



## **Studying Sustainable Revenue Sources of Municipalities (Case: Shabestar, East Azerbaijan Province)**

**Mehran Hajilou**

Master of Urban Management, Faculty of Management and Accounting, Farabi Campus, University of Tehran, Qom, Iran

**Mohammad Mirehei\***

Assistant Professor of Geography and Urban Planning, Faculty of Management and Accounting, Farabi Campus, University of Tehran, Qom, Iran

**Mahdi Pileh Var**

Master of Spatial Planning, Faculty of Management and Accounting, Farabi Campus, University of Tehran, Qom, Iran

**Received: 2017/04/19**

**Accepted: 2017/07/03**

**Abstract:** Nowadays how to finance cities by municipalities has become a big challenge. Access to favorable and sustainable revenue sources leads municipalities to play a more active role in urban environment and properly meet the needs of citizens. In this regard, this research has been conducted during the years 2004-2014 with the aim of studying the status of revenue sources of shabestar municipality in terms of sustainability indicators. This research is applied and the method is descriptive-analytic and exploratory. Data collection was carried out either documentary or field survey by using scoring forms and interviews with Municipality officials. Data analysis was conducted by using Excel, Shannon Entropy and TOPSIS techniques. The results obtained show that about 39.25 percent of municipal revenues come from general charges, 30 percent from land and buildings charges, and about 25.36 percent from other sources of funding, sale of municipality's properties. About 43 percent of municipal revenues come from unfavorable sources, 10.85 percent from fairly favorable sources and 46.15 percent from high favorable sources.

**Keywords:** Shabestar Municipality, sustainable revenues, urban sustainable development, urban economy, small-sized cities

**JEL Classification:** O18, P25, R51, Q01

---

\* Corresponding author: mirehei@ut.ac.ir

### 1- Introduction

Today, about 70 percent of the country's population is inhabited in cities, and municipalities account for more than 300 different types of services, and the biggest problem facing the municipalities as service organizations is the financial issue. Currently there are more than 400 cities in the country less than 20 thousand people, which can be categorized as small cities. Limitation and lack of financial resources and limited opportunities to provide resources are common features of the municipalities of small towns and the main concern of urban managers. The financial problems of these cities originate from the lack of sustainable sources of finance, dependence on state resources and non-local resources, and the imbalance between costs and income, but a problem that exacerbates the shortage of sustainable resources for small towns is the dependence of these cities on governmental resources and assistance. This wide range of cities requires the use of an effective and efficient management system to guide urban development and provide services to citizens. The main tools for city management and development are sufficient and sustainable sources of revenue for the preparation and implementation of urban management plans. The weakness of sustainable sources of income in some small towns has led to financial inefficiencies in urban management and has made them unsustainable in implementing their programs.

One of the small municipalities of the country is the municipality of Shabestar. The city of Shabestar is located in the central part of Shabestar, with a population of 15,663 people, of the 17<sup>th</sup>

largest city in the province and the city center of Shabestar ([www.amar.org.ir](http://www.amar.org.ir)).

Interviews with Shabestar municipal officials and observations indicate that Shabestar municipality faces some problems for good city management and service provision for its citizens, most of which due to financial dependency on government grants, municipalities and departments, as well as unhealthy sources of income; such as surplus income and offenses resulting from construction violations, etc. while municipalities should be self-sufficient and independent in the principles of good urban governance and sustainable urban development as far as possible in terms of income. On the other hand, collecting income from sales of congestion and construction violations, as well as a strong dependence on revenues from construction, are not subject to the three principles of desirability, flexibility and stability and are always at risk of reducing the cost of construction due to various reasons. Therefore, it is necessary to adopt new strategies for the municipality's access to sustainable revenues. Accordingly, this research has investigated Shabestar Municipality revenue trend during 2004-2014 and analyzed Shabestar sources of income in terms of sustainability criteria, and eventually analyzed the status of the current situation and provided solutions for the municipality's access to sources of favorable and stable income. Accordingly, the research questions are:

- How is the status of Shabestar Municipality revenues in terms of sustainability criteria?
- What are the most important sources of Shabestar municipality revenue?
- What are the executive strategies to stabilize Shabestar Municipality revenues?

## 2- Literature Review

### a) Foreign Researches

Cianciara (2010) reported on the ranking of state and local government revenues in Wisconsin compared to other states in the Colombia based on separate income sources and combined income sources. Accordingly, Wisconsin's public domestic incomes include taxes, fees, tuition fees, charges, goods, and services. Other public revenue include educational charges (higher education institutions and school food sales), hospitals, highways, air transportation, parking facilities, facilities for inland and marine ports, natural resources, parks and recreational facilities, housing and community development, wastewater , management of solid waste and other complications. Facilities income includes water and electricity, gas and transportation resources. Income from insurance companies includes unemployment insurance, retirement, employees and other revenues from insurance companies.

López González and Mesa Callejas (2008) concluded that increased local authority in collecting local taxes and the use of tax bases that have economic justification have led to an increase in the efficiency and performance of financial indicators in Medellín Municipal District of Columbia.

Cigu and Romania (2014) examined the financial independence of local governments. The results showed that local governments play an important role in sustainable development processes based on their financial and managerial independence. Policies and programs undertaken to ensure sustainable development by local governments provide benefits for the continuity of the knowledge society. To implement local

financial independence, the responsibilities of financial and executive management at each level of local management should be clearly defined. An appropriate solution is to create an elaborate local financial system.

Fletcher and McArthur (2010) investigated the local government financing process in British Columbia and concluded that in the coming years, local governments will need to adapt and innovate in the structure of their governments and institutions, taking into account socio-economic changes. Accordingly, some new sources are presented in three main areas of income: new taxes and contributions from existing taxes, opportunities to increase sales and other income options.

### b) Iranian Researches

Sharzeie (2008) studied the status of income items of the sixteenth seasons in terms of the degree of activity of the municipalities of the country in terms of urban population 2004-2014. The results of the study showed that the sub items of the headlines on the buildings and lands including the city charges, charges of construction licenses, charges on surplus, etc. were evaluated in different cities of the country with varying degrees of activity but, despite the fact that income items are affected by excessive landfill and land degradation in large cities, they are not considered to be sustainable earnings according to their nature, and therefore, municipalities should refrain from relying on these items to maintain their health and prevent the destruction of urban space.

DaneshJafari & Karimi (2011) in a comparative study of Tehran Municipality's revenue sources, several major cities in the world found that the main revenue sources of municipalities in the world

included direct sales of services (urban services fees), local taxes and duties, the use of state grants (government grants), and borrowing and issuing municipal bonds (using financial markets as supplementary income). The main sources of income in the world's major cities are the taxes and duties of citizens, and one of the most sustainable sources of tax is property tax. According to the study, property taxes, called renovations in Iran, are the fairest, most sustainable, and most profitable tax source for municipalities.

Zakeri et.al., (2012) conducted a research aimed at investigating the factors affecting the achievement of the governments and the municipality of small towns on sustainable sources of income. They examined the financial statements of the Firoozkooh Municipality from 2002 to 2011. The results of the study showed that Firoozkooh Municipality revenues in this decade were mainly based on unsustainable earnings due to construction charges. Finally, Firoozkooh Municipality could, in cooperation with the City Council, develop and implement policies aimed at achieving more sustainable sources of income such as: attracting investment and financing, developing industries, especially tourism industry, and other service activities.

Akbari & Moazzen Jamshidi (2013) in a descriptive and documentary study, examined the sources of income of the metropolitan municipality of Isfahan. The results indicated that the value added tax during the implementation period has been able to make a significant contribution from the municipal revenue sources, including incomes that are sustainable while sustaining, and by targeting

subsidies to generate income municipalities have a consistent orientation.

By studying research on sustainable and unsustainable earnings of municipalities, it can be said that the basic foundations for sustainable municipality's revenue-making and improvement of municipal finances depend on three factors: reducing existing costs, increasing the income and productivity of existing resources, and creating new sources of income.

Another point that can be made from the study is that a source of income may be active and sustainable for some municipalities, but it is considered semi-active and unsustainable for other municipalities in the cities. Moreover, the income of municipalities of small towns in different cities and towns is different from metropolitan cities because the income problems of such municipalities are different from that of metropolitan cities.

### **3- Theoretical Framework**

#### ***Local Government Revenue Sources***

There are two basic principles for determining the income of local governments:

1- Revenues from domestic sources: This resource is acquired by local governments to finance the provision of basic services to citizens, and is in fact a source that comes from in-city flows, and the criteria for collecting it is usually the responsibility of the local government, such as taxes and tolls from citizens.

2- Revenues from foreign sources: The sources of their supplies are usually institutions outside the local governance framework, and local government has a lower role in deciding how much and how

to receive it, such as government assistance (Montazeri & Khodayi, 2012).

Traditional sources of local government revenue are:

- Service cost: water, sewage, waste, business, real estate tax and other items
- Tax Revenue: Local Taxes or contributions from national taxes
- Assistance or borrowing from central governments
- Credit facilities and short-term loans from banks and the private sector
- Long-term loans and other sources of income for capital expenditures, which local governments can well use to finance markets to increase their resources, such as bonds
- Property of the city: like buildings and land
- Resources derived from waqf, loan and ... (Dirie, 2005).

#### ***The Concept of Sustainable Income and its Indicators***

In urban economy, sustainable incomes must have two characteristics of sustainability and quality of the urban environment. Sustainability means that revenue items must be in such a way as to be possible over time and to achieve the necessary planning. Therefore, all items of income that are subject to shocks, crises, changes in laws and regulations, and economic fluctuations due to any reason, are not credible and do not have the first feature of sustainability. On the other hand, sustainable incomes must be defined in such a way that their achievement does not endanger the quality of the city as a living, threatened and degraded phenomenon. In other words, it is important to be desirable and healthy. In fact, such an attitude to urban incomes is the same attitude that economists have emphasized in national

economies during the 20th century (Sharzeie, 2008).

In this context, Local Government Association of Australia has provided the simplest and most comprehensive definition for the sustainable financing of municipalities. According to this definition, sustainable financing occurs when the government's ability to manage financial resources is such that it can meet current and future obligations for the provision of services in case of unplanned tax changes and it gives assurances to taxpayers that future generations will not be faced with unmanaged billings created for today's generations, and today's generation will not bear the full financial burden of future generations. In other words, future generations will not be faced with a massive drop in services or an unreasonable rise in asset tax rates due to deferred debt of today's generation (Access Economics, 2007).

Based on the comprehensive plan for sustainable revenues and other sources of Tehran Municipality funding, sustainable revenues are those municipal revenues that have the following characteristics: (Department of Recognition and Reception of Tehran Municipality Revenue, 2007):

1. Persistence: It is stable and does not undergo extreme fluctuations at least in the short run.
2. Flexibility: the income base increases over time and expands along with expanding expenditures in order to avoid financial constraints and to define the necessary implementation planning to achieve it.
3. Desirability: Earning money from that source promotes the justice-oriented approach and it does not damage the environmental, physical, social and economic structures. The utility index can

be divided into four sub-indicators of economic utility of the city, physical desirability of the city, environmental utility of the city and the social utility of the city, which is further described in each category.

The purpose of economic utility is to pay attention to economic structures taking into account criteria such as increase of income, decrease of unemployment rate in city, increase of city administration budget, increase of number of development projects in the city, decrease of inflation (Sepahvand & Arefnejad, 2013) and so on.

The purpose of physical desirability is to pay attention to physical structures, taking into account criteria such as increasing the length of the pathways, the area of sidewalks, reducing the number of worn-out zones (Maleki & Damanbagh, 2013) etc.

The purpose of environmental utility is to pay attention to environmental structures taking into account such criteria as proper disposal of wastewater, reduction of pollution, reduction of waste amount, reduction of energy consumption (Sepahvand & Arefnejad, 2013), etc.

The purpose of social utility is to attention to social structures taking into account such criteria as: helping to increase citizens' participation, increasing social security, helping reduce poverty growth, increasing average education, appropriate population density in different parts of the city, increasing the number of cultural centers (Sepahvand & Arefnejad, 2013) helping social cohesion and solidarity (identity, social capital, social gap and social tolerance), social and economic justice, quality of life, social security and social development ethics (Armaki et al., 2012), etc.

#### 4- Research Method

In terms of purpose, this research is applied and in terms of the nature and methodology is descriptive-analytical and exploratory. In this research, Shabestar Municipality's income status, as well as municipal revenues and their changes have been analyzed in recent years using sustainability indicators. Information, statistics and figures of this research were collected by referring to relevant organizations such as Shabestar Municipality and providing municipal revenue sources during the past years, referring to the library, using the materials contained in books, journals and related sites, as well as interviewing municipal officials and the preparation and distribution of rating forms in cooperation with relevant officials and experts in the Shabestar Municipality. The statistical population included experts familiar with the municipality revenues living in Shabestar. The judgmental sampling method was used. Accordingly, eight experts from the municipality were selected as experts in this field. Data analysis was performed using Excel, Shannon entropy technique and TOPSIS. TOPSIS technique is one of the multiplicative decision compensation model (MADM)<sup>1</sup> methods (Asgharpoor, 2013). In this method, the m option is evaluated by the n index. The agreed principle of TOPSIS method for deciding the multiplicity is that the chosen option should have the shortest distance from the ideal solution and the maximum distance from the ideal negative option. It is assumed that the utility of each indicator is uniformly incremental or decreasing (Momeni, 2008).

---

1- Multi Attribute Decision Making

In most MADM issues, it is necessary to have and to know the relative importance of existing indices, so that their sum is equal to (normalized), and this relative importance of the degree of priority of each index is more than the rest for the decision to be made (Asgharpoor, 2013). Entropy is a major concept in physical science, social science, and information theory, indicating the amount of extinct content from the expected content of an information message. In other words, entropy in information theory is a criterion for the predicted value expressed by a discretionary probability distribution (Asgharpoor, 2013). The decision matrix contains information that entropy can serve as a benchmark for its evaluation (Momeni, 2008). When the data of a decision matrix are fully specified, an entropy method can be used to evaluate weights. The idea behind the above method is that the more dispersion in the values of one indicator, the more important it is (Momeni, 2008).

In order to measure continuity, the number of years of activation of each income index is reviewed during 2004-2014. In order to measure flexibility, the ratio of each of the income-based microcosts to total earnings is reviewed for each year. Then the average eleven years of the study are calculated as percentages.

73 sub-codes of active revenue are rated by eight municipal experts in terms of four indicators of utility including environmental, social, physical, and economic ones in rating forms that contain a range of numerical grading from 1 to 9 representing low utility and high utility of sub-code income respectively, and then these scores, using the Shannon entropy technique, are weighted

and ranked by TOPSIS Technique. Finally, the sustainability of incomes with the help of these indexes is obtained. Forms are tools used to extract statistical and quantitative information from statistics, books, archives and other resources. Some tables and forms, such as census forms and surveys, have found a standard state in some of the data and information and have become publicly available in public tables and forms; however, some of the tables and forms have been created; the researcher designed and used these tools in accordance with the purpose of collecting information and depending on the type of information required (Hafezniya, 2013).

#### ***Studied Area***

The city of Shabestar, with an area of 250 hectares, is located in the center of Shabestar city and is located at the north of the Shabestar- Tesooj road and is  $45^{\circ} 22'$  'longitude',  $38^{\circ} 10'$  " , latitude, 1450 m above sea level. Shabestar is located in the southern part of Mishoo Mountain and north of Tabriz plain in Tabriz-Salmas. The general slope of the earth is about 4.5%. The city is surrounded by gardens and agricultural fields. Figure 1 shows the geographical location of Shabestar in the country and East Azarbaijan province. The city of Shabestar is a region and urban area and is composed of 15 neighborhoods, as shown in Fig. 2. (East Azarbaijan Governorate Shabestar Municipality, 2001). Based on the latest statistics and results of the general census of population and housing in 2011, the population of the Shabestar city is estimated at 124499 people (3.3% of the province's population) and the population of the city center is 15663 people ([www.ostan-as.gov.ir](http://www.ostan-as.gov.ir)).

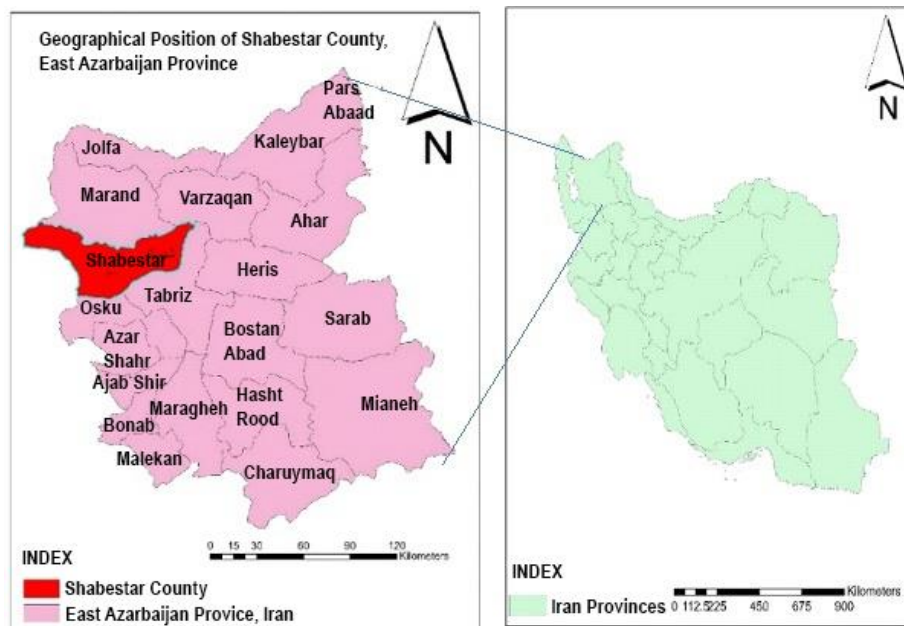


Fig1. Geographical location of Shabestar in the country and East Azarbaijan province

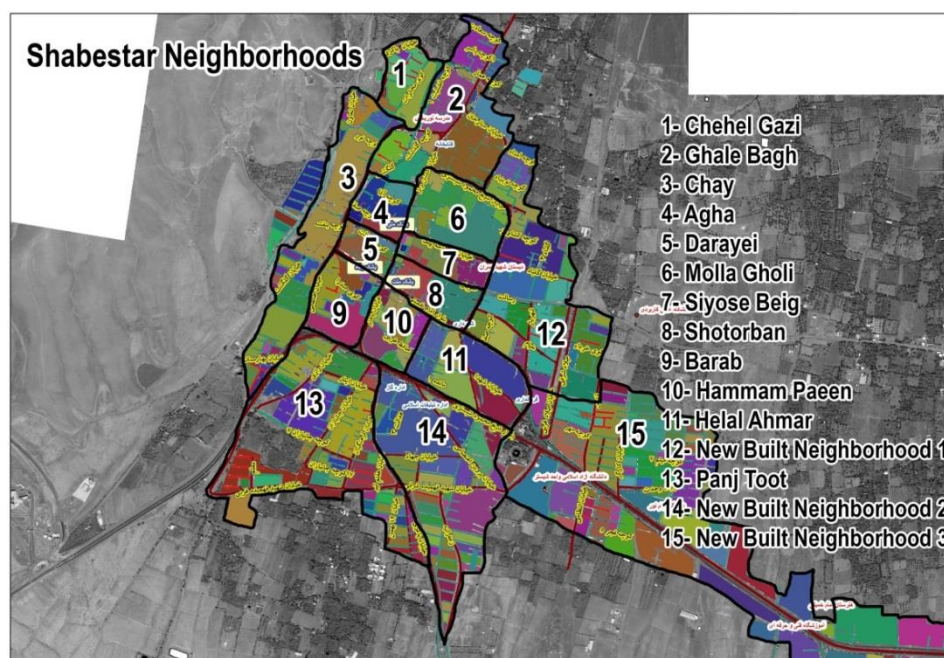


Fig2. Urban neighborhoods of Shabestar

## 5- Research Findings

### *Shabestar Municipality's Revenue for Major Revenue Groups During 2004-2014*

Shabestar Municipality revenue consists of seven major groups, each divided into sub-groups and incomes. The study of Shabestar municipality's income trend during 2004-2014 shows that the main sources of income of the municipality

have been obtained from two groups of income from public and other sources of funding. By calculating the 11-year average of municipal revenues for each income group, we find that 39.25% of Shabestar Municipality revenues were due to public incomes, of which about 30% of these revenues came from a group of tolls on buildings and land. The second largest

source of income in the Shabestar Municipality over the recent years is related to the main source of other sources of income, of which 36.25 percent of the municipality's revenues have been provided from this source. Referring to income subgroups from other sources of income, we find that out of this amount, about 24.55% of the proceeds have been provided from the sale of municipal property. In total, these two main income groups provide about 65% of Shabestar Municipality revenues.

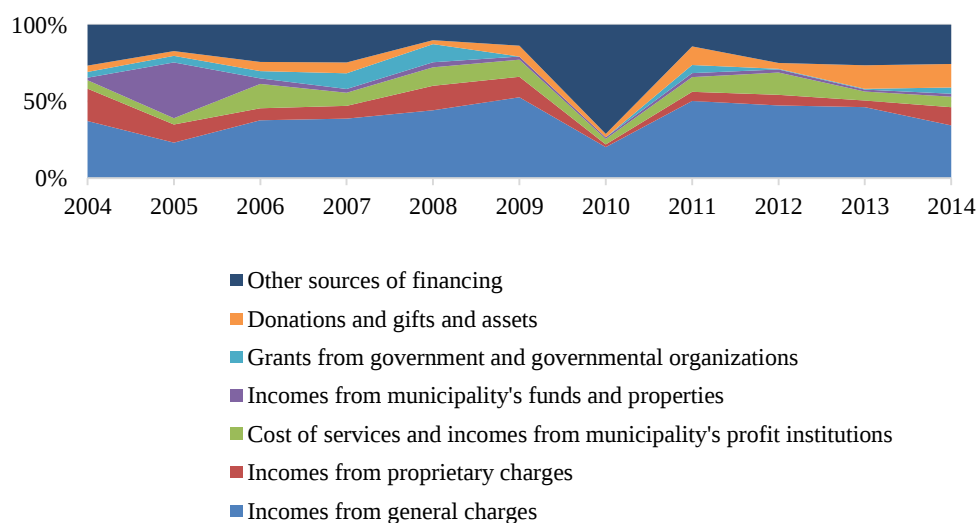
According to Table 1 and Fig 3, in 2010, we have seen a sharp drop in revenues from public disadvantages, which dropped from 53% to 20% in 2009.

A more elaborate study of income subgroups led to the conclusion that this was most due to a sharp reduction in incomes from damage to buildings and land as revenues from the sub-group of charges on buildings and lands in 2009 comprised 46% of the municipality's revenues and fell by 33% to 13% in 2010. On the other hand, Shabestar Municipality sold municipal property, which was mostly sold as immovable property, in order to offset the sharp decline in revenues from other sectors, in particular the revenue from buildings and land, so that in 2010, 71% of the municipality's revenues has been provided from this subgroup income.

**Table1. Shabestar Municipality main groups of incomes over the years 2004-2014(income of each group /income of total groups)**

| Main Groups of Incomes                                               | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 11-year average (%) |
|----------------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|---------------------|
| Incomes from general charges                                         | 0.37 | 0.23 | 0.38 | 0.39 | 0.44 | 0.53 | 0.20 | 0.50 | 0.47 | 0.46 | 0.34 | 39.25               |
| Incomes from proprietary charges                                     | 0.21 | 0.12 | 0.08 | 0.08 | 0.16 | 0.13 | 0.02 | 0.06 | 0.07 | 0.04 | 0.12 | 9.94                |
| Cost of services and incomes from municipality's profit institutions | 0.05 | 0.04 | 0.16 | 0.09 | 0.12 | 0.11 | 0.04 | 0.10 | 0.15 | 0.06 | 0.07 | 8.87                |
| Incomes from municipality's funds and properties                     | 0.02 | 0.36 | 0.04 | 0.02 | 0.03 | 0.02 | 0.01 | 0.03 | 0.02 | 0.01 | 0.02 | 5.30                |
| Grants from government and governmental organizations                | 0.04 | 0.04 | 0.05 | 0.10 | 0.12 | 0.00 | 0.00 | 0.05 | 0.00 | 0.01 | 0.04 | 4.10                |
| Donations and gifts and assets                                       | 0.04 | 0.03 | 0.06 | 0.07 | 0.03 | 0.07 | 0.02 | 0.12 | 0.04 | 0.15 | 0.15 | 7.17                |
| Other source of financing                                            | 0.27 | 0.17 | 0.24 | 0.25 | 0.10 | 0.14 | 0.71 | 0.14 | 0.25 | 0.26 | 0.26 | 25.36               |

**Reference: Shabestar Municipality Budgets (2004-2014)**



**Fig3. Shabestar municipality income changes during 2004-2014**

**Reference: Shabestar Municipality Budgets (2004-2014)**

### *Continuity of Shabestar Municipality's Revenues During 2004-2014*

In order to measure the continuity of Shabestar Municipality's incomes, the study looked at the number of years in which these revenues have been active over the past eleven years. Regarding Table 2, some income indexes have

always been active in eleven years; however, some incomes have not been active in all these years and have not been sustained. However, it should be noted that some of these revenues, such as income from value added tax, have become active in recent years and have continued to persist.

**Table2.Continuity of Shabestar Municipality's revenue sources during 2004-2014**

| No | Revenues                                                                     | Continuity | No | Revenues                                                                             | Continuity |
|----|------------------------------------------------------------------------------|------------|----|--------------------------------------------------------------------------------------|------------|
| 1  | Charges on official Documents                                                | 11         | 39 | Sale of goodwill                                                                     | 7          |
| 2  | Charges on construction permits                                              | 11         | 40 | Charges on car inspection                                                            | 6          |
| 3  | Charges on surplus density                                                   | 11         | 41 | Charges on driving test registration                                                 | 6          |
| 4  | Charges on land & building subdivisions                                      | 11         | 42 | Charges on parking and parking meters                                                | 6          |
| 5  | Charges on balcony                                                           | 11         | 43 | Sale of profit rights                                                                | 6          |
| 6  | Charges on real estate transactions                                          | 11         | 44 | Charges on gas                                                                       | 5          |
| 7  | Charges on travel tickets and freight                                        | 11         | 45 | Charges on water subscribers                                                         | 5          |
| 8  | Annual charges on cars and other vehicles                                    | 11         | 46 | Charges on telephone and mobile                                                      | 5          |
| 9  | Charges on businesses licenses and licensing right                           | 11         | 47 | Charges on passport                                                                  | 5          |
| 10 | 3% Charges monitor paying of supervising engineers and other monitor paying  | 11         | 48 | Charges on electricity                                                               | 5          |
| 11 | Charges on removing parking                                                  | 11         | 49 | Charges on sale of goods and services (paragraph An Article 38 of the Law on VAT)    | 5          |
| 12 | Fee on asphalt & repairing and drilling repair                               | 11         | 50 | Charges on taxi licensing                                                            | 5          |
| 13 | Fee on expertise and buying maps                                             | 11         | 51 | Aid to municipality budget                                                           | 5          |
| 14 | Income from sale of collected waste                                          | 11         | 52 | Income from minibus and taxi driving services                                        | 5          |
| 15 | Income from provisioning services                                            | 11         | 53 | Taxi royalty                                                                         | 5          |
| 16 | Income from mortuary and cemetery                                            | 11         | 54 | Royalty on inner-city passenger transport                                            | 5          |
| 17 | Rent of buildings and facilities                                             | 11         | 55 | Aid to public transportation system and urban traffic                                | 4          |
| 18 | Income from daily and weekly markets                                         | 11         | 56 | Aid to civil & construction development projects and municipal services              | 4          |
| 19 | Article 100 commission fines                                                 | 11         | 57 | Municipality's share of centralized charges(Claus 2 of Article 39 of the Law on VAT) | 3          |
| 20 | Sale of municipal immovable properties                                       | 11         | 58 | Income from autobus and minibus driving                                              | 3          |
| 21 | Sale of movable and worn-out properties                                      | 11         | 59 | Excess income over expenses for prior period                                         | 3          |
| 22 | Income from urban services                                                   | 10         | 6  | Charges on Urban Areas                                                               | 2          |
| 23 | Income from slaughterhouse                                                   | 10         | 61 | Charges on vehicles trading                                                          | 2          |
| 24 | Income from rent of machines and vehicles                                    | 10         | 62 | Charges on fire insurance premiums                                                   | 2          |
| 25 | Self-help of citizens and gifts received                                     | 10         | 63 | Income from Taxi transfers                                                           | 2          |
| 26 | Income from changing urban land uses                                         | 10         | 64 | Incomes from sale of asphalt factories' products                                     | 2          |
| 27 | Fines on delaying in paying 2.5 percent charges                              | 10         | 65 | Investment income in private sector                                                  | 2          |
| 28 | Income from parks                                                            | 9          | 66 | Civil & construction budgets from Twelve Thousand Customs(code 501005)               | 2          |
| 29 | Income from sale of municipality factories' products                         | 9          | 67 | Civil & construction budgets from twelve thousand customs(code 501006)               | 2          |
| 30 | Charges on development of fire stations                                      | 8          | 68 | Passage barrier fine                                                                 | 2          |
| 31 | Rehabilitation charges                                                       | 8          | 69 | Increase in annual charges for passenger cars                                        | 1          |
| 32 | Charges on contracts                                                         | 8          | 70 | Equip municipality to machinery (civil-service-computer, etc.)                       | 1          |
| 33 | Income from commercial advertisement                                         | 8          | 71 | Income from offering educational services                                            | 1          |
| 34 | Capturing lift                                                               | 8          | 72 | Income from sale of flowers, plants and other products                               | 1          |
| 35 | Fines on cutting down urban trees                                            | 8          | 73 | Investment income in public sector                                                   | 1          |
| 36 | Charges on production or sale of products                                    | 7          | 74 | Right of access to municipal facilities                                              | 1          |
| 37 | Income from other municipal facilities                                       | 7          | 75 | Other aid granted by the government and governmental organization                    | 1          |
| 38 | Government development grant(all national and provincial development budget) | 7          | 76 | Fines on constructional and urban crimes                                             | 1          |

**Reference: Shabestar Municipality Budgets (2004-2014)**

In terms of continuity, revenues such as charges on official documents, charges on construction permits, charges on surplus density, and charges on land and building subdivisions, charges on balcony etc. have the most continuity for Shabestar Municipality in 2004-2014. As it can be seen in figure 1, there have been large fluctuations in revenues from land and buildings in recent years so that in 2010 we have seen a sharp drop in incomes from charges on land & buildings. These indicate that although charges on land and buildings have been existed in recent years but high dependence on such incomes encounter urban management with serious threatens. Therefore, reducing dependency on such revenues and considering new revenue sources that have less fluctuation seems to be necessary.

***Resiliency of Shabestar Municipality's revenues during 2004-2014***

In order to examine the flexibility of Shabestar Municipality's incomes, the average percentage of each income index was calculated over eleven years. In Table 3, Shabestar Municipality's income statement has been ranked in terms of coverage for municipality expenditures over eleven years; for example, over the

past eleven years, 21.51% of the municipality's expenses have been covered through the mini-code of revenue from the sale of immovable property to the municipality. According to Table 3, it is seen that among all Shabestar Municipality's incomes, income from the sale of immovable property, tax on building licences, the charges on congestion surplus and the income derived from land use change, have the most flexibility, and most municipal expenditures are covered by such revenues.

About 67.32 percent of the total municipal costs are provided only through 10 small income corporations. Income earnings include: immovable property sales (21.51%), charges on building licences (13.69%), charges on surplus (8.38%), income from land use change (4.49%) and charge on the sale of goods and services (Article A.31 of the Value Added Tax Code) with 83.3%, tolls on parking elimination (3.49%) duties on immovable transactions (3.46%), state civil aids (all national and provincial development credits) national and provincial development credits (3.39%), municipal budget funding with 2.71% and revenue from sales of municipal products (2.29%).

**Table3. Ranking of the income of Shabestar Municipality's small-scale payrolls during 11 years of 2004-2014**

| No | Revenues                                                                              | Resiliency | No | Revenues                                                                    | Resiliency |
|----|---------------------------------------------------------------------------------------|------------|----|-----------------------------------------------------------------------------|------------|
| 1  | Sale of immovable properties                                                          | 21.51      | 39 | Charges on official documents                                               | 0.32       |
| 2  | Charges on construction permits                                                       | 13.69      | 40 | 3% Charges monitor paying of supervising engineers and other monitor paying | 0.29       |
| 3  | Charges on surplus density                                                            | 8.38       | 41 | Civil & construction budgets from Twelve Thousand Customs (code 501006)     | 0.29       |
| 4  | Income from changing urban land uses                                                  | 4.57       | 42 | Income from urban services                                                  | 0.28       |
| 5  | Charges on sale of goods and services (paragraph An Article 38 of the Law on VAT)     | 3.83       | 43 | Capturing lift                                                              | 0.27       |
| 6  | Charges on removing parking                                                           | 3.49       | 44 | Sale of profit rights                                                       | 0.27       |
| 7  | Charges on real estate transactions                                                   | 3.46       | 45 | Charges on electriciry                                                      | 0.26       |
| 8  | Government development grant (all national and provincial development budget)         | 3.39       | 46 | Income from slaughterhouse                                                  | 0.21       |
| 9  | Aid to municipality budget                                                            | 2.71       | 47 | Charges on development of fire stations                                     | 0.19       |
| 10 | Income from sale of municipality factories' products                                  | 2.29       | 48 | Charges on Gas                                                              | 0.16       |
| 11 | Sale of movable and worn-out properties                                               | 1.97       | 49 | Passage barrier fine                                                        | 0.13       |
| 12 | Fee on asphalt & repairing and drilling repair                                        | 1.97       | 50 | Charges on Passport                                                         | 0.11       |
| 13 | Fee on asphalt & repairing and drilling repair                                        | 1.63       | 51 | Income from Parks                                                           | 0.11       |
| 14 | Charges on land & building subdivisions                                               | 1.54       | 52 | Fee on expertise and buying maps                                            | 0.09       |
| 15 | Municipality's share of centralized charges (Claus 2 of Article 39 of the Law on VAT) | 1.47       | 53 | Other aid granted by the government and governmental organization           | 0.08       |
| 16 | Income from sale of collected waste                                                   | 1.37       | 54 | Charges on contacts                                                         | 0.08       |
| 17 | Rehabilitation charges                                                                | 1.37       | 55 | Incomes from sale of asphalt factories' products                            | 0.08       |
| 18 | Article 100 commission fines                                                          | 1.33       | 56 | Charges on car inspection                                                   | 0.08       |
| 19 | Income from provisioning services                                                     | 1.18       | 57 | Charges on parking and parking meters                                       | 0.08       |
| 20 | Charges on businesses licenses and licensing right                                    | 1.1        | 58 | Cahrges on water subscribers                                                | 0.07       |
| 21 | Excess income over expenses for prior period                                          | 1.01       | 59 | Income from commercial advertisement                                        | 0.07       |
| 22 | Income from daily and weekly markets                                                  | 0.91       | 60 | Income from minibus and taxi driving services                               | 0.05       |
| 23 | Charges on travel tickets and freight                                                 | 0.88       | 61 | Equip municipality to machinery (civil-service-computer, etc.)              | 0.04       |
| 24 | Charges on production or sale of products                                             | 0.82       | 62 | Charges on taxi licensing                                                   | 0.04       |
| 25 | Annual charges on cars and other vehicles                                             | 0.77       | 63 | Investment income in Private sector                                         | 0.03       |
| 26 | Charges on balcony                                                                    | 0.73       | 64 | Charges on driving test registration                                        | 0.03       |
| 27 | Charges on urban areas                                                                | 0.62       | 65 | Charges on driving test registration                                        | 0.03       |
| 28 | Sale of Goodwill                                                                      | 0.59       | 66 | Taxi royalty                                                                | 0.02       |
| 29 | Aid to public transportation system and urban traffic                                 | 0.59       | 67 | Fines on cutting down urban trees                                           | 0.02       |
| 30 | Rent of buildings and facilities                                                      | 0.57       | 68 | Income from autobus and minibus driving                                     | 0.01       |
| 31 | Investment income in Public sector                                                    | 0.55       | 69 | Charges on fire insurance premiums                                          | 0.01       |
| 32 | Income from other municipal facilities                                                | 0.52       | 70 | Income from offering educational services                                   | 0          |
| 33 | Fines on delaying in paying 2.5 percent charges                                       | 0.47       | 71 | Right of access to municipal facilities                                     | 0          |
| 34 | Income from mortuary and cemetery                                                     | 0.46       | 72 | Fines on constructional and urban crimes                                    | 0          |
| 35 | Income from rent of machines and vehicles                                             | 0.44       | 73 | Royalty on inner-city passenger transport                                   | 0          |
| 36 | Civil & construction budgets from Twelve Thousand Customs(code 501005)                | 0.35       | 74 | Income from taxi transfers                                                  | 0          |
| 37 | Charges on telephone and mobile                                                       | 0.33       | 75 | Increase in annual charges for passenger cars                               | 0          |
| 38 | Self-help of citizens and gifts received                                              | 0.32       | 76 | Income from sale of flowers, plants and other products                      | 0          |

**Reference: Shabestar Municipality Budgets (2004-2014)**

### ***Favorability of Shabestar Municipality's Revenues During 2004-2014***

According to the mentioned indices, the utility rate of each Shabestar Municipality income index was rated by municipal experts. Indices were weighed using Shannon's entropy technique and finally earnings indexes were ranked using Tapsis technique. Accordingly, the highest and lowest desirability of municipal revenues have been ranked. In Table 4, Shabestar Municipality revenues are ranked based on income desirability components. On the other

hand, if Shabestar's municipal revenues are divided into three groups of low-income, middle-income and high-income incomes, about 43 percent of municipal revenues are low-income, 10.85 percent are middle-income earnings and 46.15% are high-yield incomes. Tables 5 and 6 show each low, medium, and high utility with respect to their flexibility in the years 2004-2014.

Table 4. Ranking of Shabestar Municipality's revenue sources according to favorability criteria (normalized matrix)

**Table 4. Shabestar Municipality Revenues Rating Based on Income Desirability Components (Normalized Matrix)**

| No | Revenues                                                                              | Economic Favorability | Revenues                                                                              | Physical Favorability | Revenues                                                                              | Environmental Favorability | Revenues                                                                              | Social Favorability |
|----|---------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------|---------------------|
| 1  | Government development grant (all national and provincial development budget)         | 0.164                 | Government development grant (all national and provincial development budget)         | 0.172                 | Income from sale of collected waste                                                   | 0.1642                     | Government development grant (all national and provincial development budget)         | <b>0.1668</b>       |
| 2  | Charges on construction permits                                                       | 0.159                 | Municipality's share of centralized charges (Claus 2 of Article 39 of the Law on VAT) | 0.164                 | Government development grant (all national and provincial development budget)         | 0.1585                     | Aid to municipality budget                                                            | <b>0.1554</b>       |
| 3  | Municipality's share of centralized charges (Claus 2 of Article 39 of the Law on VAT) | 0.157                 | Investment income in Private sector                                                   | 0.159                 | Civil & construction budgets from Twelve Thousand Customs (code 501005)               | 0.1557                     | Investment income in Public sector                                                    | <b>0.1554</b>       |
| 4  | Rehabilitation charges                                                                | 0.152                 | Charges on urban areas                                                                | 0.156                 | Investment income in Public sector                                                    | 0.1557                     | Investment income in Private sector                                                   | <b>0.1526</b>       |
| 5  | Aid to civil & construction development projects and municipal services               | 0.152                 | Aid to civil & construction development projects and municipal services               | 0.154                 | Income from sale of flowers, plants and other products                                | 0.1472                     | Income from sale of collected waste                                                   | <b>0.1498</b>       |
| 6  | Investment income in Private sector                                                   | 0.147                 | Charges on land & building subdivisions                                               | 0.151                 | Charges on sale of goods and services (paragraph An Article 38 of the Law on VAT)     | 0.1444                     | Charges on sale of goods and services (paragraph An Article 38 of the Law on VAT)     | <b>0.1498</b>       |
| 7  | Charges on land & building subdivisions                                               | 0.145                 | Aid to municipality budget                                                            | 0.151                 | Aid to municipality budget                                                            | 0.1444                     | Income from urban services                                                            | <b>0.1441</b>       |
| 8  | Aid to municipality budget                                                            | 0.145                 | Civil & construction budgets from Twelve Thousand Customs (code 501005)               | 0.148                 | Aid to civil & construction development projects and municipal services               | 0.1444                     | Income from sale of municipality factories' products                                  | <b>0.1441</b>       |
| 9  | Income from sale of municipality factories' products                                  | 0.142                 | Income from urban services                                                            | 0.143                 | Municipality's share of centralized charges (Claus 2 of Article 39 of the Law on VAT) | 0.1444                     | Aid to civil & construction development projects and municipal services               | <b>0.1413</b>       |
| 10 | Sale of immovable properties                                                          | 0.14                  | Investment income in Public sector                                                    | 0.143                 | Investment income in Private sector                                                   | 0.1387                     | Municipality's share of centralized charges (Claus 2 of Article 39 of the Law on VAT) | <b>0.1413</b>       |

| No | Revenues                                                                          | Economic Favorability | Revenues                                                                          | Physical Favorability | Revenues                                                                | Environmental Favorability | Revenues                                                                    | Social Favorability |
|----|-----------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------|---------------------|
| 11 | Income from urban services                                                        | 0.14                  | Rehabilitation charges                                                            | 0.14                  | Charges on urban areas                                                  | 0.1359                     | Charges on construction permits                                             | 0.1385              |
| 12 | Investment income in Public sector                                                | 0.14                  | Charges on sale of goods and services (paragraph An Article 38 of the Law on VAT) | 0.14                  | Civil & construction budgets from Twelve Thousand Customs (code 501006) | 0.1359                     | Income from sale of flowers, plants and other products                      | 0.1385              |
| 13 | Fee on asphalt & repairing and drilling repair                                    | 0.135                 | Incomes from sale of asphalt factories' products                                  | 0.14                  | Other aid granted by the government and governmental organization       | 0.1359                     | Other aid granted by the government and governmental organization           | 0.1385              |
| 14 | Income from provisioning services                                                 | 0.135                 | Charges on construction permits                                                   | 0.137                 | Charges on businesses licenses and licensing right                      | 0.133                      | Income from mortuary and cemetery                                           | 0.1357              |
| 15 | Income from changing urban land uses                                              | 0.135                 | Fee on asphalt & repairing and drilling repair                                    | 0.132                 | Income from mortuary and cemetery                                       | 0.133                      | Self-help of citizens and gifts received                                    | 0.1357              |
| 16 | Equip municipality to machinery (civil-service-computer, etc.)                    | 0.135                 | Income from provisioning services                                                 | 0.132                 | Income from daily and weekly markets                                    | 0.133                      | Rehabilitation charges                                                      | 0.1357              |
| 17 | Capturing lift                                                                    | 0.133                 | Income from sale of municipality factories' products                              | 0.132                 | Income from urban services                                              | 0.133                      | Civil & construction budgets from Twelve Thousand Customs (code 501005)     | 0.1357              |
| 18 | Civil & construction budgets from Twelve Thousand Customs (code 501005)           | 0.133                 | Civil & construction budgets from Twelve Thousand Customs (code 501006)           | 0.132                 | Charges on development of fire stations                                 | 0.133                      | Income from commercial advertisement                                        | 0.1328              |
| 19 | Civil & construction budgets from Twelve Thousand Customs (code 501006)           | 0.133                 | Equip municipality to machinery (civil-service-computer, etc.)                    | 0.132                 | Capturing lift                                                          | 0.133                      | Equip municipality to machinery (civil-service-computer, etc.)              | 0.1328              |
| 20 | Other aid granted by the government and governmental organization                 | 0.133                 | Other aid granted by the government and governmental organization                 | 0.132                 | Income from rent of machines and vehicles                               | 0.1302                     | Charges on businesses licenses and licensing right                          | 0.13                |
| 21 | Charges on businesses licenses and licensing right                                | 0.13                  | Rent of buildings and facilities                                                  | 0.129                 | Excess income over expenses for prior period                            | 0.1302                     | Income from rent of machines and vehicles                                   | 0.13                |
| 22 | Income from commercial advertisement                                              | 0.13                  | Income from sale of collected waste                                               | 0.127                 | Right of access to municipal facilities                                 | 0.1302                     | Aid to public transportation system and urban traffic                       | 0.13                |
| 23 | Charges on production or sale of products                                         | 0.13                  | Income from daily and weekly markets                                              | 0.127                 | Income from Parks                                                       | 0.1274                     | Income from provisioning services                                           | 0.1272              |
| 24 | Charges on urban areas                                                            | 0.13                  | Capturing lift                                                                    | 0.127                 | Aid to public transportation system and urban traffic                   | 0.1274                     | Charges on urban areas                                                      | 0.1272              |
| 25 | Income from sale of collected waste                                               | 0.128                 | Income from sale of flowers, plants and other products                            | 0.127                 | Charges on travel tickets and freight                                   | 0.1245                     | Charges on travel tickets and freight                                       | 0.1215              |
| 26 | Sale of Goodwill                                                                  | 0.128                 | Right of access to municipal facilities                                           | 0.127                 | Fee on asphalt & repairing and drilling repair                          | 0.1245                     | Fee on asphalt & repairing and drilling repair                              | 0.1215              |
| 27 | Charges on sale of goods and services (paragraph An Article 38 of the Law on VAT) | 0.128                 | Income from rent of machines and vehicles                                         | 0.124                 | Rehabilitation charges                                                  | 0.1245                     | Income from slaughterhouse                                                  | 0.1215              |
| 28 | Income from daily and weekly markets                                              | 0.125                 | Self-help of citizens and gifts received                                          | 0.121                 | Income from slaughterhouse                                              | 0.1217                     | Charges on fire insurance premiums                                          | 0.1215              |
| 29 | Incomes from sale of asphalt factories' products                                  | 0.125                 | Income from Parks                                                                 | 0.121                 | Self-help of citizens and gifts received                                | 0.1217                     | Civil & construction budgets from Twelve Thousand Customs (code 501006)     | 0.1215              |
| 30 | Income from slaughterhouse                                                        | 0.121                 | Charges on development of fire stations                                           | 0.121                 | Income from commercial advertisement                                    | 0.1217                     | Charges on official documents                                               | 0.1187              |
| 31 | Charges on parking and parking meters                                             | 0.121                 | Income from offering educational services                                         | 0.121                 | Charges on car inspection                                               | 0.1217                     | 3% Charges monitor paying of supervising engineers and other monitor paying | 0.1187              |
| 32 | Article 100 commission fines                                                      | 0.118                 | Income from commercial advertisement                                              | 0.119                 | Income from offering educational services                               | 0.1217                     | Fee on expertise and buying maps                                            | 0.1187              |

| No | Revenues                                                                    | Economic Favorability | Revenues                                                                    | Physical Favorability | Revenues                                                                    | Environmental Favorability | Revenues                                         | Social Favorability |
|----|-----------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------|----------------------------|--------------------------------------------------|---------------------|
| 33 | Sale of movable and worn-out properties                                     | 0.118                 | Charges on businesses licenses and licensing right                          | 0.116                 | Equip municipality to machinery (civil-service-computer, etc.)              | 0.1189                     | Income from Parks                                | 0.1187              |
| 34 | Income from mortuary and cemetery                                           | 0.116                 | Income from slaughterhouse                                                  | 0.116                 | 3% Charges monitor paying of supervising engineers and other monitor paying | 0.1161                     | Excess income over expenses for prior period     | 0.1187              |
| 35 | Income from rent of machines and vehicles                                   | 0.116                 | Charges on taxi licensing                                                   | 0.116                 | Income from sale of municipality factories' products                        | 0.1161                     | Charges on land & building subdivisions          | 0.1159              |
| 36 | Charges on surplus density                                                  | 0.111                 | Fee on expertise and buying maps                                            | 0.113                 | Charges on Gas                                                              | 0.1161                     | Income from daily and weekly markets             | 0.1159              |
| 37 | Rent of buildings and facilities                                            | 0.111                 | Income from mortuary and cemetery                                           | 0.113                 | Charges on vehicles trading                                                 | 0.1161                     | Charges on taxi licensing                        | 0.1159              |
| 38 | Self-help of citizens and gifts received                                    | 0.111                 | Annual charges on cars and other vehicles                                   | 0.111                 | Charges on fire insurance premiums                                          | 0.1161                     | Income from offering educational services        | 0.1159              |
| 39 | Income from Parks                                                           | 0.111                 | 3% Charges monitor paying of supervising engineers and other monitor paying | 0.111                 | Rent of buildings and facilities                                            | 0.1132                     | Right of access to municipal facilities          | 0.1159              |
| 40 | Aid to public transportation system and urban traffic                       | 0.111                 | Charges on production or sale of products                                   | 0.111                 | Charges on taxi licensing                                                   | 0.1132                     | Charges on development of fire stations          | 0.1131              |
| 41 | Charges on contacts                                                         | 0.109                 | Charges on real estate transactions                                         | 0.108                 | Annual charges on cars and other vehicles                                   | 0.1104                     | Capturing lift                                   | 0.1102              |
| 42 | Income from other municipal facilities                                      | 0.109                 | Sale of Goodwill                                                            | 0.108                 | Sale of Goodwill                                                            | 0.1104                     | Income from other municipal facilities           | 0.1102              |
| 43 | Charges on vehicles trading                                                 | 0.109                 | Aid to public transportation system and urban traffic                       | 0.108                 | Charges on water subscribers                                                | 0.1104                     | Charges on vehicles trading                      | 0.1102              |
| 44 | Charges on real estate transactions                                         | 0.106                 | Charges on fire insurance premiums                                          | 0.108                 | Charges on electricity                                                      | 0.1104                     | Incomes from sale of asphalt factories' products | 0.1102              |
| 45 | Charges on travel tickets and freight                                       | 0.106                 | Charges on contacts                                                         | 0.105                 | Charges on official documents                                               | 0.1076                     | Annual charges on cars and other vehicles        | 0.1074              |
| 46 | Annual charges on cars and other vehicles                                   | 0.104                 | Charges on parking and parking meters                                       | 0.105                 | Income from provisioning services                                           | 0.1076                     | Charges on Gas                                   | 0.1074              |
| 47 | Charges on development of fire stations                                     | 0.104                 | Excess income over expenses for prior period                                | 0.105                 | Charges on production or sale of products                                   | 0.1076                     | Rent of buildings and facilities                 | 0.1046              |
| 48 | Fines on constructional and urban crimes                                    | 0.104                 | Charges on vehicles trading                                                 | 0.105                 | Charges on Passport                                                         | 0.1076                     | Charges on parking and parking meters            | 0.1046              |
| 49 | increase in annual charges for passenger cars                               | 0.101                 | Charges on travel tickets and freight                                       | 0.1                   | Charges on construction permits                                             | 0.1047                     | Charges on water subscribers                     | 0.1046              |
| 50 | 3% Charges monitor paying of supervising engineers and other monitor paying | 0.099                 | Fines on delaying in paying 2.5 percent charges                             | 0.1                   | Charges on land & building subdivisions                                     | 0.1047                     | Charges on telephone and mobile                  | 0.1046              |
| 51 | Charges on car inspection                                                   | 0.099                 | Income from other municipal facilities                                      | 0.1                   | Charges on telephone and mobile                                             | 0.1047                     | Charges on Passport                              | 0.1046              |
| 52 | Charges on fire insurance premiums                                          | 0.099                 | Charges on Passport                                                         | 0.1                   | Fee on expertise and buying maps                                            | 0.1019                     | Charges on electricity                           | 0.1046              |
| 53 | Charges on taxi licensing                                                   | 0.096                 | Taxi royalty                                                                | 0.097                 | increase in annual charges for passenger cars                               | 0.1019                     | Income from autobus and minibus driving          | 0.1046              |
| 54 | Charges on removing parking                                                 | 0.094                 | Income from autobus and minibus driving                                     | 0.097                 | Charges on real estate transactions                                         | 0.0991                     | Charges on real estate transactions              | 0.1017              |
| 55 | Income from minibus and taxi driving services                               | 0.094                 | increase in annual charges for passenger cars                               | 0.097                 | Income from other municipal facilities                                      | 0.0991                     | Sale of profit rights                            | 0.1017              |
| 56 | Charges on Gas                                                              | 0.092                 | Sale of movable and worn-out properties                                     | 0.094                 | Charges on parking and parking meters                                       | 0.0991                     | Income from taxi transfers                       | 0.1017              |
| 57 | Charges on water subscribers                                                | 0.092                 | Charges on water subscribers                                                | 0.094                 | Income from minibus and taxi driving services                               | 0.0991                     | Sale of Goodwill                                 | 0.0989              |
| 58 | Fee on expertise and buying maps                                            | 0.089                 | Charges on driving test registration                                        | 0.092                 | Sale of movable and worn-out properties                                     | 0.0962                     | Charges on contacts                              | 0.0961              |
| 59 | Charges on Passport                                                         | 0.089                 | Charges on Gas                                                              | 0.092                 | Charges on driving test registration                                        | 0.0962                     | Charges on car inspection                        | 0.0961              |

| No | Revenues                                               | Economic Favorability | Revenues                                      | Physical Favorability | Revenues                                         | Environmental Favorability | Revenues                                        | Social Favorability |
|----|--------------------------------------------------------|-----------------------|-----------------------------------------------|-----------------------|--------------------------------------------------|----------------------------|-------------------------------------------------|---------------------|
| 60 | Income from taxi transfers                             | 0.089                 | Income from minibus and taxi driving services | 0.092                 | Taxi royalty                                     | 0.0962                     | Income from minibus and taxi driving services   | 0.0961              |
| 61 | Charges on balcony                                     | 0.087                 | Income from taxi transfers                    | 0.092                 | Income from taxi transfers                       | 0.0962                     | increase in annual charges for passenger cars   | 0.0961              |
| 62 | Sale of profit rights                                  | 0.087                 | Charges on car inspection                     | 0.089                 | Charges on contracts                             | 0.0934                     | Charges on production or sale of products       | 0.0933              |
| 63 | Charges on telephone and mobile                        | 0.087                 | Sale of profit rights                         | 0.089                 | Sale of profit rights                            | 0.0934                     | Charges on driving test registration            | 0.0933              |
| 64 | Income from offering educational services              | 0.087                 | Charges on telephone and mobile               | 0.089                 | Income from autobus and minibus driving          | 0.0934                     | Taxi royalty                                    | 0.0904              |
| 65 | Charges on electricity                                 | 0.084                 | Charges on electricity                        | 0.089                 | Royalty on inner-city passenger transport        | 0.0878                     | Royalty on inner-city passenger transport       | 0.0904              |
| 66 | Right of access to municipal facilities                | 0.084                 | Royalty on inner-city passenger transport     | 0.089                 | Incomes from sale of asphalt factories' products | 0.0878                     | Sale of movable and worn-out properties         | 0.0848              |
| 67 | Income from sale of flowers, plants and other products | 0.082                 | Charges on balcony                            | 0.084                 | Fines on delaying in paying 2.5 percent charges  | 0.0849                     | Income from changing urban land uses            | 0.0791              |
| 68 | Charges on driving test registration                   | 0.08                  | Passage barrier fine                          | 0.081                 | Passage barrier fine                             | 0.0764                     | Charges on balcony                              | 0.0735              |
| 69 | Taxi royalty                                           | 0.08                  | Charges on official documents                 | 0.078                 | Charges on balcony                               | 0.0708                     | Sale of immovable properties                    | 0.0707              |
| 70 | Income from autobus and minibus driving                | 0.08                  | Sale of immovable properties                  | 0.078                 | Sale of immovable properties                     | 0.0651                     | Passage barrier fine                            | 0.0678              |
| 71 | Fines on delaying in paying 2.5 percent charges        | 0.077                 | Fines on constructional and urban crimes      | 0.067                 | Fines on cutting down urban trees                | 0.0623                     | Fines on constructional and urban crimes        | 0.0594              |
| 72 | Excess income over expenses for prior period           | 0.077                 | Income from changing urban land uses          | 0.062                 | Fines on constructional and urban crimes         | 0.0623                     | Fines on delaying in paying 2.5 percent charges | 0.0537              |
| 73 | Charges on official documents                          | 0.075                 | Fines on cutting down urban trees             | 0.057                 | Income from changing urban land uses             | 0.0566                     | Fines on cutting down urban trees               | 0.048               |
| 74 | Royalty on inner-city passenger transport              | 0.075                 | Article 100 commission fines                  | 0.046                 | Article 100 commission fines                     | 0.0368                     | Article 100 commission fines                    | 0.0452              |
| 75 | Fines on cutting down urban trees                      | 0.068                 | Charges on surplus density                    | 0.043                 | Charges on removing parking                      | 0.0283                     | Charges on removing parking                     | 0.0311              |
| 76 | Passage barrier fine                                   | 0.06                  | Charges on removing parking                   | 0.035                 | Charges on surplus density                       | 0.0226                     | Charges on surplus density                      | 0.0226              |

Reference: Shabestar Municipality Budgets (2004-2014)

**Table5. Low favorable or fairly favorable revenues of Shabestar Municipality during 2004-2014**

| Low favorable revenues                          | Resiliency | Fairly favorable revenues                        | Resiliency |
|-------------------------------------------------|------------|--------------------------------------------------|------------|
| Sale of municipal immovable properties          | 21.51      | Incomes from sale of asphalt factories' products | 0.08       |
| Sale of movable and worn-out properties         | 1.97       | Charges on vehicles trading                      | 0.03       |
| Charges on surplus density                      | 8.38       | Fee on expertise and buying maps                 | 0.09       |
| Charges on removing parking                     | 3.49       | Annual charges on cars and other vehicles        | 0.77       |
| Charges on balcony                              | 0.73       | Sale of goodwill                                 | 0.59       |
| Article 100 commission fines                    | 1.33       | Charges on production or sale of products        | 0.82       |
| Fines on constructional and urban crimes        | 0          | Charges on parking and parking meters            | 0.08       |
| Passage barrier fine                            | 0.13       | Charges on gas                                   | 0.16       |
| Income from changing urban land uses            | 4.57       | Income from other municipal facilities           | 0.52       |
| Fines on delaying in paying 2.5 percent charges | 0.47       | Charges on real estate transactions              | 3.46       |
| Fines on cutting down urban trees               | 0.02       | Charges on passport                              | 0.11       |
| Sale of profit rights                           | 0.27       | Charges on water subscribers                     | 0.07       |
| Royalty on inner-city passenger transport       | 0          | Charges on car inspection                        | 0.08       |
| Income from autobus and minibus driving         | 0.01       | Charges on official documents                    | 0.32       |
| Income from Taxi transfers                      | 0          | Charges on electricity                           | 0.26       |
| Income from minibus and taxi driving services   | 0.05       | Charges on telephone and mobile                  | 0.33       |
| Taxi royalty                                    | 0.02       | Charges on contracts                             | 0.08       |
| Charges on driving test registration            | 0.03       | Increase in Annual Charges for Passenger Cars    | 0          |
| -                                               | -          | Other incomes                                    | 3.02       |
| Total                                           | 43         | Total                                            | 10.85      |

Reference: Shabestar Municipality Budgets (2004-2014)

**Table6. High favorable revenues of Shabestar Municipality during 2004-2014**

| High favorable revenues                                                              | Resiliency |
|--------------------------------------------------------------------------------------|------------|
| Government development grant(all national and provincial development budget)         | 3.39       |
| Aid to municipality budget                                                           | 2.71       |
| Investment income in private sector                                                  | 0.03       |
| Municipality's share of centralized charges(Claus 2 of Article 39 of the Law on VAT) | 1.47       |
| Investment income in public sector                                                   | 0.55       |
| Aid to civil & construction development projects and municipal services              | 1.63       |
| Civil & construction budgets from Twelve Thousand Customs(code 501005)               | 0.35       |
| Charges on sale of goods and services(paragraph An Article 38 of the Law on VAT)     | 3.83       |
| Income from sale of collected waste                                                  | 1.37       |
| Income from urban services                                                           | 0.28       |
| Charges on urban area                                                                | 0.62       |
| Other aid granted by the government and governmental organization                    | 0.08       |
| Rehabilitation charges                                                               | 1.37       |
| Income from sale of municipality factories' products                                 | 2.29       |
| Civil & construction budgets from twelve thousand customs(code 501006)               | 0.29       |
| Equip municipality to machinery (civil-service-computer, etc.)                       | 0.04       |
| Income from sale of flowers, plants and other products                               | 0          |
| Charges on construction permits                                                      | 13.69      |
| Charges on businesses licenses and licensing right                                   | 1.1        |
| Income from rent of machines and vehicles                                            | 0.44       |
| Fee on asphalt & repairing and drilling repair                                       | 1.97       |
| Income from mortuary and cemetery                                                    | 0.46       |
| Income from commercial advertisement                                                 | 0.07       |
| Income from daily and weekly markets                                                 | 0.91       |
| Self-help of citizens and gifts received                                             | 0.32       |
| Capturing lift                                                                       | 0.27       |
| Charges on land & building subdivisions                                              | 1.54       |
| Income from provisioning services                                                    | 1.18       |
| Income from parks                                                                    | 0.11       |
| Aid to public transportation system and urban traffic                                | 0.59       |
| Income from slaughterhouse                                                           | 0.21       |
| Charges on development of fire stations                                              | 0.19       |
| Right of access to municipal facilities                                              | 0          |
| Income from offering educational services                                            | 0          |
| Charges on travel tickets and freight                                                | 0.88       |
| Rent of buildings and facilities                                                     | 0.57       |
| Charges on fire insurance premiums                                                   | 0.01       |
| 3% Charges monitor paying of supervising engineers and other monitor paying          | 0.29       |
| Excess income over expenses for prior period                                         | 1.01       |
| Charges on taxi licensing                                                            | 0.04       |
| Total                                                                                | 46.15      |

**Reference: (Shabestar Municipality Budgets (2004-2014))**

#### ***Evaluating Shabestar Municipality's Revenues in Terms of Sustainability During 2004-2014***

In order to investigate the sustainability of municipality revenues using TOPSIS technique, once sub-indicators of utility were compared with sustainability and flexibility indicators, and the sustainability

of earnings was measured and again, the average of sub-indices of desirability was captured as an indicator, along with continuity and flexibility indicators as three sustainability indicators were introduced. In both ways, the following income microcosts were identified as the most stable municipal revenues:

Selling immovable property, construction license fees, charge on surplus, revenues from land use change, sales and service charges (Article A.31 of the Value Added Tax Code), parking cancellation fees, duties on immovable transactions, governmental construction grants (all national and provincial development credits), municipal budget aid, revenues from the sale of municipal products.

By comparing two sustainability measures, this result was achieved, with almost 65% of the results being quite similar, and in the remaining cases, there is a slight difference between the rankings of the income indexes. In both ways, the proceeds from the sale of immovable property, the costs of building licenses, charge on the surplus, the proceeds from land use change, the charges for the sale of the goods and the provision of services (Article 38 of the Value Added Tax Value Law), the charges of the removal of parking, taxes on immovable transactions, government grants (all national and provincial development credits), municipal budget support, revenues from the sale of municipality factory products are recognized as the most stable municipal revenues. Nevertheless, the important point in this ranking is that many low-yield incomes, such as immovable property sales, surplus-based surcharges, revenues from redevelopment, tolls, etc. are among the top priorities, indicating strong dependence on Shabestar municipal revenues on undesirable earnings.

Duties on the sale of goods and services (Article A of Article 38 of the Value Added Tax Act), government grants for assistance (all national and provincial credits), municipal budget aid, sales revenue from municipal utilities and the charges on building licenses are among

the high-income revenues for the municipality. Generally, considering both the method of ranking the stability of the income index, it can be said that the most influential are the indicators of flexibility and then continuity in the sustainability and financing of the municipality of Shabestar, but compared to the other two indicators, how to finance Shabestar municipality for the utility index less attention has been paid.

## 6- Conclusion and Discussion

In this research, three main indicators of sustainability, namely continuity, flexibility and utility based on Shabestar municipality revenues, were investigated during 2004-2014. Regarding the continuation of revenues such as charges on official documents, construction charges, surplus charges, charges on land and building separation, charges on the balcony and outpacing, etc., had have the largest continuity for Shabestar Municipality during 2004-2014. In this regard, it is observed that many low-utility microcodes have always been in place for many years. On the other hand, many desirable incomes have not been sustained and have only been active in some years.

Flexibility analysis revealed that about 67.32 percent of the total municipal costs were provided through only 10 mini-corporations. Income earnings include: immovable property sales (21.51%), charges on building licenses (13.69%), charges on surplus (3.38%), income from land use change (4.57%) and charges on the sale of goods and services (Article A.31 of the Value Added Tax Code) with 3.83%, tolls on parking elimination (3.49%), duties on immovable transactions (3.46%), state civil aids (all national and provincial development credits) (3.39%),

municipal budget funding with 2.71% and revenue from sales of municipal products (2.29%). In the meantime, the presence of low-yielding low-utility sales such as immovable property sales, surplus-based surcharges, revenues from land use change, and tolls on parking elimination show that a large portion of municipal costs are covered by low-utility incomes.

In recent years, some of low-utility and medium-size incomes have been generated by Shabestar Municipality. If Shabestar municipal revenues are divided into three groups of low utility, medium-income and high-utility incomes, about 43 percent of municipal revenues are low utility, 10.85 percent are middle-utility and 46.15 percent make up incomes with high desirability.

By calculating sustainability, which is the outcome of three main indicators of utility, continuity and flexibility, it was found that the proceeds from the sale of immovable property, the charge on building licenses, the charges on the surplus, the income from land use change, the charges for the sale of goods and the provision of services (Article 38 (a) of the Value Added Tax (Value Added Tax) Law), tolls for parking, tax on immovable transactions, government grants (all national and provincial development credits), municipal budget support, revenue from sales of municipality's products are known as the most stable municipal revenues. Of these, lower utility incomes such as: the sale of immovable property, the charges on surplus, revenues from land use change, the charge of removing parking are among the most sustainable sources of financing for Shabestar Municipality. This suggests that Shabestar municipality's earnings depend heavily on low-utility incomes.

Among the high-utility revenues are also duties on the sale of goods and services (Article A of Article 38 of the Value Added Tax Act), government grants for assistance (all national and provincial credits), municipal budget aid, sales revenue from municipal utilities and the charges of construction licenses are considered as sustainable incomes for the municipality. In sum, the most impact on sustainability and financing of Shabestar Municipality has been flexibility and then continuity indicators, and the income index is not very important for the utility index.

During 2004-2014, about 39.25% of Shabestar Municipality revenues came from public revenue, which is about 30% of the share of tolls on buildings and lands. Comparing these results with Faraji Mulla'i and Azimi (2011) in the municipality of Boeinizhra, Mousavi et.al, (2011) in Shahediyeh Municipality, Ghanbari et.al, (2011) in Zarch Municipality, Zakeri et al., (1391) in Firoozkooh Municipality, Ziyari et al., (2013) in Mahabad Municipality, and Bakhshi and Sahraei (2014) in Jooybar municipality, as examples of municipalities in small towns, indicate strong dependence of these municipalities on tax on buildings and lands so that the toll on buildings and lands with 46 percent growth during 2001-2008 in Shahediyeh Municipality has had the largest share in increasing revenues from public charges. In Buin-Zahra Municipality, during 1998 to 2008, the share of the surplus-based charges from the municipal revenues received by the municipality was 42.20%, and after that, the toll on the construction licenses was the highest with 20.9%. In Firoozkooh Municipality, revenues from construction charges accounted for 20-40 percent of municipal funding sources during 2002-

2011. Charges on buildings and lands in Mahabad have always given a significant percentage of the total annual income of the municipality, so that the revenues from these incidents in 2010 account for more than 32% of the total income of Mahabad Municipality.

In addition, comparing the results of this study with studies in metropolises, including Hasanzadeh and Khosroshahi (2008) in Tehran Municipality, Jalali (2009) in Tehran Municipality, Danesh Jafari and Karimi (2011) in Tehran Municipality, Mahmoudi et al. (2011) in Tehran Municipality, Nasr Esfahani et al. in Isfahan Municipality, Akbari and Mo'azzan Jamshidi (2013) in Isfahan Municipality, Ghorbani and Azimi (2014) in Mashhad Municipality also confirm that municipality revenue in these metropolises are also highly dependent on revenues from tolls on buildings and land.

The second most important source of income in Shabestar Municipality during 2004-2014 was the sub-group of other sources of financing i.e. municipal property. Municipal property includes urban land, buildings and facilities. Income from this source has accounted for about 36.35% of Shabestar municipality revenues over the years.

In Mahabad Municipality, during the year under review, about 30% of the municipality's revenues stem from the sale of municipal property. In Shahedyeh and Zarch municipalities, in recent years, the share of this type of income has increased from total municipal revenues. However, the income of other sources of financing (municipal property sales) in Firoozkooh Municipality, during of 2002-2011, has been lower (one percent of the municipal revenues), and government grants and governmental organizations

with a figure of 20 to 30 percent of revenues, were the most important sources of income of municipality after tolls on buildings and lands.

One of the obstacles to achieve sustainable incomes in Shabestar Municipality is that in recent years mayors and members of City Council have not had enough expertise in urban management. In recent years, people have been elected as members of City Council, who did not have any knowledge of the mechanisms in the city, and were more likely to become members of the council based on tribal support, and in terms of education, they were at a low level. Therefore, in choosing a mayor, they also have considered individual's interests. This means that they selected non-expert people from unrelated organizations, such as education department, as mayor.

Given these cases, efforts have not been made to reach new and sustainable sources of income for Shabestar Municipality. With this in mind, it is suggested that the Law on Elections of Islamic City Councils be amended and the qualifications of individuals both scientifically and specially selected for participation in elections be selected and eligible individuals be selected as candidates for elections so that we do not see tribal management of cities.

Another issue concerning the income sources of municipalities in small towns is the change in the share of such municipalities' income from the Value Added Tax Act. Considering that income opportunities in smaller cities are more limited than large cities and metropolitan areas; therefore, it is suggested that the share of incomes of small cities is much higher than in large cities and metropolitan areas. Accordingly, the municipalities can determine the value

added tax based on the degree of municipalities, so that the share of incomes of lower-level municipalities is considered more and by increasing rates of municipality fees, value added tax will be reduced. Increasing revenues from the government to municipalities and determining the amount received from these resources will lead to better planning and reduce the dependence of municipalities on low-utility incomes.

Creative and entrepreneurial people should be employed in municipality to make money for municipalities in different ways, and they do not need to go directly to their own people for any problems. Another important issue in this area is the use of thoughtful and creative forces in Shabestar Municipality expenses and revenues. If the municipality welcomes ideas and even buy them, and if even one of these ideas is operational, in a few years, a huge transformation and huge capital will be created for Shabestar Municipality. For this purpose, it is necessary to form a commission of experts in municipalities in order to review creative and executive ideas.

Other ways to earn money include:

- Increasing revenue through the construction of manufacturing plants commensurate with the duties of the municipality, such as: the production of sand and concrete components and the sale of asphalt to the requesting organs, especially the subsidiaries of Shabestar

- Participation bonds can be one of the municipality financing tools. The sale of partnership bonds, whereby people's money is collected and spent on major projects and municipal development projects

- Shabestar City Council and Municipality, taking into account the

cultural environment governing the city of Shabestar, will take the necessary measures to introduce Shabestar to hold festivals, exhibitions, cinemas

- Mass production of flowers, plants, seedlings and greenhouse plants and their sale in order to generate income

- Participation with the private sector in the implementation of construction and service projects and the sale of suitable services to applicants

- Proper use of municipal real estate in line with increasing municipal revenues instead of selling them

- Replacing land tax instead of revenues from construction

- Strengthening and developing infrastructure projects and urban services such as urban wastewater and production of biogas for energy production

- The use of wood waste and biomass for heating energy

- The establishment of a municipal insurance company

- Construction and rental of tourist-recreational complexes in areas with natural potential for income generation

- Implementation of new mechanized methods to reduce personnel costs in urban services

## 7- References

- Access Economics. (2007). *A Review of the Financial Sustainability of Local Government in Tasmania*. A Report for the Local Government Association of Tasmania by Access Economic Pty Limited.
- Akbari, N., & Jamshidi, H. (2013). *Value Added Tax: A Sustainable Source for City Governance Case Study of Isfahan Metropolis*. The 5th Conference on Urban Planning and Management. Holy Mashhad.

- Asgharpoor, M.J. (2013). *Multi-criteria decision-making*, print time: 11, Tehran: University of Tehran.
- AzadArmaki, T., Mobaraki, M., & Shahbazi, Z. (2012). Exploring and identifying social development utility indicators (using Delphi technique). *Quarterly Journal of Socio - Cultural Development Studies*, 1(1), 7-30.
- Bakhshi, H., & Sahrayi, A. (2014). *Pathology of the Municipal Finance and Income System Case study: Municipality of Joybar*. Sixth National Conference on Urban Planning and Management with emphasis on the components of Islamic city, Mashhad.
- Budgets Approved by Shabestar Municipality. (2006-2016).
- Cienciara, J. (2010). *State and Local Government Tax and Revenue Ranking*. Wisconsin Department of Revenue Division of Research and Policy.
- Cigu, E., Romania, I. (2014). An aproach of local financial autonomy and implication over sustainable development in the knowledge society. *Journal of Public Administration, Finance and Law*, Issue 6, 44-53.
- DaneshJafari, D., & Karimi, S. (2011). A comparative study of Tehran's municipality's revenue and financing resources with a number of major cities in the world. *Journal of Urban Economics*, 3(11), 24-38.
- Department of Recognition and Reception of Tehran Municipality. (2007). *The comprehensive plan for sustainable revenues and other financial resources of Tehran Municipality*. Approval of the sixty-fourth, sixty-sixth and sixty-eighth official formal-public, extraordinary and ordinary public meeting of the Tehran Islamic City Council (third period), available at: <http://daramad.tehran.ir/Portals/0/documents/tarhe%20jameh.pdf>
- Dirie, I. (2005). Municipal finance: Innovative resourcing for municipal infrastructure and service provision. In *A report prepared for commonwealth local government forum in cooperation with ComHabitat*.
- Faraji, A., & Azimi, A. (2011). An Analysis of Sustainable Income of Municipalities (Case Study of Buenizhra City). *Journal of Urban Economics*, 3(12), 59-72.
- Fletcher, J., & McArthur, D. (2010). *Local Prosperity: Options for Municipal Revenue Growth in British Columbia*. Think City.
- Ghanbari, A., Moosavi, M.N., Saeidabadi, R., Bagheri, A., & Hosseini Amini, H. (2011). Ways to Enhance Municipality Revenues Growth in Small Cities, A Case Study of Zarch Town. *Journal of Geography and Environmental Planning*, 22(2(42)), 41-58.
- Ghorbani, R., & Azimi, M. (2014). Investigating the Impact of Municipality's Income Structure on Urban Development Using the Correlation Coefficient and Principal Analysis; Case Study of Mashhad. *Journal of Urban Research and Planning*, 5(18), 115-132.
- Governorate of East Azarbaijan-Shabestar Municipality. (2001). Shabestar Hadi Plan, first report.
- Hafezniya, M. (2013). *An Introduction to the Research Method in the Humanities*, Tehran: SAMT.
- Hasanzadeh, A., & Khosroshahi, P. (2008). *An Effective Financing Model for Metropolitan Municipalities (Case Study of Tehran Municipality)*. The first municipal finance conference, problems and solutions.
- Jalali, D. (2009). Major Trends in the Municipality Budget of Tehran, 2004-2007. *Journal of Urban Economics*, 1(2), 104-115.
- López González, M., & Mesa Callejas, R. J. (2008). Improved local public finance: the case of the municipality of Medellín, 2002-2005. *Cuadernos de Administración*, 21(35), 327-351.
- Mahmoodi, M., Zomorodiyani, Gh., & Aghayi, M. (2011). Investigating the Factors Related to Tehran's Municipality's Sustainable Revenues and Their

- Prioritization. *Journal of Urban Management*, special issue of spring and summer, 259-276.
- Maleki, S., Damanbagh, S. (2013). Evaluation of Urban Sustainable Development Indicators with Emphasis on Social, Physical and Urban Indices (Case Study: 8 districts of Ahwaz). *Journal of Urban Planning Studies*, 1(3), 29-54.
- Momeni, M. (2008). *New Operational Research Topics*. Printing time: 2, Tehran: University of Tehran, Faculty Management.
- Montazeri, R., & Khodayi, Z. (2012). The Role of Sustainable Financial Resources in Municipal Revenue Resources, *Journal of Urban Economics*, 4(13), 25-39.
- Moosavi, M.N., Sarvar, R., & Bagheri, A. (2011). Income Tax Management Strategy with Emphasis on Budgeting (Case Study: Shahedyeh Municipality). *Journal of Urban Management*, 3(5), 109-127.
- NasrEsfahani, R., Akhundi, N., Shahidi, A., Shiri, H. (2010). Performance Analysis of Isfahan municipality in terms of sustainable and unsustainable revenues (1196-2005) along with presenting new strategies. Third Municipal Finance Conference, Problems and Solutions, Tehran.
- Sepahvand, R., & Arefnejad, M. (2013). Prioritization of Sustainable Urban Development Indicators with a Group Hierarchy Analytic Approach (Case Study in Isfahan City). *Journal of Urban Planning Studies*, 1(1), 43-59.
- Sharzei, Gh. (2008). Recognition and Sustainability Analysis of Income Items of Municipalities of the Country, *Journal of Urban Management*, 6(20), 23-37.
- [www.amar.org.ir](http://www.amar.org.ir)
- [www.ostan-as.gov.ir](http://www.ostan-as.gov.ir)
- Zakeri, M., Shoja, H., & Asghari, H. (2012). Effective factors on Attainment of Local Governments for Sustained Income Resources; Case Study: Firoozkooh Municipality, *Quarterly Journal of Urban Management*, 4(11), 47-56.
- Ziyari, K., Mahdi, A., & Mahdian., M. (2013). Studying and recognizing financial resources and providing solutions for improving the sustainability of municipality revenue; studying Mahabad municipality, *Journal of Urban management*, 6(31), 107-124.