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Growth and Spatial Variations of Urban House Prices In Tamilnadu: A Micro Level Study

R. Magesan[1]
Ph.d Research Scholar (Part-Time), Islamiah College (Autonomous), Vaniyambadi
E.mail: promagesan99@gmail.com

C.A.Basheer Ahmed Khan[2]
Associate Professor and Research Supervisor of Economics, Islamiah College (Autonomous), Vaniyambadi

Abstract

In India, housing generally embodies lifetime savings of the many individuals and thus the government and therefore the Centre got to be sensitive to the housing sector. in sight of the very fact that housing may be a personal wealth, its demand is closely associated with socioeconomic strata of the population. Therefore, there's a condition to accept in-depth research on housing for every specific state, assess the housing necessities in several regions, climate and socio-economic strata of the society. State governments will get to progress in urban and city planning due to urbanization and to avoid unplanned growth and damage to natural and ecological balance specific to every state. The housing prices reflect land prices, which probably get captured within the housing price level, but a separate Land price level would bring transparency within the construction industry and also help in accepting the trend in prices of land. Therefore this paper attempts to analysis of growth and Spatial Variations of urban house prices in Vellore District of Tamilnadu.

Key word: urban house prices, Housing, Land use, spatial variations

1.1 Introduction

The economic framework is concerned with the operation of our price system as it affects each individual in his attempt to make profitable use of his land-resource base. This frame work deals with a man's tendency to maximize his returns. It is concerned with the effect that economic concepts such as value, costs, returns, and profits have upon his allocation and distribution of land resources and upon his use of these resources for production and consumption purposes. As later discussion will indicate, most of our thinking on land economics is oriented within this framework.

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The institutional framework is concerned with the role man's cultural environment and the forces of social and collective action play in influencing his behavior as an individual and as a member of his family, his various groups, and his community. It is concerned with the impact of cultural attitudes, custom and tradition, habitual ways of thinking and doing things, legal arrangements, government programs, religious beliefs, and other similar factors upon man-to-man and man-to-land behavior. Among its many facets, it also involves the effect of personal and household considerations-an individual's non-monetary goal or his family obligations upon one's decisions as a business operator. Almost every type of human activity is influenced or conditioned to some extent by the institutional factors that operate within this framework.

Together with the level of technology, these three factors set the stage within which man's use of land takes place at any given time. In his work with this threefold framework, the land economist finds that he must deal with the full gamut of factors that affect residential land-resource use. Much as he may wish to limit himself to the application of economic principles, he frequently finds that the solution of his problems requires consideration of the physical and biological nature of his land-resource base. In like manner, his problem-solving approach also requires an understanding of the various institutional and man-to-man relationships that influence human behavior in matters involving the ownership and use of residential land.

In India, housing generally embodies lifetime savings of the many individuals and thus the state and therefore the Centre got to be sensitive to the housing sector. In sight of the very fact that housing may be a personal wealth, its demand is closely associated with socioeconomic strata of the population. Consequently, there's a prerequisite to take on in-depth research on housing for every specific state, assessing the housing requirements in several regions, climate and socio-economic strata of the society. State governments will get to move in urban and city planning to keep away from unplanned growth and damage to natural and ecological balance specific to every state. The housing prices reflect land prices, which probably get captured within the housing price level, but a separate Land price level would bring precision within the construction industry and also help in thoughtful the trend in prices of land.

Housing, not like most trade goods, exhibit certain special features, making its study distinctive and complex. These features include durability and heterogeneity. Housing is a heterogeneous good with varying dimensions both quantitatively and qualitatively, which complicates its definition and its measurements. As a result of these varying dimensions, both buyers and sellers may view the dwelling units with the same

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selling price as substantially different. However, the quantitative traits of the housing such as the number and size of rooms, baths, and the lot size exhibit fewer problems of definition and measurements relative to the qualitative attributes such as the physical quality (or) structural quality and neighborhood quality (or) over vocational quality. Therefore this paper attempts to analysis of of growth and Spatial Variations of urban house prices in Vellore District of Tamilnadu.

1.2 Research Method

The study area confined to select Vellore district of Tamilnadu and market value of house in Vellore district was collected from the renowned real estate agents and property developers with the active co-operation of state government officials. The whole area of Vellore District was categorized in to four zones, namely central, north, south and west. The marker value of urban house price calculated in Rs per square foot basis. The results of the analysis are tested using Growth rate analysis and ANNOVA one way classification with the help of Secondary and primary information.

1.3 Results and Discussion

(a) Growth of urban house prices

The growth of urban house prices amid 2013-2018 is considered with the assistance of secondary data. The time series data for 6 year (2013-2018) was used to to examine growth rates in urban house price for each Zone of Vellore District city, a Compound Annual Growth Rate is found to the fitting. The equation is:

CAGR = (current year value/Base year value)/(1/Periods) -1

Population and economic growth do not take place in thin air; they require land and lots of it. Cities in developing countries are facing serious challenges as they attempt to cope with the population growth. In most cases, public policies have been launched to relive the symptoms of poor urban land and housing market performance. Public Housing Authorities have been set up and multi-national agencies have invested heavily in new programmes as a part of national economic development planning. Nevertheless, urban development is overwhelming the capacity of local institutions, both private and public and joint ventures, to respond adequately to development pressure.

Against the backdrop of rapid economic growth and questions mentioned above, policy makers are beginning to recognize that the efficient residential land market operation is essential to maximize the potential delivery of affordable housing for all sections of the society. There are two impediments to this. One is the absence of a workable model with which to understand the residential land market. The other is the lack of accurate and up-to-date information about the growth of the city. No one exactly knows the price of housing land across the city, how far infrastructure or regularization of

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tenure change house prices, or how much revenue of the government could be raised from more efficient land taxation system. In the absence of such knowledge the assumed existence of a house price spiral in many developing nations is based on perceived price changes often informed by the reports in the transactions at the urban periphery or in the city entire.

The market value of house in Vellore district was collected from the renowned real estate agents and property developers with the active co-operation of state government officials. The whole area of Vellore District was categorized in to four zones, namely central, north, south and west.

The urban house price in Vellore District was derived in units of Rupees per square feet. **Table 1.1** indicates the average market value of urban house price during the year 2018 was observed at Rs. 17,896.38 per sq.ft and this was in the range, minimum of Rs. 15,712.5 per sq.ft and maximum at Rs. 20,080.25 per sq.ft. The same during the initial period covered under the study was Rs. 13,248.5 per sq.ft as average, Rs. 11,709 per sq.ft and Rs. 14,788 per sq.ft minimum and maximum price respectively. The average market value of urban house price in Vellore District during the last six years increased at an annual rate of 5.39 per cent. The percentage growth of the minimum value outweighs the maximum and the difference was observed at a very less, 0.09 per cent per annum.

The minimum price of house is always increasing as compared with the maximum house price, is a general phenomenon found in all the developing cities on the globe. The highest growth of the average market price of house was observed during the last year covered under the study i.e., 2017-2018 at 8.78 per cent the second and third highest growth of the average market value of house was observed during 2013-2014 and 2016-2017 at 7.48 per cent and 6.63 per cent respectively. In all the periods covered under the study, market price of urban house price showed positive trend. Comparatively lesser growth of market value of urban house price was observed during the middle period.

Table 1.1 Market Value of Urban house price and its Growth

Years	House price (Rs/Sq.ft)			Growth (%)		
	Min	Max	Av.	Min	Max	Av.
2013	11709	14788	13248.5	-	-	-
2014	12635	15843.5	14239.25	7.91	7.14	7.48
2015	13105.75	16506.75	14806.25	3.73	4.19	3.98
2016	13517	17341.5	15429.25	3.14	5.06	4.21
2017	14458.25	18446.75	16452.5	6.96	6.37	6.63

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2018	15712.5	20080.25	17896.38	8.67	8.86	8.78
				***30.41**	***31.62**	***31.08**

Source: Computed

Note: * Mean Percentage Change 2013-2018

(b) Spatial variations of house prices

The differences in the zonal characteristics make differences in the house prices in the study area with the assistance of secondary data; it is being investigated with the assistance of one way classification of ANNOVA. The one-way classification ANNOVA is:

$$Xij = \mu+\alpha j +Eij$$

Where,

Xij denotes house prices per square foot in the 'i'th year at 'j'th Zone.

μ is the general mean effect

αj explains the influence of 'j'th zone

Spatial variation refers to the differences in the zonal characteristics and the factors that influence the specified areas or types of decision units. A location system is a step like arrangement of centres and market areas patterned in a distinctive manner. Zonal characteristics mean the concentration of specified kinds of activities within the specified areas or the types of areas[1].

In Vellore District City is apportioned into four zones, while apply the Bartlett's test to the house price for Vellore District city, the calculated value of χ^2 = 11.74 which less than 5 per cent tabulated value of 12.5. This indicates that the house price variation at different zones is found to be homogeneous. Hence, the ANOVA- a technique is used to test the hypothesis that house price per sq foot differs significantly between zones in Vellore District city. The Results are given below:

Table 1.2 Variations in urban house prices between zones in Vellore District

Sources of Variation	Sum of Square (SS)	Degrees of Freedom(DF)	Mean Sum of Square (MSS)	F – Ratio
Between Locations	2652092	4-1=3	403135	**12.48****
Within Locations	4210001	24-1=23	40464	

[1] Granfield, Michel E., (1974), 'Residential Location - A Comparative Econometric Analysis', Applied Economics, Vol. 6.

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Total	**6862093**	**26**		

Source: Computed

** Significant at 5 per cent level

Table 1.2, it is clear that the calculated value of R-Ratio (9.45) is greater than tabulated value (2.37) at 5 per cent level of significance. Hence, the house price per sq foot differs significantly between zones in Vellore District as shown in F value. From this result, it is inferred that the difference in the relative house prices are wider between the Zones in Vellore District. This is due to fact that the four zones are medium sized zones with 'monocentric' type of single market centre. In this centre, all types of business and commercial activities are concentrated. Financial institutions, health centres and schools are located nearby the central place to the residential areas. Colleges are situated far away from the central place. Hence, the differences in the zonal characteristics make differences in the house price. In other words, similar dwellings in different zones and different dwellings in the same zone command different prices.

1.4 Conclusion

It is concluded from above discussion that the market Value of house in all the periods covered under the study in Vellore District indicates the market price of urban house price showed a positive trend. Comparatively lesser growth of the market value of urban house was observed during the middle period. Spatial variation refers to the differences in the zonal characteristics and the factors that influence the specified areas or types of decision units. , it is clear that the calculated value of R-Ratio (9.45) is greater than tabulated value (2.37) at 5 per cent level of significance. Hence, the house price per sq foot differs significantly between zones in Vellore District city as shown in F value.

Information regarding the land price is a vital and basic research. Like any other resource, the information on house price, some people are in possession of it or have access to it and others need it but do not have it. Those who have it can use it, waste it, market it, or else give it away. But it is consumed and hence it remains however much it is used; yet it cannot be destroyed or corrupted. It can be transformed, yet it remains with the transfer. It is indivisible, yet it can be accumulated. It has tremendous value both from social and cultural point of view, but, on its own, it has very material use- its value is tangible only when the information on house prices in the particular city is used for the productive uses like as a module for policy formulation, valuation, implementation, monitoring and evaluation of various policies introduced by the government from time to time or we can say with other tangible products.

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The policy planners, town planners, social scientists, academicians and researchers dealt with the land price information on day-to-day basis. There the information regarding the land is major information in the information category. Spatial data may relate to specific sites or points in detail or may be generalized and have widespread implication. There is a wide hierarchy of needs for such information on land from sovereignty, defence, public safety, protecting the welfare of all sections of the society.

References

1. Arimah C., B.. Hedonic prices and the demand for housing attributes in a third world city: the case of Ibadan, Nigeria. Centre for Urban and Regional Planning, 1992, 9(5)..

2. Colwell, P.F., Dilmore, G. Who was first? An examination of an early hedonic study. Land Economics, 1999, 75(4).

3. Stacy G, Macpherson, David A.; Zietz, Emily N. The Composition of Hedonic Pricing Models. Journal of Real estate Literature, 2005, 13 (1).

4. Ridker, R.G., Henning, J. A. (1967). The determinants of residential Property values with special reference to air pollution. The Review of Economics and Statistics, 1967, 49.

5. Nelson, J. P. Accessibility and the value of time in commuting. Southern Economic Journal, 1977, 43(3).

6. Ottensmann, J. R. Changes in accessibility to employment in an urban area: Milwaukee, 1927-1963. Professional Geographer, 1980, 32(4).

7. Herbert S. Swan, Land values and City Growth. Journal of Land and Public Utility Economics, 1934, Vol.10.

8. Lan.D. Mc Avinchey and Duncan McClennan, A Regional Comparison of House Price Inflation Rates in Britain, 1967-76, Urban Studies, 1982, Vol.19.

9. Abdul Raheem, A Correlates house price Determinants, The Indian Journal of Economics 2012, Vol.XIIIC,No. 368

10. Darrin H and Darabin, Aspects of Land Policy and urban land Prices in Israel", Israel Ministry of Urban Housing, (August, 1964), Mimeo

ISSN: 0474-9030

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11. Abelson, House and Land Prices in Sydney 1925 to 1970, Urban Studies, 1985, Vol.22.

12. Sillince J.A.A., The Housing Market of the Budapest Urban Regional 1949-1983, Urban Studies, 1985, 22 (1985).
13. Ya-Lun Chou, Statistical Analysis, (New York: Holt, Rinehart and Winston, 1975.

14. Granfield, Michel E, Residential Location - A Comparative Econometric Analysis, Applied Economics, 1974, Vol. 6.