# Global Tendencies to Decentralization and the Provision of Environmental, Educational and Health Services in the Context of Developing Economy

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In recent decades, there have been clear global tendencies towards decentralization, and rapid growth in the autonomy and responsibilities of subnational governments. As a result of decentralization, a large variety of systems emerged, with different degrees of fiscal, administrative, and political powers given to subnational governments. But what are the arguments for decentralization? Do these arguments work in all systems and circumstances? In Tiebout's approach, different local governments suggest different tax-expenditure bundles and mobile citizens, the consumer-voters, are supposed to allocate themselves in accordance with their preferences. The Tiebout model is very influential in the contemporary public finance field, however, surprisingly, there have only been a few direct tests of this theory. This paper is devoted to the direct examination of the Tiebout model in the case of the Bayandai district (Irkutsk oblast, Russia).

**Key words:** Decentralization, provision of public goods, residents, preferences, municipality

In recent decades, there have been clear global tendencies towards decentralization, and rapid growth in the autonomy and responsibilities of subnational governments (Rodrigez and Gill 2003). The main reasons for the increased decentralization are the recent changes in the international economic and political conditions and the failures experienced in the central planning systems (Smoke 2001). As a result of decentralization, a large variety of systems emerged, with different degrees of fiscal, administrative, and political powers given to subnational governments. But what are the arguments for decentralization? Do these arguments work in all systems and circumstances? Arguments in favor of decentralization are centered on the works of Musgrave (1958), Oates (1972), Tiebout (1956). These theorists claim that federal arrangements and decentralization promote higher efficiency, better public services, more transparency, and economic growth. Further, it is argued that decentralization increases efficiency in provision of public goods because local governments are better informed about the residents' needs and preferences than the national

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government, therefore, local governments are better positioned to provide public goods and services. Informational advantages allow local governments to provide public goods more efficiently, which means that the demands of the residents for public goods are satisfied more fully. Secondly, decentralization has the potential to stimulate competition among local and regional governments, and in this way it can force the efficient production of public goods and services (Tiebout 1956). Thirdly, some authors (e.g. Weingast 1995) argue that decentralization and federal arrangements may create good incentives for subnational governments to develop market economy and promote economic growth (often referred to as "market-preserving federalism"). Finally, decentralization can be a means of promoting democracy, transparency, and accountability (Putnam 1993, Ebel and Yilmaz 2002). At the same time, along with significant positive effects, decentralization may cause some problems. Moreover, extreme decentralization can be even harmful, especially in the case of the developing and transition countries.

Bardhan (2002) presents a critical rethinking of the traditional literature on decentralization, including the Tiebout model, in the context of developing countries. In Tiebout's approach, different local governments suggest different tax-expenditure bundles and mobile citizens, the consumer-voters, are supposed to allocate themselves in accordance with their preferences. But in Bardhan's view, the assumptions required for the Tiebout model are much more stringent, particularly for poor countries (Bardhan 2002). Indeed, in his analysis of the Tiebout model and the traditional literature on decentralization, Bardhan (2002) argues that the important assumption of population mobility in the Tiebout model fails in poor countries. Is Bardhan right arguing that the assumption of population mobility does not hold in all circumstances? Are residents indeed willing to move to other municipality if they are not satisfied with the quality and quantity of public goods in their current municipality? The Tiebout model is very influential in the contemporary public finance field, however, surprisingly, there have only been a few direct tests of this theory. There have been some indirect tests. For example, Oates's (1969) article on the link

between local tax and service package can be considered as an implicit test of the Tiebout model. Brueckner (1982), in turn, analyzes Pareto-efficient provision of local public goods, which is also implicitly related to the Tiebout model. According to Oates (2005), many tests have concentrated on the issues of stratification in demand for public goods and on the link between income and the provision of public goods across communities (e.g., Edward M. Gramlich and Daniel L. Rubinfeld 1982; Dennis Epple and Sieg 1999, Paul W. Rhode and Koleman S. Strumpf 2003).

As mentioned earlier, direct tests of the Tiebout hypothesis – residents' migratory response to the provision of public goods – have been less common. This paper is devoted to the direct examination of the Tiebout model in the case of the Bayandai district (Irkutskaya oblast, Russia). To the best of my knowledge, a direct test of the Tiebout mechanism in the case of a particular Russian municipality has not been conducted in the contemporary literature so far.

**Theoretical Framework**

The Tiebout model, presented in the paper *A Pure Theory of Local Expenditures* (1956), was a pioneering work in the field of local public finance. In his seminal work, Professor Charles Tiebout intended to give an answer to R. Musgrave and P. Samuelson[1], both of whom agreed that a "no market type" solution exists to determine the level of expenditures on public goods. (Tiebout 1956). By the "market type solution" Musgrave and Samuelson meant a decentralized and efficient solution. Tiebout's response to Musgrave and Samuelson's assertion was to suggest that if a public good is local, a market type solution may exist. According to Samuelson and Musgrave's assumption, the expenditures were handled at the central government level. However, many public services, such as the police force, fire protection, education and hospitals, are actually provided by local governments. In practice, local expenditures are indeed significant, yet quite often neglected. Tiebout raised a very important question on whether there was a mechanism to insure that expenditures on these public goods approximate at a proper level (Tiebout 1956). For instance, if we consider the case of a certain city resident who decided to move to a suburb region, what factors will influence his/her choice of municipality? If the

person in question has children, most likely the school quality will play a role in the decision. Other factors impacting the consumer-voter choice may include the availability and quality of the health care services, the police protection, parks, roads, and so on. It is highly likely that our consumer-voter will choose the municipality that best satisfies his/her preferences for public goods. Tiebout considered precisely the better satisfaction of preferences as a major difference between central and local provision of public goods.

The consumer-voter moves to that community whose local government best satisfies his set of preferences. The greater the number of communities and the greater the variance among them, the closer the consumer will come to fully realizing his preference position (Tiebout 1956, p.418)

Tiebout's theory, often called in the contemporary literature as the Tiebout model, is based on the following assumptions.

1. Consumer-voters are fully mobile.
2. Consumer-voters have full knowledge on revenue and expenditure patterns of all communities.
3. There is a large number of communities.
4. Restrictions due to employment opportunities are not taken into account.
5. No spillovers among communities.
6. Average cost is a function of the population size and has a U-shape form, i.e. there exists a population size which minimizes cost.
7. The communities with a population size below the cost minimizing level will try to expand, while the communities with a population size above the cost minimizing level will try to contract.

If the system is not in equilibrium, there will be a subset of consumer-voters who are not contented with their community's pattern of revenue and expenditure. Given the assumption of mobility, movement of residents will take place: discontent consumer-voters will move to the community that satisfies their preferences.

The brilliant insight of Tiebout was to argue that people by "voting with their feet" reveal their demand for public goods. The main point here is that "feet voting" can serve as a mechanism to discipline and constrain the behavior of the local government. If the residents, consumer-voters, are not satisfied with the performance of the local government in the provision of public goods, they will move to other municipalities, i.e. they will vote with their feet. Tiebout claimed that under assumptions mentioned above, an efficient provision of public goods would be reached.

**Methodology**

In this research, a set of both quantitative and qualitative methods were used to analyze the residents' degree of satisfaction with the provision of public goods as well as their willingness to move to another municipality (i.e. to test the Tiebout model). As for public goods, three public services were chosen: environment, education and health. The aim was therefore to investigate the residents' satisfaction with the provision of ecological, educational and health services, as well as their intention to move to more attractive places.

For the quantitative analysis, there was conducted a survey in the district of Bayandai in Irkutsk oblast, Russia. A questionnaire was filled by 100 respondents who were the adult (over 20 years old) representatives of households. The respondent households were chosen randomly, about 90% of the respondents being between 30 and 55 years old.

The Tiebout model served as the theoretical framework for the questionnaire. Questions in the questionnaire were formed in the way to measure the residents' degree of satisfaction with the quality of environmental, educational and health services as well as their willingness to move to other jurisdictions, where these services are of better quality.

In addition to the quantitative methods, a set of qualitative methods were also used: I conducted five interviews with residents of the Bayandai district to deepen our understanding of the community members' reaction to the performance of the local government in the areas of environment, education and health.

**Method of analysis**

To analyze quantitative data, I used simple statistical methods, namely, descriptive statistics. The purpose of the analysis was to find out the average opinion of the residents of the Bayandai district: are they satisfied with the quality of environmental, educational and health services; and if not, are they planning to move out from the district to a more attractive place. To conduct the

simple statistical analysis, I used the SPSS statistical package.

To analyze the qualitative data, i.e. the interview transcripts, we used the Miles and Huberman framework for qualitative data analysis (Miles and Huberman 1994). The Miles and Huberman method includes three main operations, namely, coding, memoing and drawing conclusions.

The analysis of the interview transcripts began with coding, i.e. putting labels, against pieces of empirical data. The second operation in the analysis was memoing. The process of coding usually raises many ideas in the mind of the analyst, and these will, eventually, form the substance of the memos, which are meant to record the ideas (Punch 2004). In fact, in this study, while performing the process of coding, whenever a new idea came into my mind, we stopped coding for a while to record the idea. All memos were stored for subsequent use.  The third and final part of the analysis was conclusion drawing. On this stage, by integrating what has been done into a meaningful and coherent picture of the data, the conclusions were made.

**Context of the Study: the Bayandai District**

Bayandai aimag with its center in the village of Bayandai was established of nine "*buluchnyh*"[2] and rural councils of Ekhirit-Bulagat aimag by the Decree of the Presidium of the Supreme Soviet of the RSFSR of 19 April 1941. Over the years of its existence, the district went through a number of changes – it was a member of Ekhirit-Bulagat district for more than 11 years, and was later reorganized into an independent district in February 1975.

The district of Bayandai is located in the south of Irkutsk oblast and in the north-eastern part of Ust-Orda okrug, at the top of the watershed Lena-Yenisei and near the famous Lake Baikal, which contains 20% of the world's fresh water reserves together with a unique flora and fauna. The Bayandai district stretches along the Yakutsk road – a road 100 km long and 40 km wide in the area of   375619 hectares. The distance between the district center, the village of Bayandai, and the regional center of Irkutsk is 130 km. The district center is connected with the regional center by highways. Through the district run the following roads: Ust-Orda - Kachug (83 km), Bayandai -

Elantsy (23 km), and others (in total 338 km).

The climate is continental with a long severe winter and a short and quite warm summer. The temperatures vary between minus 40-50'C in the winter up to 35-40'C in the summer time. The area gets a snow cover usually at the end of November, winters typically being rather snowy. The soil freezes up to 3 meters and the measured seismicity is 8 points.

The district is crossed by five larger rivers: Tamara, Murin and Ishin-gol in the weat; Ungur and Hodantsa in the north-east.

The district abounds with woodlands, the forest covering 226,341 hectares, of which areas available for use 170,126 hectares.

One of the main factors determining the socio-economic development of the municipality is its resource potential.

The Bayandai district has the largest thermokarst lake in the okrug, lake Nuhu-Noor. Moreover, there are two lakes of termokarst origin about 2 km to the north of the Lake Nuhu-Noor, Bakhay and Bayandai. These lakes are rather small with a depth of about 1-1.5 meters. The "Nagalyk" health resort uses the mud of the lake Nuhu-Nur, which is believed to have medical properties.

Moreover, the Bayandai district has a large variety of natural resources, the rational use of which may contribute to the successful development of the economy in the district. The district is rich in  building materials – for example, there are large reserves of gravel deposits 1.5 km away from the village of Hogot. The oldest rock deposits are located in Bayandai, Melzany and Lyury. These deposits abound with various clay and loam, suitable for the manufacture of ceramic and tiles, porcelain and earthenware, bustilat, putty, latex paint and bricks.

In 1936, a large deposit of coal, Laphayskoe, was discovered 2.5 km to the north of the district center Bayandai. The reserves are estimated at 56 million tons. In addition, large deposits of brown coal were discovered in the district: Bayshinskoe (8 million tons), Tuhumskoe (4 million tons), Kyrmenskoe (15-20 million tons), Eleninskaya (50 million tons), and Vershinskaya (31 million tons). There are also large reserves of limestone in the area of Lidinsk used in the poultry industry. Despite all these extensive reserves, mining is not active in the district in the present day.

Agriculture represents the most important branch of the economy in the district. Especially the livestock sector and crop production have developed largely: in early 2010, the total number of cattle at farms of all categories was 24,801, while there were 3,128 horses, 4,771 sheep, and 2,127 pigs.

Local self-governance (*mestnoe samoupravlenie*) is one of the foundations of the constitutional system of the Russian Federation, guaranteed in the entire territory of the Russian Federation.

As mentioned above, the Bayandai district was formed on the 19th of April in 1941 by the Decree of the Presidium of the Supreme Soviet of the RSFSR.

In accordance with the law of the Ust-Orda Buryat Autonomous Okrug[1] of 17.12.2004 # 60-oz *On vesting the municipality Bayandai district of Ust-Orda Buryat autonomous okrug status of the municipal district and the delineation of municipality Bayandai district*, the Bayandai district was endowed with the status of the municipal district.

The territory of the municipal district includes the following rural settlements, all independent municipal areas:

1)    The municipality of Bayandai with the center in the village of Bayandai;
2)    The municipality Vasilyevskay" with the center in the village of Vasilevka;
3)    The municipality of Gahany with the center in the village Badagui;
4)    The municipality of Kurumchinsky with the center in the village of Zagatui;
5)    The municipality of Kyrma with the center in the village of Baisha;
6)    The municipality of Lury with the center in the village of Lury settlement;
7)    The municipality of Nagalyk with the center in the village of Nagalyk;
8)    The municipality of Olzon with the center in the village of Olzon;
9)    The municipality of Pokrovka with the center in the village of Pokrovka;
10)    The municipality of Polovinka with the center in the village of Polovinka;
11)    The municipality of Turgenevka with the center in the village of Turgenevka;
12)    The municipality of Hogot with the center in the village of Hogot.

The administrative center of the municipal area, in accordance with the law of Ust -Orda Buryat Autonomous Okrug of 17.12.2004 # 60-oz *On vesting the municipality Bayandai district of Ust-Orda Buryat autonomous okrug status of the municipal district and the delineation of municipality Bayandai district*, is the village of Bayandai. The local government's task is to solve questions of local importance *(voprosy mestnogo znacheniya).* According to the local government official, questions of local importance are those concerning the social and economic development of the district.

*Voting with feet* – the citizens' response to the performance of the local government in the areas of environment, education and health care:

**RESULTS AND DISCUSSIONS**

As discussed earlier, the Tiebout model assumes that if the residents of a certain municipality are not satisfied with the quality (and quantity) of the public goods in their municipality, they will move to other municipalities where their needs and preferences can be better satisfied (i.e. residents "vote with their feet"). In this section, the Tiebout model will be tested and applied into the case of the Bayandai district. As mentioned in the Methodology chapter, we conducted a survey to test the Tiebout model. The purpose of the survey was to find out residents' opinion about the provision of public goods (environment, education and health) in the district: a) are residents satisfied with the provision of clean environment, education and health in the district; b) are residents planning to move to other places for a better satisfaction of their needs and preferences for public goods. The empirical data, collected during the survey, was analyzed using the statistical package SPSS: a simple descriptive analysis was conducted to find out the average opinion of the residents of the district. The results of the statistical analysis are presented in the Table 1.

The average answer to the question "Are you satisfied with the quality of education (for your children) at the place of your current lace of residence (at your municipality)?" was 2.43, i.e. "Almost no".  Therefore, the analysis shows that the average resident of the district is rather not

satisfied with the quality of education in the district. On the other hand, it is well-known that the performance of the schools is usually evaluated with the increased knowledge of the students. The main indicator used in the district to measure the success or failure of the provision of education is the performance of the students on the final exams as well as their success in the enrollment in the universities. According to the data provided by the local government officials, in 2011 there were 105 graduates of general schools in the district, of which 102 were successful in the final examinations, 68 students were enrolled in a university, and 28 in a college. As for 2012, there were 101 graduates, 94

**Fig. 1.** Map of Irkutsk oblast, Russian Federation (Bayandai district colored in red)

Table 1. Descriptive Statistics

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Age | 100 | 18..0 | 62..0 | 39..380 | 9..6930 |
| Education | 100 | 1..0 | 4..0 | 2.250 | ..8919 |
| Would you like to move to another place to live (to other municipality) in the near future? | 100 | 1.00 | 5.00 | 2.3800 | 1.43393 |
| Are you satisfied with the quality of education (for your children) at your current place of residence (at your municipality)? | 100 | 1.00 | 5.00 | 2.4300 | 1.38283 |
| Do you think that your children would get a better education if they attend another school in another place? | 100 | 1.00 | 5.00 | 3.1300 | 1.12506 |
| Are you satisfied with the quality of health services in your municipality? | 100 | 1.00 | 4.00 | 1.8600 | .77876 |
| Do you think that the quality of health services would be better at another location? | 100 | 1.00 | 5.00 | 3.6300 | 1.09779 |
| Are you satisfied with the quality of environmental services in your municipality (ex., water quality, garbage collection)? | 100 | 1.00 | 5.00 | 2.48 | 1.05789 |
| Can you afford to buy an apartment or a house in a more attractive location (better schools, better health services, better environmental services)? | 100 | 1.00 | 5.00 | 1.6100 | 1.06263 |
| Can you afford to rent an apartment or a house in more attractive location, for example, in the city of Irkutsk? | 100 | 1.00 | 5.00 | 2.0800 | 1.35348 |
| Is life in the city stressful for you? | 100 | 1.00 | 5.00 | 2.8000 | 1.62057 |
| Is communication and keeping close relationships with your extended family and friends important and valuable for you? | 100 | 1.00 | 5.00 | 4.0800 | 1.50205 |
| Valid N (listwise) | 100 |  |  |  |  |

The answers to the questions in the questionnaire ranged from 1 to 5: 1 - No, 2 - Almost no, 3 - I don't know, 4 - Almost yes, 5 - Yes.

students were successful in the final examinations, 53 students being enrolled in a university, 40 students in a college. In my opinion, having more than 50% of the graduates being enrolled in a university on a competitive basis is quite a good indicator of the performance of the school in the district. However, as the questionnaire revealed, the parents (residents) were not satisfied with the provision of the educational services in the district. This situation can, probably, be explained by the fact that the parents are usually rarely satisfied with the quality of the education for their children, and there is always room for improvements. In the case of the Bayandai district, indeed many aspects of education can and should be improved (not all schools have good teachers, not all schools offer lunch for students, not all schools organize summer camps for children, etc.)

The average answer to the question "Are you satisfied with the quality of the health services in your municipality?" was 1.86, i.e. "Almost no". In comparison with the educational services, the residents were less satisfied with the quality of the health services. Indeed, in our conversation with the residents, we very often heard a negative attitude toward the quality of the health services in the district. This was confirmed by the analysis of the survey, which clearly indicates dissatisfaction among the residents concerning health care services.

The average answer to the question "Are you satisfied with the quality of environmental services (ex., water quality, garbage collection)?" is 2.48, i.e. "Almost no". The residents of the district often complained about low water quality, absence of garbage collection, etc. As well, the residents expressed concern that existing environmental problems in the district could cause health problems.

Thus, the residents of the Bayandai district are not satisfied with the quality of the environmental, educational and health services in the district. According to the Tiebout model, in this case the residents should be willing to move to another location, where their needs and preferences would be better satisfied. However, as the analysis shows, the average resident is not willing to move to another place. Indeed, the average answer to the question "Would you like to move to another place of residence (to other municipality) in the near

future?" was 1.38, i.e. "Almost no". Such an answer can be explained by the costs of moving and finding appropriate housing in the new location. The average answers to the questions "Can you afford to buy an apartment or a house in a more attractive location (better schools, better health services, better environmental services)?" and "Can you afford to rent an apartment or a house in a more attractive location, for example, in the city of Irkutsk?" were 1.61 and 2.08, respectively, i.e. "Almost no". Thus, the residents of the district were not willing to move to a more attractive location because of expensive housing in the new location. In addition, keeping close social relationships seems to be impacting the decision of not moving to another location. The average answer to the question "Is communication and keeping close relationships with your extended family and friends important and valuable for you?" was 4.08, i.e. "Almost yes". The result suggests that the residents value social relationships and are rather not willing to lose or weaken these relationships by moving to another location.

In addition to the survey, we conducted qualitative interviews with five residents. These interviews supported the results of the survey analysis. All five interviewees expressed their dissatisfaction with the quality of the public goods in the district. Among the five interviewees, only one was planning to move to the city of Irkutsk in the nearest future. Among the reasons for not moving to another location were "expensive housing", "difficult to find a job", "I am used to living here", "I have friends and good connections here, it is very important for me" and "It is very noisy and stressful in the city". All these answers support the results of the survey analysis.

## CONCLUSION

The Tiebout model asserting that people *vote with their feet* to find the community with the optimal provision of public goods has played a central role in the theory of public finance. However, despite its importance, there have been very few direct tests of its basic mechanisms. The present research allowed me to directly examine the Tiebout hypothesis – the residents' migratory response to the provision of public goods – in the case of the Bayandai district (Irkutsk oblast, Russia). The main conclusion drawn from the

analysis of the present research indicates that in the case of the Bayandai district the Tiebout model does not hold because of the low mobility of the population: the residents were not satisfied with the provision of the public goods in the district, yet they are not willing to move to another municipality. Bardhan's (2002) argument according to which the assumption of population mobility in the Tiebout model fails in the poor and transition countries holds true in the case of the Bayandai district, the main reasons of low mobility being housing costs and social relations.

Thus, it can be concluded that Tiebout's (1956) suggestion on people "vote with their feet" to find the community with the optimal provision of public goods does not actualize in all circumstances.

## ACKNOWLEDGMENTS

## REFERENCES

1.    Bardhan P., "Decentralization of Governance and Development". *The Journal of Economic Perspectives*. Vol. 16, No.4 (Autumn, 2002), 2002; 185-205.
2.    Bewley, T.F. A Critique of Tiebout's Theory of Local Public Expenditures. Econometrica, Vol. 1981; **49**(5).
3.    Brueckner, J.K., "A Test for Allocative Efficiency in the Local Public Sector." *Journal of Public Economics*, 1982; **19**(3): 311–31.
4.    Ebel, R.D. and Yilmaz, S., On the measurement and impact of fiscal decentralization. World Bank Policy Research Working Paper No. 2809. Washington, D.C.: World Bank Institute, 2002.
5.    Epple, D. and Sieg, H., "Estimating Equilibrium Models of Local Jurisdictions." *Journal of Political Economy*, 1999; **107**(4): 645–81.
6.    Gramlich, E.M., and Rubinfeld, D.L, "Micro Estimates of Public Spending Demand Functions and Tests of the Tiebout and Median-Voter Hypotheses." *Journal of Political Economy*, 1982; **90**(3): 536–60.
7.    Leksin and Shetsov., Biudzetnyi federalizm v period krizisa i reform, *Voprosy Ekonomiki,* 1999; 3.
8.    Miles, M. and Huberman, A., Qualitative Data Analysis. 2d ed. Thousand Oaks, CA: Sage, 1994.
9.    Musgrave, R., *The theory of public finance: A study in public economy.* N.Y.: McGraw-Hill, 1958.
10.   Oates, W.E., *Fiscal Federalism.* Harcourt Brace Jovanovich, Inc, 1972.
11.   Oates, W.E., "The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis." *Journal of Political Economy*,1969; 77(6): 957–71.
12.   Oates, W.E., "The Many Faces of the Tiebout Model." In *The Tiebout Model at Fifty: Essaysin Public Economics in Honor of Wallace Oates*, ed. William A. Fischel, 21–45. Cambridge, MA: Lincoln Institute of Land Policy, 2005.
13.   Punch, K., *Introduction to social research.* Thousand Oaks, CA: Sage Publication, 2004.
14.   Putnam, R.D., Making democracy work: Civic traditions in modern Italy. Princeton, NJ: Princeton University Press, 1993.
15.   Rhode, P.W., and Strumpf K.S., "Assessing the Importance of Tiebout Sorting: Local Heterogeneity from 1850 to 1990." *American Economic Review*, 2003; **93**(5): 1648–77.
16.   Rodríguez-Pose, A. and Gill, N., The global trend towards devolution and its implications. *Environment and Planning C: Government and Policy* 2003; **21**(3): 333-51.
17.   Rubinfeld, Daniel L. "The Economics of the Local Public Sector." In *Handbook of Public Economics*. Vol. 2, ed. Alan J. Auerbach and Martin Feldstein, 571–645. Amsterdam: North-Holland, 1987.
18.   Smoke, P., Fiscal decentralization in developing countries: A review of current concepts and Practice. Geneva: United Nations Research Institute for Social Development, 2001.
19.   Tiebout C. "A Pure Theory of Local Expenditures". *The Journal of Political Economy*. 1956; **64**(5): 416-424.
20.   Vigdor, J.L. "Does Gentrification Harm the Poor?" *Brookings-Wharton Papers on Urban Affairs*: 2002; 133–73.
21.   Weingast, B.R. "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics, and Organization,* 1995; **11**: 1-31.