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The Ranking of Financing Methods in Urban Old Texture (Case Study of Isfahan City)

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Extended abstract

1- Introduction

Aging and building of old texture, in various forms, including the reduction or loss of viability conditions and safety problems as well as physical, social, economic and infrastructural can be received and identified. The essential need for reconstruction and rehabilitation of the urban old textures is the development of environment for humans. The necessary requirements are socio - cultural and economic (Shamaei and Pourahmad, 2006: 43).

The first thing to be considered in this regard is the ways of providing financial tools for this issue (Jafarzadeh, M. and Jannati, M. 2009:525). According to the latest estimates of Reconstruction

Organization of Tehran (2010), the total volume of old textures in country is 65,000 acres. The cost of developing infrastructures of urban old textures is estimated to be about 100 billion Rials per acre and the time needed to reconstruct all old textures, with allocation of current resources and regardless of erosion growth, is 78 years. This shows that because reconstruction and rehabilitation of this enormous volume of urban old textures are capital intensive, they requires a lot of time. On the other hand, providing required capital is not in the ability of the government, the Municipality or the banking system and it needs more and more private sector's partnership through applying financing tools in financial markets.

In this research, the issue is being addressed by studying the most important and useful financing tools for reconstructing and rehabilitating urban old textures and also studying the important criteria for choosing a suitable financing tool applying AHP.

This research is applied and its method is a descriptive one of survey field. Using survey field and library studies, most of the

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tools which could be used to reconstruct and rehabilitate old urban texture in a way that they have operational experience in large cities and the criteria considered choosing a good financing tool are studied. The spatial domain of current research is financial experts of "reconstruction and rehabilitation organization of Isfahan city" and "Isfahan Municipality". Time zone of this research is from December 2009 to December 2010.

2-Theoretical bases

The required capital for the reconstruction and rehabilitation of the whole old urban textures, according to rehabilitation organization of Tehran's estimates, is 5 times bigger than government budget in 2010 and 59 times bigger than all Municipalities of Iran in 2008. This subject demonstrates that providing required capital is not merely in capabilities of the public sector or Municipality (Ranjbarian, 2010, p.142). But it needs the widely usage of financial markets and the financial tools which is possible via more cooperation between both public and private sectors.

From a theoretical perspective, the concept of the cooperation between public and private sectors is related to the "X-efficiency" theory which was introduced in 1966 by American economist Harvey Leibenstein (1922-1993). According to his view, until the public economic institutions and enterprises receive official blessing of financial resources and enough monetary policy for release, offset and limit their possible failure, they will never go bankrupt.

Kargar (2004), Moezzi Moghadam (2004) and Akbari and Tavasoli (2009) also pointed out the instability and insufficiency of Municipalities' revenue. Providing large amount of capital for reconstruction and rehabilitation of old textures is not possible without cooperation with private sector and collecting people's savings by applying

various financing tools in a way that can be used in old texture. Hans Klijn, Erik et al. (2002), believed that because of the instability of the revenues of local government (inelasticity of income costs and reverse impact of increasing the rates of complication on income earned by the municipality) and on the other hand, the increase in these kind of services, local governments have no choice but to bring the private sector's resources. Also, Michael Foster (1995), considering the private sector's role in urban projects, believes that in a situation which the governments because of the economic fluctuations and limitations of financial resources are not able to provide service spaces, the private sector's capitals can well make profit and meantime help in rehabilitation and enhancing urban service usages.

By studying financial structure of countries, we find out that basically financial structure of any country can be put on the two main money market or capital markets and according to it, the financing ways lie in two following categories:

- Asset-based financial
- Debt-based financial

In developed countries, the capital market mostly is the central part of financial structure. By contrast, in most of developing nations, money market is the financing way which causes the companies to be largely dependent on the banking system to meet their financial needs (Dadras Moghaddam and Parivash, 2009: 338).

Asset-based financial method needs transferring part of the project profit for getting capital. The main asset-based financing method which can be used in the reconstruction and rehabilitation of urban old textures are:

- Assets securitization
- Project-shareholders
- Sale yards

- Private sector participation and investment

Debt-based financing method involves the amount of money that the investor has borrowed and should repay with its interest during a period of time. The main debt-based financing methods which can be used in the reconstruction and rehabilitation of urban old textures according to the study of Najjarzadeh, Jannati and Farhadi (2009) and Mashhad, Isfahan and Tehran reports include the following:

- The deposit and lending system
- The use of foreign finance
- Foreign investment
- The private sector participation and investment

This research uses Analytical Hierarchy Process (AHP) to determine the priority of the most important financing methods used for reconstruction and rehabilitation of urban old textures and to study the criteria influence the choice of suitable financing tool.

Analytical Hierarchy Process (AHP) is one of the best and most accurate methods of ranking and deciding based on several criteria. AHP implementation in a decision involves four phases: the construction of a hierarchy, performing paired comparisons, calculating weights, system compatibility assessment.

3- Discussion

The final results of this research show that the private sector participation with final weight of 0.323 is the best financing method for reconstruction and rehabilitation of urban old textures according to the research's criteria. The risk in this method is much less than in other financing methods. Also, the private sector participation in higher return rate criteria with the relative rate of 0.319 is in first place. The cost of this method is low and only the cost of the

money providing process is higher in this method comparing to the others. But the relative weight of the cost of money providing criteria in comparison to the other ones is lower; thus in general, it has not changed the private sector participation rank.

After that the private sector investment comes in the second place with its final weight of 0.235. This method is in the first place in low risk criteria. According to return rate criteria, it is in second place after the private sector participation with the relative rate of 0.293. The costs of this method, in comparison to the others, were high. But the importance of cost measure in comparison to the other criteria is low and about 0.091; it has not changed the private sector investment place.

The project- shareholder method with final weight of 0.178 comes after and in the second place among all methods. This method has the least cost and its rank according to private sector participation with the relative rate of 0.227 is the second. But according to the budget provided and higher return rates, it is in the fourth rank.

The sale yards method with final weight of 0.135 has the fourth rank. This method according to lower cost measure with the relative weight of 0.183 is in the third place. Considering the return rate criteria, it has the least return among the other methods with the relative rate of 0.112. Also, the risk is higher in this method comparing to the others and with the relative rate of 0.197 it is in the fourth place.

The banks funding method with the relative weight of 0.129 has the fifth or the last rank. The results of this research do not suggest applying this method in comparison to the other methods introduced in current study. This method has the highest risk and the lowest cooperation of the private sector. Considering the measures of the cost of the

money providing process and financial costs, it has the fourth rank. Also, according to the return rate and the budget provided with the relative weight of 0.147 and 0.138, respectively has the third rank.

5- Conclusion

Although government officials are aware of the importance of executing the project, but government aids to this community is at least and the rules are not supporting using government facilities. As the results showed, the method of private sector participation with total weight of 0.323 is the best method for reconstructing and rehabilitating old urban texture. Thus, government officials need to consider this and provide required facilities to supply bonds. Also, according to results, the private sector investment with final weight of 0.235 is in the second place in financing methods priority. On the other hand, considering the advantages of this method and also its high place in ranking due to criteria, more attention is needed. The bank funding method with relative weight of 0.129 has the last or fifth ranking. The results do not suggest applying this method comparing to the other financing methods used in this research.

6- Suggestions

- The results show that the private investment with final weight of 0.235 is in the second place in financing methods priority. On the other hand, considering the advantages of this method and also its high place in ranking due to criteria, more attention should be given to it.

- As the results showed, the method of private sector participation is the best method for reconstructing and rehabilitating old urban texture. Thus, government

officials need to consider this and provide required facilities to supply bonds.

- To use private sector resources, whether in the form of investing in a project or the owner's participation, well and on time announcement of project's conditions is one of the main preconditions and advertisement and announcement are among the items which yet no investment is done for them and we can say that this is one of the problems in the reconstruction and rehabilitation of projects and solving it can be very useful for financing resources.

- The rate of return was one important criterion in current research to attract private sector's partnership. So, it is necessary to consider profit rate in financing methods in a way that private sector's capitals instead of being invested in banks, be used in profitable urban projects which will either bring more economic profit or make the city more beautiful, healthier and with more and better services.

- Designing new financing methods for reconstructing and rehabilitating old urban texture considering the criteria ranking of this research.

Also, it is suggested that in the case of using AHP method, try to have more variation in financing methods.

Key words: Financing, Partnership, Rehabilitation and Reconstruction, Old texture, Analytic Hierarchy Process AHP

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