

READINESS OF MUNICIPALITIES IN THE DEVELOPING COUNTRIES FOR ISSUE OF MUNICIPAL BONDS THROUGH THE ANALYSIS OF THEIR BUDGET ACCOUNTS (OVERVIEW OF THE MUNICIPALITY OF STIP - R.MACEDONIA)

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Abstract- In developing country alternative ways of funding are minor represented. This paper contributes to understanding the readiness of these municipalities to issue municipal bonds as an alternative way of financing. The aim is to prove that if the funds are successfully managed and associated with revenue-generating project does not need rigidity. Alternatives for implementation of the projects are too many despite the fact that municipalities are small. Also, despite the fact that municipalities are small and developing economies are usually centralized in the capitals in the country, neither Skopje (the capital in Republic of Macedonia) will attempt to realize the municipal bond. Processing of paper used data analysis, statistical calculations, synthesis and similar methods for data analyzing. Used methods are qualitatively and quantitatively supporting the thesis of this paper.

Keywords- Municipal bonds, budget bill, municipal revenues, municipal expenditures, Municipality of Stip.

I. INTRODUCTION

According to official data of the municipality “in the centralized catchment area of Bregalnica River, in the center of East Macedonia is Municipality Stip. Along both banks of the dry ravine Otinja extends the city that is east Macedonian center and one of the oldest cities in Macedonia”. Macedonia is a developing country that wants to follow the trends, but is still characterized with poorly developed financial market. Financial market in the country use conventional financial instruments. Lead institution in this market are commercial banks. The state implemented a strategy of targeting the exchange rate and the national currency, denars, binds to the euro. Exchange rate between the two currencies is 1 Euro = 61.5 denars.

The city of Stip, lies at an altitude of 300 meters. It is spread over an area of 893 km² of which according to the last census 47,796 inhabitants live.

Stip is the center of the East - planning region and is bordered by seven municipalities.

Basic information:

Area: 893 km²

City area: 13.5 km²

Settlements: 34

number of inhabitants in the municipality: 47798

number of residents in the city: 42625

primary schools: 4

district schools: 2

high schools: 5

University: 1

Radio Stations: 5

TV stations: 2

Clinical Center: 1

Industrial Area 1

Airport: 1

According to these same data road network in Stip has a total length of 377.4 km, of which 47.0 km (12.45%) are roads, 22.4 kilometers (5.94%) are regional roads and the remaining 308, 0 km (81.61%) are local roads. The entire road network of 230.4 km of the Municipality of Stip formed street network in urban settlements. The remaining 147.0 km go on the roads that connect the settlements within the municipality.

Stip is accessible from the main road M-5 (Stip - Kocani - Delcevo) in connection with an E-75 highway (Skopje - Gevgelija) thanks to the road Stip - Veles. There are regional roads R - 601 (Stip - Mountain Plachkovitsa) and R-526 passing through the city and connects the highway M-5. The plan is building a new road (Stip - Miladinovci) which will shorten the journey to the capital Skopje.

Stip is known as an industrial region with developed industries. The principal feature of the economy in Stip is textile industry which more than half a century successfully exists in Stip ground. Compared to European cities Stip is one of the leading compared the number of employees in the textile industry. This means that private companies cluster carry the employment of citizens of Stip. Also important is the establishment of business relations with foreign partners.

Industry development is realized through free industrial zone, and as an added incentive there is construction of a cargo airport, according to project of the Government of Macedonia, which with expansion and adaptation would grow into a major airport in the country.

Stip in total agricultural area is 31 757 ha, of which 9906 hectares are arable lands. Feature and a boon to

agriculture in Stip is that in this part of Ovcepolie water leak HS Bregalnica and much of the agricultural land covered by the irrigation system. In terms of financial results of Municipality Stip can be shown Figure 1, from which it is perceived that the municipality has a continuous positive balance which has a growing trend.

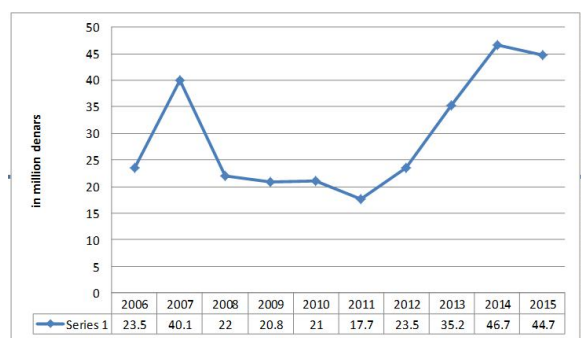


Fig.1. Results of the accounts of Municipality of Stip in the period 2006-2015

From the above data it can be concluded that Municipality of Stip has infrastructure, business, cultural, agricultural and other facilities. Either of these facilities can be considered for additional funding through alternative means, which are for example, municipal bonds. On the other hand, it is not about municipality with extra revenue and therefore municipal bonds should be considered as a serious solution of certain municipal purposes.

II. ANALYSIS OF BUDGET ACCOUNTS OF THE MUNICIPALITY OF STIP DURING 2006-2015

2.1. Municipal revenues

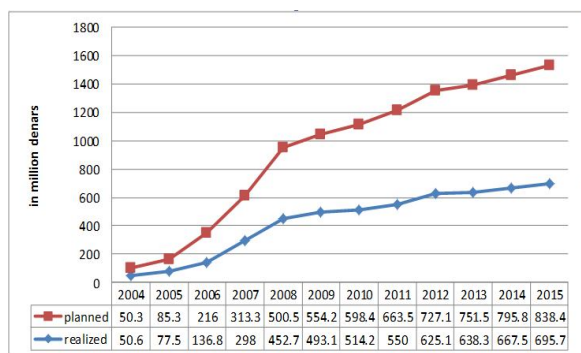


Fig.2. Implemented and planned revenue of Municipality of Stip in the period 2004-2015

Revenues in Municipality of Stip in the period 2004-2015 was moving upwards as a result of the country's economy. The average amount of planned revenues totaled 507.86 million, and the average amount of realized income was 433.3 million.

These data concludes that there are deviations in the realized and planned activities of the municipality. These deviations municipality can not used as boast because throughout this period the realization is

weaker than planned. On average realization was 85.5% from planned.

2.2. Municipal expenditures

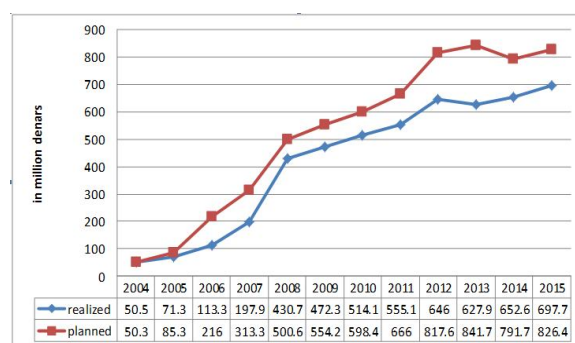


Fig.3. Implemented and planned expenditures of Municipality of Stip in the period 2004-2015

Expenditures in Municipality of Stip in the period 2004-2015 was moving upwards as a result of the country's economy, that is a response to the increase in revenues (shown in Figure 2). The average amount of planned expenditure was 521.7 million and the average amount of realized expenditure was 419.1 million.

These data concludes that there are deviations in realized and projected expenditures of the municipality. These deviations municipality boasts because throughout this period are much lower than planned. On average realization was 81.7% of the planned.

This, at first glance, positive management with expenditure does not always mean success. Depending on the economic situation in the economies of the municipalities sometimes is necessary to give subventions for an activity to achieve long-term positive effect. That long term positive effect can be reflected in future levels of expenditures or realization of positive balance.

2.3. Domestic borrowings of Municipality of Stip

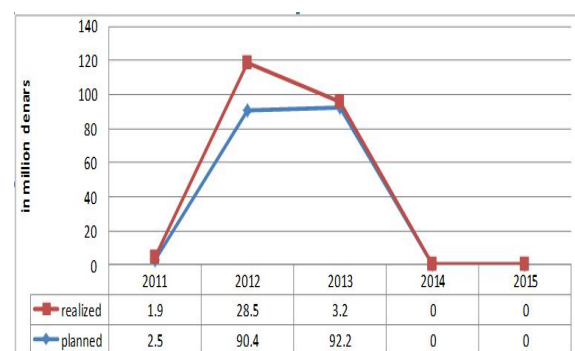


Fig.4. Implemented and planned domestic borrowing of Municipality of Stip in the period 2011-2015

Domestic borrowing that can be seen from the account 75 in annual accounts of the budget of the municipality are not in the period 2004-2015. They first appear in 2011 and they are linked to capital

investment in the city which is realized on the river Otinja in order to achieve more parking spaces.

Figure 4 indicates a sharp decline in the curve of the level of domestic debt. This is at the same period when had a change in mayoral positions and the decision of the current mayor was to prevent such loans because they are perceived as unprofitability projects. That was the reason to stop lending. The average amount of planned domestic borrowing is 61.7 million, and the average realized domestic borrowing was 11.2 million.

These data concludes that there are deviations in realized and planned domestic borrowing of the municipality. On average, realization was 18.15% of the planned.

2.4. Domestic borrowings of Municipality of Stip

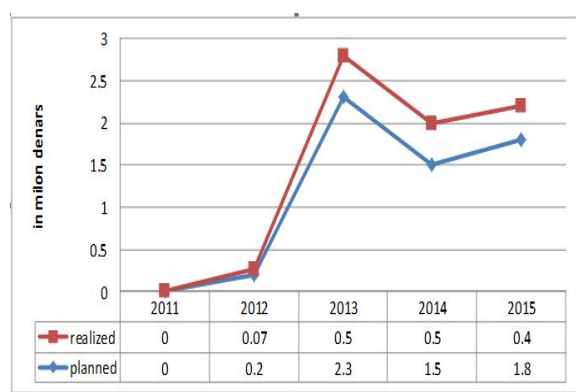


Fig.5. Implemented and planned interest payments to domestic creditors of Municipality of Stip in the period 2011-2015

Interest payments to domestic creditors that can be seen from the account 45 in the annual accounts of the budget of the municipality are not in the period 2004-2015. They first appear in 2012. This is logical from the fact that lending is first recorded in 2011. Figure 5 indicates the existence of an upward trend curve for interest payments to domestic creditors. This can be taken as a positive signal that the municipality corresponding to their obligations. The average amount of interest-planned payments to domestic creditors amounted to 1.45 million and the average amount of realized interest-payment of domestic lenders is 0.36 million.

These data concludes that there are deviations in realized and projected interest payments to domestic creditors of the municipality. On average realization was 24.8% of the planned.

III. RESULTS AND DISCUSSION

3.1. Correlation relationship between domestic borrowing and expenditure of Municipality of Stip

By applying a statistical survey of the data provided in the graphs above, performed a calculation of the correlation between the levels of domestic borrowing and expenditure of Municipality of Stip. Specifically,

the data in Figure 3 and Figure 4 provides inputs for calculating the correlation relationship. Correlation relationship between domestic borrowing costs and expenditures is calculated on the basis of a series of three fit and that for 2011, 2012 and 2013. The reason for this brief analysis is that the municipality as mentioned above before and after this period had no borrowings in the domestic sector.

By calculating the simple linear correlation, in which the municipal debt is variable x , and expenses are variable y , we got a result that the coefficient of determination is 0.82.

This indicates a direct and positive correlation.

The fact that is performed simple linear correlation, the purpose of this test is to show whether the variation between the observed phenomena exist quantitatively match and if how intensity is. Both observed phenomena are treated as random variables, and this does not indicate whether a phenomenon is a function of the other, but perceive that between domestic borrowing and expenditure of Municipality of Stip there is a linear relationship.

This is a logical result if you look at the time series for these variables. Their positive correlation is logical result that the increase in domestic borrowing will lead to increased expenditures of Municipality of Stip.

3.2. Correlation relationship between interest payments to domestic creditors and revenue in Municipality of Stip

By applying a statistical survey of the data provided in the graphs above, is performed a calculation and the correlation between the levels of interest payments to domestic creditors and the revenue of Municipality of Stip.

Specifically, the data in Figure 2 and Figure 5 provide inputs for calculating the correlation relationship. About the correlation between the levels of interest payments to domestic creditors and the revenue of Municipality of Stip is calculated on the basis of a series of four fit and it's 2012, 2013, 2014 and 2015. The reason for this analysis is that the municipality as mentioned above before and after this period had no interest payments on the basis of domestic borrowing. By calculating the simple linear correlation, in which interest payments to domestic creditors are variable x , and the income is variable y , we got a result that the coefficient of determination is 0.85.

This indicates a direct and positive correlation.

The fact that is performed simple linear correlation, the purpose of this test is to show whether the variation between the observed phenomena exist quantitatively match, and if there is how intensity is. Both observed phenomena are treated as random variables, and this does not indicate whether a phenomenon is a function of the other, but perceive that between interest payments to domestic creditors

and the revenue of Municipality of Stip there is a linear relationship.

This is a logical result if you look at the time series for these variables. Their positive correlation is logical and the increase of municipal income will lead to an increase in payments to domestic creditors.

3.3. Willingness of the municipalities of developing countries to issue municipal bonds

Through the study of data from annual accounts for Municipality of Stip can be concluded that the municipality can meet the challenge to publish municipal bonds. The municipality pays their liabilities on time. Only as a preventive factor should be considered a connection of bond with a project. It would show the bond whose collected funds will be used for a capital or natural resources. The use of the new project in itself brings profit to cover the additional costs for the issue, as the program itself, interest and so on.

CONCLUSIONS

From this work we can draw several conclusions which will significantly contribute towards encouraging municipalities in developing countries to use alternative ways of financing. Municipal bonds are one of these ways:

1. In the Republic of Macedonia has no realization of municipal bond. This can serve as an advantage in the market in terms of introducing innovation.
2. Municipality of Stip and all municipalities in developing countries have the infrastructure, commercial, cultural, agricultural and other potential facilities that have yet to be developed.
3. Binding emission of municipal bonds with revenue-generating project is not a risky activity.
4. Municipal bonds may be less expensive tool for the implementation of projects.
5. Municipality of Stip works in a positive direction and there are conditions for issuing this instrument.
6. Public confidence in the municipalities in such instruments could have a critical impact.
7. Despite deviations in the projected and planned revenues and expenditures of Municipality of Stip can be concluded that this municipality in a good percentage (85%) realize its plans.

ACKNOWLEDGMENTS

This paper gives a contribution to any municipality that meets roughly the same criteria as Municipality of Stip. This paper would be useful as a starting point

for revival of financial markets in emerging economies which are characterized by applying the basic instruments and institutions.

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