this becomes a best guide to the determination of the rent which the premises may command after development. It is believed that location and location specific attributes are responsible for the choice of what materials to include in the design of a building, though the same also applies to rental value. The level of risk which an investor encounters in building does influence the investors return expectation. Brueggeman and Fisher (1997) concluded that many sources of risk affect return on real estate investment by making such returns more variable. Further observation is that the higher the risk in projecysthe greater the returns in such projects. Vandell and Lane (1988) joined other scholars in attempting to evaluate empirical contribution of architectural quality to the value of building. The summary of their work was that architectural quality will also enhance the value of a house and thus its rental value. Ruegg and Marshall (1990) concluded that we need both improved measures of these hard-to-quantify benefits and cost and greater use of the measures in economic evaluation of buildings.

3. Methodology

This study employed primary data obtained from respondents who are owners of private property within the study location through the use of structure questionnaire. Two major factors were responsible for easy collection of data from respondents. The first was that the researcher is a colleague to majority of respondents in their workplace. The second factor that assisted was the presence of one of the occupants who is a banker to most of the respondents with a very good social relationship network who also introduced the researcher to the respondents. Data collection emphasized costs incurred in the construction of each houses, expected life span of the houses, and the rental collection. Data collected was analysed through the use of descriptive statistics as well as budgetary analyses.

4. Results

| Reasons                                           | Frequency   |
|---------------------------------------------------|-------------|
| A means of tying down money for return later in life | 64          |
| An investment opportunity that does not crash      | 41          |
| A guarantee of inheritance for the children        | 29          |
| Difficulty to steal the investment compared to other business lines by attendants | 13          |
| Status inclination                                 | 5           |

Table 1: Reasons for Investing in Landed Property
Source: Field survey, 2019
Table 2: Factors Militating against Investing in Landed Property
Source: Field Survey, 2019

| Reasons                                           | Frequency |
|---------------------------------------------------|-----------|
| Insufficient fund to put structure in place within ample time | 51        |
| Rate of conflict about land is usually high       | 47        |
| Difficulty in recouping investment value within active life of the investor | 38        |
| High rate of competition lowers value of the property in limited time | 29        |
| Theft of inputs on site during construction       | 22        |

| Life span (years) | Frequency |
|-------------------|-----------|
| 36-40             | 15        |
| 41-45             | 32        |
| 46-50             | 50        |
| 51-55             | 46        |
| Total             | 143       |

| Occupancy structure | Frequency |
|---------------------|-----------|
| Single room self-contain (hostel: many occupants) | 71        |
| Bungalow (Lone occupier flat)                      | 33        |
| Bungalow (two occupiers)                           | 19        |
| Block of flats (Four occupiers)                    | 20        |
| Total                                             | 143       |

Table 3: Approximate Time That Owners Expect Their Houses to Last (Years)
Source: Field Survey, 2019

| Occancy structure | Cost structure per occupant to completion (₦’million) | Minimum | Maximum | Average |
|-------------------|-------------------------------------------------------|---------|---------|---------|
| Single room self-contain (many occupants) | 1.2 | 1.7 | 1.55 |
| Bungalow (Lone occupier flat) | 4.9 | 6.1 | 5.92 |
| Bungalow (two occupiers) | 7.8 | 10.8 | 9.15 |
| Block of flats (Four occupiers) | 17.1 | 20.5 | 18.55 |
| Pooled average | | | 6.09 |

Table 4: Types and Sizes of Houses by Occupancy Structure
Source: Field Survey, 2019

| Occupancy structure | Yearly rent per occupant (₦’000) | Minimum | Maximum | Average |
|---------------------|-----------------------------------|---------|---------|---------|
| Single room self-contain (many occupants) | 60 | 150 | 80 |
| Bungalow (Lone occupier flat) | 300 | 450 | 400 |
| Bungalow (two occupiers) | 250 | 400 | 350 |
| Block of flats (Four occupiers) | 250 | 400 | 300 |
| Pooled average | | | 220 |

Table 5: Cost of Completion per Structure (Pooled Data)
Source: Field Survey, 2019

| Variables | Minimum | Maximum | Average |
|-----------|---------|---------|---------|
| Cost structure (in millions of naira) | 1.2 | 1.7 | 1.55 |
| Returns (thousands naira) | 60 | 150 | 80 |
| Expected life span (years) | 20 | 35 | 30 |
| Occupancy rate (%) | | | 85 |
| Total returns = 80,000 x 30 x 0.85 x 0.95 | 1,938,000 |
| Payback period (years) | | | 21 |
| Net present value | 579,322 |
| Surplus over net present value | (970,678) |
| comment | Non-profitable |

Table 7: Cost and Return Estimates in Single Room (Hostel: Many Occupants)
Source: Field Survey, 2019
Variables | Minimum | Maximum | Average
--- | --- | --- | ---
Cost structure (in millions of naira) | Lone occupant | 4.9 | 6.1 | 5.92
Returns (thousands naira) | 200 | 400 | 275
Expected life span (years) | 45 | 50 | 48
Occupancy rate (%) | 85
Total returns = 275,000 x 48 x 0.85 x 0.95 | 10,659,000
Payback period (years) | 23
Net present value | 2,032,368
Surplus over net present value | (3,887,632)
Comment | Non-profitable

Table 8: Cost and Return Estimates in Bungalows (Lone Occupant)
Source: Field Survey, 2019

Variables | Minimum | Maximum | Average
--- | --- | --- | ---
Cost structure (in millions of naira) | Two occupants | 7.8 | 10.8 | 9.5
Returns (thousands naira) | 400 | 700 | 500
Expected life span (years) | 45 | 50 | 51
Occupancy rate (%) | 85
Total returns = 500,000 x 51 x 0.85 x 0.95 | 20,591,250
Payback period (years) | 20
Net present value | 3,697,898
Surplus over net present value | (5,802,102)
Comment | Non-profitable

Table 9: Cost and Return Estimates in Bungalows (Two Occupants)
Source: Field Survey, 2019

Variables | Minimum | Maximum | Average
--- | --- | --- | ---
Cost structure (millions of naira): Block of flats | 15.3 | 28.7 | 25.44
Returns (thousands of naira) | 600 | 1,000 | 800
Expected life span (years) | 40 | 60 | 45
Occupancy rate (%) | 85
Total Returns = 800 x 45 x 0.85 x 0.95 | 32,703,750
Payback period (years) | 34
Net present value | 5,906,068
Surplus over net present value | (19,533,932)
Comment | Non-profitable

Table 10: Cost and Return Estimates in Block of Flats (4 in Number)
Source: Field Survey, 2019

Reasons | Frequency
--- | ---
Bad access road to houses | 41 | 28.7
Size of houses bigger or smaller relative to needing person family size | 32 | 22.4
Location may sometimes not be okay for tenants | 18 | 12.6
Renovation exercises | 15 | 10.5
Loneliness of houses in some cases | 13 | 9.1
Frequent robbery attack at such locations | 11 | 7.7
Delayed handing over by previous occupant | 9 | 6.3
Poor electricity connection to the location in some cases | 8 | 5.6

Table 11: Reasons for Incomplete Year-Round Occupancy of Houses
Source: Field Survey, 2019
4. Discussion

4.1. Descriptive Statistics

A list of reasons was advanced for involving in landed property (housing) investment. The most indicated by respondents being a way to tie down capital during the active stage of income generation towards a future time when there is expected to be limited strength and reduced and possibly insufficient income for one's upkeep. This position was supported by about 45% of respondents (Table 1). Another important point by about 30% of respondents was that investment in landed property does not crash. This implies that in the absence of considering time value of money, landed property will always bring a return that is at least higher than the nominal investment. This position was clearly followed by the fact that investment in landed property is a guarantee of inheritance for the children (subsequent generation). Some other reasons are as indicated in Table 1. The study went further to inquire if there be any mitigating factor in landed property from this study. The average was 47.5 years. Another important fact that was noted was that the value of the currency remains the same from time to time. From this study it was observed that the average investment in the residential property by each investor was ₦6,090,000 (Table 5) with an average annual inflow of rent being ₦20,000 (Table 6) per year. The result indicated that investors have approximately 34 years to pay back the initial outlay. This figure corroborates the position that there is difficulty in recouping the initial layout (Table 2) during the active lifespan of the investor, a situation that puts reaping of total returns in the hands of the dependants of the investor. This constraint was that a huge sum is needed to put the investment in place. This sum is not easy to gather from the perspective of the investor. A breakdown of the various houses into the different types of structures revealed that an investment in landed property has its value fully harvested over more than one generation. This point was indicated by 27% of respondents (Table 2). The next important point was that the investment option along that line presents itself with high rate of competition which eventually obeys basic economic principle as it is expected that price will fall when competitors enter any economic environment.

The third area of concern in this study was to establish the length of time it took for the building as an economic asset to come to an end. This was proxied as life span. Just like every other activity, there was variation in the projected life span of houses. One factor that could contribute to this observation is the quality of material inputs used by individuals. This variable ranged from 36 to 51 years from this study. The average was 47.5 years. Another important factor that was noted from this study was by way of description; houses were in the form of self-contain (hostel), bungalow (lone occupier and two occupier) and block of flats. Self-contain was the commonest from the study. It represented almost 50% of the sampled respondents (Table 3). The study further established that occupancy of houses by tenants is not on a complete year-round basis. It was approximately established to be 85%. The major reasons for this situation are presented in Table 10. The leading factor was that respondents indicated bad access road to their property which does not encourage the appropriate person to show patronage. Road situation in Nigeria in the current time is in high state of disrepair, people spend heavily where there is cooperation between owners of properties and members have the willingness to attend to such. In the absence of team spirit to contribute to fix such roads, the amenity becomes lacking in occupancy. In this study 28.7% indicated that unavailability of good access road has contributed to forceful vacancy of their apartment at times when such should be yielding returns. In some other instances, the family size of the needing person may be higher or smallerrelative to the available accommodation. This situation puts extended vacancy on the house at the expensive of tenancy that ought to be running. About 22.4% of respondents had this claim (Table 10). Other important points listed that may account for unutilized rental time are; location not commensurate with the taste of a potential tenant, and renovation exercise that will make the house to look neat, habitable and compete with other newly completed structures in the neighbourhood. These two reasons accounted for 12.6% and 10.5% respectively as indicated in Table 10.

4.2. Business Analyses

4.2.1. Payback Period

This method was used to know how long it takes to recoup an investment in the residential property development. The method was considered as the starting point to analyse investment in residential properties. In essence, it was assumed that the value of the currency remains the same from time to time. From this study it was observed that the average investment in the residential property by each investor was ₦6,090,000 (Table 5) with an average annual inflow of rent being ₦20,000 (Table 6) per year. The result indicated that investors have approximately 34 years to pay back the initial outlay. This figure corroborates the position that there is difficulty in recouping the initial layout (Table 2) during the active lifespan of the investor, a situation that puts reaping of total returns in the hands of the dependants of the investor. A breakdown of the various houses into the different types of structure revealed that hostel has a longer payback period relative to other types of structures. This may not be unimagined as it is expected that it will require minimal finishing since the period of its use is always minimal and also majority of occupants are students with reduced household fittings at this stage and period of life. All these translate to minimized costs that led to early payback.

4.2.2. Stepwise Periodic Increase in Payback with Time

This approach attempted to view inflow from rental receipt using a variant of payback period. This was done using the same construct as it is in payback but prefers to consider incremental pay after a certain time lapse. Thus, this study chooses to have increment after equal intervals of time. For this analysis, the author decided a 10% increase in rent at the end of every eight years. The result from this concept aggregated eight inflows is presented in Table 12. Figure 1 also corroborates this explanation.
Further calculations from Table 12 revealed that this imaginary estimate gave 80.06% return on investment over a 48-year life span. This result is just around 1.67 percent per annum.

**4.2.3. Discounted Payback**

Discounted payback is a more economically realistic way of assessing businesses and other investments that are expected to refund the initial outlay over long period of time. Under this approach the assumption of payback period was relaxed. This then warranted it that time value of money cannot be the same throughout for a period as long as almost 50 years. Under an ideal assessment situation, it becomes rational to view cost of capital to be that value that is prevalent in the economic environment of the country while all other business indicators are assumed constant. In Nigeria, the prevailing cost of capital during the period of this study (2019) was 13.5%. Equation 1 assumes the scenario explicitly; where \( C_i \) is the constant amount of money (inflow) from annual rent; \( r \) is the assumed cost of capital (13.5%), and \( T \) is the number of years that houses build for commercial purposes is expected to last. \( C_0 \) is the original investment value, and NPV (net present value) is the worth of the investor over the given period.

\[
NPV = -C_0 + \sum_{t=1}^{T} \frac{C_i}{(1 + r)^t} \]

The study used average of the available statistics to compute the net present value. Thus, outlay \( C_0 \) was N6,090,000 while inflow in the form of annual rent was N220,000. The result from this approach using equation (1) arrived at the sum of present value to be N1,625,895. When we factor in the initial outlay, the result arrived at a negative net present value of (N4,464,105). This result serves as a pointer to the conclusion that investment in housing is not profitable in the life span of the investor.

**4.2.4. Stepwise Periodic Increase Discounted Payback**

This method slightly borrows from the concept of time value of money by going a bit outside the ceteris paribus frontier. This was done by assuming that practically rent cannot be the same over a 48-year span. The research focus here assumes 50% increment after some length of time; say 16 years. For analytical purpose and to remove complexity, cost of capital was kept constant all through the period at 13.5%. The method thereafter estimated the present value for 16-year period (first value out of the three parentheses in equation 2). Next as it is in the second parenthesis, a 50% increase in
value of rent was assumed, this then discounted using 13.5% and sum over 32-year period less the discounted value for the same amount of rent for 16 years since emphasis was on the values ranging from year 17 to year 32. This was also applied for the third parenthesis; discount of a second 50% increase in annual rent sum over 48 years less the discount over 32-year period. Again, it was because the emphasis at this third level was on rent for the period of year 33 to year 48. Total sum of discounted value = \( ¥1,749,902 \)

\[
NPV = C_0 + \left[ \sum_{i=1}^{16} C_i \left( \frac{1}{1+b_1} \right)^i \right] + \left[ \sum_{i=1}^{32} C_i \left( \frac{1}{1+b_1} \right)^i - \sum_{i=1}^{16} C_i \left( \frac{1}{1+b_1} \right)^i \right] + \left[ \sum_{i=1}^{48} C_i \left( \frac{1}{1+b_1} \right)^i - \sum_{i=1}^{32} C_i \left( \frac{1}{1+b_1} \right)^i \right] \quad \ldots \ldots \ldots (2)
\]

\[= ¥1,414,770 \quad + \quad ¥279,797 \quad + \quad ¥55,335 \]

Net present value = (sum of discounted value - initial outlay).

Adjusted net present value is the net present value factored for idle time as well as repair cost. Throughout this study, idle time was taken as 15% while repair cost was taken to be 5%. Overall estimate puts net present value to be adjusted value at 0.85 and 0.95 respectively.

\[= ¥1,749,902 \times (0.95) \times (0.85) - ¥6,090,000 = (¥4,676,955) \]

With respect to the value obtained after the computation of net present value over the 48-year period, it can be deduced that the investment resulted in a loss of about 76.8%. This can be linearly transposed to annual loss of 1.6%. Except inference of benefit can be deduced from other dimensions, investment in housing infrastructure should not be left in the hands of individuals but be fully supplied and managed by government

5. Conclusion

This study was about residential properties investment potentials of private investors in Ile-Ife and its environs. Emphasis was placed on the benefits accruable to investors in the private housing provision. Cost-benefit analyses were used to bring out the picture of the economic realities in the industry. Results indicated that housing investment is a long-term business enterprise with lifespan in the range of five decades. Although what can be termed huge investment in one location may be micro investment elsewhere. However, considering the economic realities in Ile-Ife and its environs, investment in housing investment is a huge investment in terms of initial monetary commitment. From the various analytical steps considered, only payback period tends to favours investment in housing. For a sincere analysis, time value concept should be factored in whenever any investment that will bring in proceeds over many future periodic times is involved. When that concept was employed, the result indicated that the investments were unable to bring back the complete value after the projected lifespan. This then brings to conclusion that value inherent in landed or housing property by individual investor is a succeeding generational benefit. This is because some respondents indicated that it was for a guarantee of investment for their children

6. Recommendations

In order to meet world health organisation (WHO) requirement of housing provision for all, the following recommendations emanating from this study were made:

- Government at all levels must really come into terms with affordable and meaningful housing provision for all.
- Adequate socio-economic amenities (roads, electricity, and water) should be made accessible to needling public to enhance standard of living, as well as a guarantee to social payback for investors in housing provision.
- Since private housing provision for commercial purpose is not a profitable venture for the original investors, government can have a public private partnership arrangement that will encourage individuals and guarantee their returns while government also a control mechanism towards the betterment of the masses

7. References

i. Alavi, H. (1982). The structure of peripheral capitalism. In H. Alavi and T. Shanin (eds), Introduction to the sociology of ‘developing societies’, Macmillan London.
ii. Bradby, B. (1980). The destruction of natural economy. In Wolpe (1980).
iii. Bruegeman, W. B., & Fisher, J. D. (1997). Real Estate Finance and Investments, Irwin: McGraw Hill.
iv. Briton, W., Keith, K., & Johnson, T. (1980). Modern Methods of Valuation, Great Britain: Pitman Press.
v. Diogu, J. O., & Onyegiri, I. (2006). Cost Reduction Strategies in Residential Design: Analysis and Application Concepts. Environmental Research and Development Journal, 1(1), 1–8.
vi. Gilbert, A. & Varley, A. (1990). The Mexican landlord: rental housing in Guadalajara and Puebla. Urban Studies 27(1), 23–44.
vii. Gilbert, A. & Varley, A. (1991). Landlord and tenant: housing the poor in urban Mexico. Routledge, London.
viii. Maslow, A.H. (1943). A theory of human motivation. Psychological Review. 50(4): 370–396.
ix. McGee, T. (1979). Conservation and dissolution in the third world city: the shantytown as an element of conservation. Development and Change, 10 (1), 1-22.
x. Olusegun, K. (2000). Property Valuation Principles and Practice in Nigeria, The Estate Management Institution (TEMI).
xii. Peet, R. (1985). An introduction to Marxist geography. Journal of Geography, 84(1), 5-10.
xii. Pison Housing Company in - EFInA and FinMark Trust (2010) Overview of the Housing Finance Sector in Nigeria. Publication commissioned by Enhancing Financial Innovation and Access (EFInA) and Making Financial Market Work for the Poor (FinMark Trust).

xiii. Rees, W. H. (1980) Valuation: Principles into Practice, London. The Estate Gazzette Ltd.

xiv. Ruegg, R. T., & Marshall, H. E. (1990). Building Economy: Theory and Practice, New York: Van Nostrand Reinhold.

xv. Taylor, J.G. (1979). From modernization to modes of production: a critique of the sociologies of development and underdevelopment. Macmillan, London.

xvi. Vandell, K. D., & Lane, J. S. (1988). The Economics of Architecture and Urban Design Some Preliminary Findings. Paper presented at the Allied Social Science Associations Annual Meetings, New York.

xvii. Wolpe, H. (ed.) (1980). The articulation of modes of production: essays from Economy and Society. Routledge & Kegan Paul, London.