

CREDIT ENHANCEMENTS AND THE ROMANIAN MUNICIPAL BOND MARKET

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Abstract

Under the combined pressure of increased urbanization, fiscal adjustments and decentralization, central governments were pushed towards accepting the idea of local government accessing the private finance sources for their public infrastructure and service development investments. While the importance of borrowing increases for local developments, the main challenge many small municipalities have to face is the difficulty to access private financing sources. One obstacle is related to the creditworthiness of the municipal debtor or bond issuer. Sub-national governments can overcome the problem of creditworthiness through the use of credit enhancement mechanisms or techniques. The present paper is the first to discuss the situation of credit enhancements for Romanian municipal bond financing, its consequences and the path that might be followed for their further development. The absence of appropriate credit enhancements can be considered among the factors that contributed to the underdevelopment of the Romanian municipal bond market segment mainly between 2011 and 2014. In order to improve the municipal bond market profile, Romanian local governments should not ignore credit enhancements for any future bond issue and a combination of internal credit enhancements and bond pooling, as external credit enhancements seem to provide a feasible solution.

Keywords: bonds, municipalities, credit enhancement, Romania.

1. Introduction and literature review

The importance of sub-national borrowing as an element of development strategy at municipal or local level is continually increasing given three important trends identified since the 1980s and discussed by Peterson (2000), Magrassi (2000), Venkatachalam (2005), Kehew, Matsukawa and Petersen (2005), Martell and Guess (2006), Canuto and Liu (2010), and USAID (2009). These trends are: a) the growing pace of urbanization which requires considerable infrastructure and urban services expansion; therefore the need for local investments is mounting and the demand for financial resources to support them increases accordingly; b) the decentralization trend, a process through which sub-national governments are granted increased responsibilities and more important roles in planning capital investments, establishing priorities, and implementing chosen projects; also the difficult responsibility for financing the needed investments is transferred to local governments; c) fiscal adjustments which require governments at all levels to reduce budget deficits; one of the favored instrument is the cut back of central government subsidies for local infrastructure financing; since sub-national governments rarely maintain cash surpluses necessary for medium and large-scale investment projects, this trend also enhances the need of local authorities for alternative financial resources as a way to support their development projects.

As highlighted by Venkatachalam (2005), these three trends have challenged the traditional approach of fiscal federalism, under which borrowing at sub-national levels was not favored, especially in developing economies. Under the combined pressure of increased urbanization, fiscal adjustments and decentralization, central governments were pushed towards accepting the idea of local governments accessing private financing sources for their public infrastructure and service development investments. Moreover, the use of credit for these developments is supported by the idea of inter-temporal equity which requires future generations to partake in supporting the costs of current infrastructure investments, as highlighted by Peterson (2000) and Venkatachalam (2005). This inter-temporal equity is ensured through the standard rule holding that the period of a local debt repayment should approximate the useful life of the project, as such matching the time profile of costs and benefits (Peterson, 2000).

While the importance of borrowing increases for local developments, the main challenge many small municipalities have to face is the difficulty to access private financing sources. The hardship is generated mainly by the relative small amount of capital needed for (potentially profitable) projects/developments, often combined with the lack of frequency in accessing market sources, which limit or even deny the access of local governments to market financing at attractive (borrowing) rates. Other factors that increase the difficulty of accessing private finance sources are: the limited credit experience, the limited knowledge of financial markets, and, when available, poor credit ratings. This difficulty of small local governments in accessing the market financing alternatives is briefly discussed by Noel (2000), Petersen (2006), Blommestein and Rhee (2009), and Schmith *et al.* (2011).

Another problem that impairs local government access to capital market resources arises from the fact that investors are not always fully aware of the true credit quality of the municipal borrower/issuer given the infrequent access to capital market, which reduces the investors' familiarity with the respective entity; moreover, the analysis of a local government financial performances is a daunting task given the difficult access to financial information, as highlighted by Peng (2002). This problem is related to the creditworthiness of the municipal debtor or bond issuer. Sub-national governments can overcome the problem of creditworthiness through the use of credit enhancement mechanisms or techniques. Moreover, through credit enhancements the problem of small borrowed amounts can also be surmounted, since these mechanisms can help the issuer to market their debt to investors (Platz, 2009).

Credit enhancements consist of a variety of provisions used to reduce the credit risk of a municipal debtor or municipal bond issuer, by providing additional collateral, insurance, and/or a third party guarantee that the debtor/issuer will meet its obligations (Petitt, Pinto and Pirie, 2015).

Few academic papers are dedicated to discuss credit enhancement only since these mechanisms are closely linked with the credit market developments relative to sub-national borrowers. Among the most recent academic works discussing the credit enhancements are Platz (2009), Mandel, Morgan and Wei (2012), Schmit *et al.* (2011), and Petitt, Pinto and Pirie (2015). A comprehensive presentation of credit enhancements can be found in Ziegler (1985).

Two main types of credit enhancements exist: internal, put in place by the debtor or bond issuer, and external, provided by a third party to the debtor or bond issuer.

The internal credit enhancements rely either on the collateral value or on the structural features concerning the priority of payments (Petitt, Pinto and Pirie, 2015). According to Fabozzi *et al.* (2005) these credit enhancements influence the cash flow characteristics of the loan, even in the absence of default. Being put in place by the debtor, these credit enhancements are less costly, except the opportunity costs for reserve funds. Often, at least a form of credit enhancement is required to exist before external credit enhancements are put in place by a third party. The following types of internal credit enhancements are the most common in case of local governments borrowing: overcollateralization, reserve accounts or reserve funds, and debt subordination. These three types of internal credit enhancements are briefly presented below.

The overcollateralization represents the practice through which the debtor or issuer of bonds offers collateral that has a greater value than the borrowed amount (Crawford, 2005; Banks, 2005; Petitt, Pinto and Pirie, 2015). The excess collateral pledged by the debtor creates a buffer that can cover a series of unexpected risks. Through overcollateralization, the debtor's credit profile becomes stronger and this might trigger a higher credit rating and lower interest rates for the borrowed amount. Thus, overcollateralization might prove to be expensive if the tied up collateral (mainly in the case of assets) cannot be used for other purposes. A supplementary mechanism that

completes the overcollateralization is represented by the intercept of (central) state aid to local governments dedicated to meet debt service payments.

Reserve accounts or reserve funds. A reserve account/fund is established either voluntarily by the debtor/bond issuer or at the request of the lender or guarantor. Such an account/fund might come in one of the two forms: a) a cash reserve fund¹ (Crawford, 2005) is a deposit of cash resulting from the cash proceedings; a portion of the obtained loan is placed in an escrow reserve account, out of the debtor's reach; a drawn against such account or fund is made if a loan installment is not paid when due; it might take the form of a hypothecated fund that typically is invested in money market instruments, and it is held at a custodian or trustee; this cash reserve account/fund is often used in conjunction with a letter of credit, an external form of enhancement; b) excess spread account (Petitt, Pinto and Pirie, 2015) is a reserve account funded by the excess spread; the excess spread is the difference between the cash flow received from the assets used to secure the issue and the interest paid to the investors; also, it can be funded by an extra interest paid by the debtor or bond issuer. The excess spread account is most often established in the case of debt subordination and is considered the first line of protection against credit losses; this account must be completely used (exhausted) before even the most subordinated tranches incur losses (Mandel, Morgan and Wei, 2012). Moreover, in a process called turboing, the excess spread account might be used to retire the principal (to pay the principal in advance) and thus, to reduce the default risk for the respective issue.

Debt subordination, also called senior/subordinated structure, refers to the ordering of claims over a loan. According to Petitt, Pinto and Pirie (2015) and Crawford (2005) the loan/debt is structured in at least two tranches: a senior tranche (called class A) and a subordinate or junior tranche (called class B). The subordinated/junior tranche acts as a protective layer to the senior tranche; the subordinated/junior tranche will absorb any potential losses. Basically, the subordinated/junior is a buffer or collateral to the senior tranche. The senior tranche has priority claims, and is the first repaid in case of default, while the junior tranche incurs the losses. Moreover, the senior tranche is unaffected by losses unless these exceed the amount of the subordinated/junior tranche. Due to this structure, the senior tranche has a high credit quality, a high rating, and a low yield. The junior tranche, given its high credit risk and the greater default risk exposure, is supposed to have a higher yield. Furthermore, the subordinated/junior tranche will have a low rating or no rating at all. Debt subordination is also known as waterfall structure and more than one senior and junior tranche might exist with various levels of claim priorities.

1 An alternative form of this cash collateral account is funded by the debt issuer not with a portion of loan proceedings but with another loan from a third party bank or affiliate. The amount of this fund is immediately invested in high rated, short term commercial papers. Thus, this alternative is seldom used as municipal bond credit enhancement.

The external credit enhancements, provided by a third party, increase the creditworthiness of the debtor. External credit enhancements bear a high cost, mainly for small local borrowers. Moreover, they expose both the borrower and the investors to the third party credit risk. The debtor benefiting from external credit enhancements finds its creditworthiness strongly related to that of the credit enhancement provider, any downgrading of this entity will trigger a downgrading of the borrower, as discussed by Fabozzi *et al.* (2005) and Petitt, Pinto and Pirie (2015). Moreover, the investors have a double task: to perform a credit analysis on the debtor, and another credit analysis on the third-party, the credit enhancement provider, by bearing in mind the extreme situation that the respective provider might not be able to meet its obligations, as highlighted by Fabozzi *et al.* (2005) and Petitt *et al.* (2015). The most common types of external credit enhancements are: stand-by letters of credit, various types of guarantees, surety bonds, credit wraps, and bond pooling. These types of external credit enhancements are briefly presented below.

The stand-by letter of credit is a contingent letter of credit representing an obligation of the issuing bank on a designated third party (the beneficiary) that becomes effective only if the drawing customer fails to perform on a specific transaction or under the terms of a contract with the beneficiary (Banks, 2005; Petitt, Pinto and Pirie, 2015; Mandel, Morgan and Wei, 2012). The stand-by letter of credit obligates the bank to ensure that investors receive timely payment on the issued debt/bond, or to ensure that investors receive payment in the event of market disruptions; later, the bank will attempt to recover the loss from the customer. The issuance of the letter of credit implies the payment of a fee; the fee depends on the required credit enhancement amount which becomes the letter of credit balance. The issuance of a letter of credit may also require the existence of a reserve account or an excess spread account and/or other forms of internal and external credit enhancements. The stand-by letter of credit can provide coverage based on the remaining outstanding in the pool, which would be constantly decreasing or could be based on the original amount issued that would provide an increased percentage of coverage as the balance of the pool decreases (Banks, 2005; Petitt, Pinto and Pirie, 2015). The rating of the letter of credit issuer is important for the rating of its customer.

Various types of guarantees: a guarantee is a contractual agreement where the guarantor provides payment to the beneficiary should the contracting party default on its obligations. Through the provision of the guarantee, the obligations of the contracting party assume the credit rating of the guarantor (Banks, 2005). The guarantees are offered mainly by international financial institutions, highly rated banks or especially created/dedicated funds. The main types of guarantees are: a) comprehensive guarantees or full credit guarantees that cover the principal and the interest payment regardless of the cause of debt service default; they are very seldom offered given the risk of municipal debts; b) partial credit guarantees where a guarantor covers a portion of debt service payments regardless of the cause of debt service default; there are also partial risk guarantees when the sharing of borrower default risk is based on the

cause of such default; the partial credit guarantees are more often used, the guarantee being expressed as a percentage of the principal and it amortizes in proportion to the bond or loan; the percentage of the guarantee can increase or decrease in the later years depending upon the needs of the borrower or creditor.

Surety bond is a financial agreement under the form of a policy written by an insurance company to protect another party against loss or violation of a contract; the insurer assumes the role of the contracting party in completing a transaction or project in the event the contracting party defaults on its performance obligation (McElravey, 2005; Banks, 2005). The surety bond is similar to an insurance policy designed to cover the beneficiary against losses, and is provided by a multiline rated and regulated insurance company. Usually, one or more levels of credit enhancements are required to cover losses before the surety bond is used. Often, this type of guarantee is provided only for securities rated BBB or higher. Surety bonds (sometimes called performance bonds) are commonly used in project financing, and in municipal or governmental developments. A surety bond includes three parties (Banks, 2005; Tavakoli, 2003): a) the *principal* or the *obligor* (the purchaser of the bond) is the entity responsible for performing on the underlying contract, task or transaction; it has the primary responsibility to perform the obligation; b) the *surety* or the insurer (multiline insurance company that backs the bond) performs upon the default of the principal; it is the part with the secondary responsibility of performing the obligation if the principal/obligor fails to perform; c) the *obligee* (the entity that requires the bond) is the party to whom the right of performance is owed. The rating of a surety bond is strongly related to the rating of the insurance company, and has an important influence upon the rating of the debt or bond issue for which it was purchased.

Credit wrapping is an external guarantee whereby a monoline bond insurer² agrees to cover the interest and principal payments if the debtor or bond issuer cannot fulfill its obligations (Banks, 2005). It refers to a specific loan or debt, and the amount of the enhancement depends on the deal structure, and is expressed as a multiple of the expected loss level (Tavakoli, 2003). The monoline insurance company may choose to pay back a certain amount of interest or principal on the defaulted loan or may buy back a portion of the loan. The credit wraps are considered financial guarantees and are used to supplement other forms of credit enhancements. The highest rating possible on a wrapped loan is the rating of credit wrapping provider.

Bond pool or pool financing is a technique through which small loans are aggregated or pooled into a larger and more efficient grouping. The main idea is to create a portfolio of loans that can be remarketed in bulk towards the security market as the obligation (bond) of a specialized financial institution. Through loan pooling a required 'critical mass' can be attained in order to bring attractive market financing

2 Monoline insurance companies offer only guarantees to bond issuers, mainly in the form of credit wraps. These insurance companies do not offer other insurance lines such as life, property or causality.

within the reach of small local government entities (Schmit *et al.*, 2011). Based on this loan portfolio the sponsor sells an issue of bonds and the proceeds of the issuer are divided between the small borrowers, cities or organizations of public interest. The pooling allows small sub-national borrowers, which individually are of no interest to private capital markets, to achieve economies of scale related to underwriting costs, credit enhancement costs, and interest rates as highlighted by Gilbert and Pike (1998). The bond issue based on loan portfolio (pool) is carrying a variety of other credit enhancements like reserve funds, intercept provisions, and bond insurance. The pool diversity provides financial stability and mitigates the overall credit risk.

Usually a combination of internal and external credit enhancements is used in order to obtain the desired creditworthiness in order to achieve the targeted debt rating (when used) and interest rate.

The use of a type or another of the credit enhancements is closely related to the type of credit systems that support the development of local credit markets. Two main systems were identified according to Peterson (2000) and Schmit *et al.* (2011): one based on credit institutions and one based on municipal bond financing. A brief description of these two models is presented below.

Credit institutions model: Within this model, two main subtypes can be identified: a) the model based on specialized municipal credit institutions (MCIs), and b) the model based on commercial banks.

a) MCIs represent a specialized niche of lending institutions and, in some countries (e.g. Netherlands), such institutions are over a century old. An MCI can be either a municipal bank or a funding agency specialized in providing financial services to municipalities; the main goal is to reduce the borrowing cost for local governments through the MCI complex activity (Schmit *et al.*, 2011). The main service that an MCI offers is debt financing for local governments and other public entities, usually within a given region like a province or county. MCIs also offer loans for local infrastructure project financing and for public-private partnership projects (Schmit *et al.*, 2011). Moreover, MCIs offer a wide range of support services acting as advisers and assistants for various aspects related to local investment projects. In fact, MCIs develop a quasi-permanent relationship with local governments; this evolved into the philosophy of relationship banking and bundled services as described by Peterson (2000) and Peterson (2003). MCIs were established either as customer-oriented entities or member-owned credit cooperatives³ (Schmit *et al.*, 2011). In the case of customer-oriented entities the equity capital is owned either by the state (central government), local governments or by both, as in the case of Austria and Norway (Schmit *et al.*, 2011). In the case of credit cooperatives, the equity capital is formed by members, mainly

³ Schmit *et al.* (2011) also mention the Bank Nederlandse Gemeenten as a third type of structure. This institution is a two-tier company under Dutch law, with 50% of its equity capital owned by the Dutch State, and the remaining half owned by municipal and provincial authorities, and by a water board (Schmit *et al.*, 2011).

local governments, which are also the beneficiaries of the provided financial services, as in the case of Sweden and Denmark (Schmit *et al.*, 2011). A detailed description of MCIs in Western Europe is provided by Peterson (2000), Magrassi (2000) and Andersson (2014). In all cases, MCIs benefited by a special status enforced by law which allowed these institutions to access cheap long-term financial resources in order to fulfill their goal of providing low cost financing to local governments. Moreover, MCIs benefited by some form of state guarantee, either explicit or implicit, under the form of maintenance statement (Schmit *et al.*, 2011). The deregulation process within the financial sector of the 1980s put an end to this special status of MCIs, mainly in France, Germany, and forced them to compete against other banks for funds on the financial markets. Thus, the aftermath of the recent financial crisis forced regulators and central governments to reconsider the special status of MCIs taking into consideration the paramount importance of infrastructure projects for the economic development. According to Andersson (2014) and FMDV (2012) countries like France, Germany, Great Britain, and Italy are reconsidering the model of Nordic countries (Denmark, Finland, Norway and Sweden), and the creation of Local Government Funding Agencies (LGFAs) was proposed as a way to enhance local governments' possibilities to access the capital markets while maintaining costs at the lowest levels.

b) The lending model based on *commercial banks* developed mainly in emerging economies where the MCIs were virtually unknown (Peterson, 2003), and where the deregulation of financial services did not allow the creation of lending institutions with a special status. Due to the fact that for commercial banks municipal lending represents only a fraction of their operation portfolio, the range of products dedicated to local governments is narrower, and the lending period is shorter. Since municipal lending is included in a larger operation portfolio, commercial banks often allocate little time and fewer resources to develop the needed special understanding and expertise in municipal financing. Therefore, commercial banks seldom offer support services, and the relationship banking with local governments is virtually inexistent. Moreover, standard commercial banking loans have the tendency to be more costly given the financial resources accessed.

Municipal bond financing model: The model of municipal bond financing is based on the direct access to capital market financing through bond issuance. Therefore, the system is based on competition among lenders, and public disclosure of municipal information. The relationship banking and bundle services disappear under this model, as highlighted by Peterson (2000, 2003). Nevertheless, municipal bond financing has proven to be a difficult process mainly for small local governments or entities which access the capital market with a low frequency and for modest amounts, compared to large municipalities. These small municipalities incurred high borrowing costs by trying to access capital market financial resources. In order to overcome this problem, in 1956 Canada launched the municipal financial corporation/authority model; the model was followed by the opening of the first bond bank in the US in

1970⁴ (Gilbert and Pike, 1995; Blommestein and Rhee, 2009). These institutions, generically called municipal bond banks or MBBs, have been created for a similar reason as MCIs: to lower the borrowing costs of local governments. Thus, their role is achieved in a different manner than in the case of MCIs. MBBs operate as credit enhancement institutions by pooling the borrowing needs of small local governments and public institutions, adding credit enhancements at local level and issuing bank bond debts into national or international markets (Gilbert and Pike, 1995; Blommestein and Rhee, 2009). The main benefits for sub-national borrowers are represented by the economies of scale that result from the reduction of the interest rates, and also from the diminished administrative cost and credit enhancement costs.

In October 2011, the Europe 2020 Project Bond Initiative was launched and became operational during the second half of 2012. The Initiative has two main objectives (Rosales and Vassallo, 2012): a) to reopen debt capital markets as financing sources; b) to help individual infrastructure projects to attract the needed financing resources. The LGFAs mentioned in relation with MCIs are also connected to this initiative, and LGFAs are expected to play a role not only as classic lenders but also to pool European sub-national borrowers needs similar to MBBs.

The credit institution model was prevalent in Western European countries while the municipal bond financing is traditionally linked to the US and Canada (Peterson, 2000). The system based on credit institutions which provides most of the financing under the form of long-term (bank) loans is linked with the use of internal credit enhancements. The municipal bond financing gives preference to external credit enhancements⁵ which, in turn, require some form of internal credit enhancements. Therefore municipal bond financing implies the use of a combination of internal and external credit enhancements.

Developing countries have the choice between the two main credit system models, or better still a combination of both in order to build their local credit systems. As Peterson (2000) shows, the existence of municipal credit institutions or commercial bank lending to local governments can operate side by side with a municipal bond market. In order to encourage this kind of development, in many developing countries municipal development funds (MDFs)⁶ were established. A presentation *in extenso* of various countries' experiences is given by Peterson (2000).

Romania, as a developing country, needed also to follow the path of municipal credit system development. At the end of the 1990s, Peterson (2000) mentions

4 Peterson (2000) presents a detailed evolution of bond banks in the US.

5 The importance of bond insurance as credit enhancement was discussed in extenso by Godfrey and York (1994) and Peng (2002).

6 Municipal development funds (MDFs) were established with the assistance of international financial institutions and were mainly used to on-lend international program funding to local authorities; MDFs were seen as transitional institutions which were supposed to pave the way for self-sustaining municipal credit systems (Peterson, 2000).

that Romania was taking tentative steps towards establishing a municipal development fund based on external support. However, this initiative never took shape and through Law no. 189/1998, Romanian sub-national governments were allowed to borrow money from capital markets based on bond issuance, within a ceiling based on their revenues. While this development seemed to be in line with the trends on international markets, for sure it was relatively a too large step for the unprepared and underdeveloped Romanian capital market. Moreover, the development was pursued in complete ignorance of the importance of internal and external credit enhancements and overlooked the significance of bond rating mainly for the international investors, dominant within the Romanian investing environment.

This paper is the first to discuss the situation of credit enhancements for Romanian municipal bond financing, its consequences and the path that might be followed for their further development.

2. Romanian municipal bond market and the virtual absence of credit enhancements

The introduction of municipal bonds on the Romanian main capital market, Bucharest Stock Exchange (BVB), was made in November 2001, and it aimed to open the access of local governments to private financing, and also to diversify the securities traded on the market, which were represented only by domestic shares as of October 2001. A brief evolution of the municipal bond market segment within BVB is presented in Table 1 and reflects the modest position of this sector. After a slow start, a more promising evolution followed between 2004 and 2007. The peak reached in 2008 was generated by the investors' desire to exit the equity market and purchase alternative securities less influenced by the financial crisis turmoil. The interest towards the municipal bond sector dwindled between 2009 and 2011 and reached the lowest level in 2012. The years 2013 and 2014 show also modest evolutions indicating a lack of interest. In depth analyses of this sector evolutions and causes can be found in Lăcătuș and Văduva (2009), Pop and Georgescu (2011, 2015).

At the launch of the municipal bond market, Romania had in place the following two regulation mechanisms, of the four identified by Ter-Minassian and Craig (1997), according to NALAS (2010) based on a questionnaire investigation: *direct control* through which borrowing at local level is subject to approval by the central government; in the case of Romania this approval is given by the Commission for the Authorization of Local Loans, functioning within the Ministry of Finance; and, *the rule-based approach*, a ceiling on the level of indebtedness is set by the legislation; the first set of Romanian regulations established the ceiling of local debt ratio at 20%; this limit was later increased at 30%, level currently in place; more details regarding the calculation of the debt ratio are available in Moșteanu and Lăcătuș (2008a, 2008b), and Pop and Georgescu (2011).

The attempt to identify the credit enhancements available for the listed municipal bonds revealed the following aspects: a) Romania is among the countries where an

Table 1: Municipal bond sector at BVB

Year	Listed bonds	New listings	Traded bonds	Number of trades	Volume	Value (EUR mil.)	% of total BVB bond sector
2001	2	2	2	5	45	0.00	100.00
2002	4	2	3	10	59,050	0.25	100.00
2003	9	8	7	12	29,310	0.34	95.66
2004	19	12	12	85	51,945	1.32	10.02
2005	13	5	11	60	25,632	0.71	2.38
2006	11	3	10	60	80,658	2.04	3.80
2007	16	7	12	58	119,695	2.96	2.00
2008	20	9	18	175	323,793	8.51	15.92
2009	31	13	18	154	221,394	4.57	1.65
2010	35	5	19	88	254,207	5.46	0.99
2011	36	2	16	47	107,839	2.01	1.91
2012	36	0	6	8	5,992	0.10	0.04
2013	37	1	9	111	64,548	0.62	0.65
2014	35	0	12	150	74,382	0.58	1.65

Source: Author's calculations based on data available online at www.bvb.ro

explicit declaration exists regarding the fact that state guarantees are not available in any circumstances; this situation is also highlighted by NALAS (2010); b) within every municipal bond prospect, in the guarantee section, there is a standard declaration that the respective local government pledges all its collected revenues to support any payment default⁷; nevertheless, this collateral cannot be drawn on directly when the default occurs; further details show that in order for a lender to receive the due payments based on the collateral, a commercial court order is required⁸. Therefore, the usefulness of the established collateral is diminished due to administrative procedures.

Based on point b) presented above, only this form of overcollateralization could be identified as credit enhancement for the Romanian listed municipal bonds; its existence is hindered by administrative procedures.

No other form of credit enhancement could be identified.

7 All municipal bond issued between 2001 and 2003 and two issues of 2004 (DEV08A and SAC07) included in their prospect the following general formula regarding their promise to repay the principal and coupons: 'the local government guarantees with its full taxing power'. The only exception is the local government of the city of Arad (ARA06) which specifies the revenues pledged as collateral. For the majority of the municipal bonds issued in 2004 and for all the other issues launched between 2005 and 2012, the formula changed as such: 'the local government guarantees the entire payment of principal and coupons with a part of its own revenues (for the period of loan maturity) through the assignment of claim or interest over these revenues disclosed in the accounts opened at the local Treasury unit'.

8 The requirement for a court order is in fact an administrative procedure through which an official statement is made that the respective local government failed to fulfill its payment promises/obligations and that the lender can proceed further by drawing on the collateral. Another reason, given the Romanian experience, is that this administrative procedure is also a way of protection against abusive lender conducts.

The absence of other credit enhancements, with the exception of overcollateralization by pledging the local governments' own revenues, derived from a combination of lack of knowledge and lack of market sophistication, the absence of a rating system, and the intention to maintain the borrowing costs at the lowest possible levels. Moreover, when the municipal bonds were launched on the market and the listing started, the demand for new securities largely overpassed the offer. The main investors seeking and buying large quantities of local government bonds were the domestic institutional investors as highlighted by Pop and Georgescu (2015). The overcollateralization was considered enough despite the high interest rates, given the relative small amount borrowed and the short-term maturities⁹.

The absence of rating¹⁰, a common situation for Central and Eastern Europe, as highlighted by Szilagyi, Fetherston and Battern (2004), generated the lack of external credit enhancements. In Romania the monoline insurance companies remained virtually unknown, as are the bond pooling system and the bond banks.

By offering only a simple form of internal credit enhancement, Romanian local governments using bond financing, kept their cost related to collateral at zero since the pledged collateral was never insulated in a reserve account.

Between 2001 and 2008 no problems were reported in the frequency of coupon and installment payments for the outstanding municipal bonds listed at BVB. The situation changed in 2009. Two small municipalities, Băile Herculane (BHR20) and Oravița (ORV27) announced delays in meeting coupon and installment payments (Miricescu, 2009, Bunescu, 2010, Pop and Georgescu, 2015).

An unanswered question persists: why was BHR20 accepted to be listed at BVB (listing started on December 23rd 2009) if doubts existed regarding its capacity to meet the announced payments? No official explanation was ever provided. An educated guess points towards the unsatisfied demand for listed municipal bonds. Later on, it was brought to the surface that BHR20 had not met its scheduled coupon and installment payments since June 2009 while sending periodic reports to BVB that the payments were made (Musgociu, 2013). The case of BHR20 became public at the end of June 2013 when an official complaint was filed by an investor with the Financial Supervisory Authority (FSA) showing that the local government of Băile Herculane ceased the payments; FSA launched an investigation at the end of July 2013, according to Musgociu (2013). BVB suspended BHR20 for five hours during July 25th 2013. Starting with July 26th 2013, BHR20 was again tradable; no trade was registered with

9 Between 2001 and 2005 the average outstanding principal was of RON 22.34 million, the average coupon of 24.03% and the average maturity of 40 months. For the period 2006-2012, the average outstanding principal was of RON 515.18 million, the average coupon of 9.11% and the average maturity of 208 months.

10 The only two municipalities that have an international rating provided by Fitch are Bucharest for its international bond issue of 2005 through which an amount of EUR 500 million was borrowed (Bursa, 2015), and Oradea which required the Fitch rating in 2007 at the initiative of its mayor (BihorStri.ro, 2014). Currently, Oradea has no outstanding municipal bond issue.

BHR20 between February 26th and November 7th 2013 when it was last traded on the main market. The mayor of Băile Herculane was fined as of December 10th 2013 by FSA with the amount of RON 10,000 (EUR 2,245)¹¹ for failing to announce the default on payments¹². BVB announced that starting with December 23rd 2013, BHR20 was under monitoring due to the absence of a designated intermediary to handle the payments¹³; a period of six months was established as limit for the situation to be solved. No mention was made to the arrears and BHR20 remained tradable. As of July 3rd 2014 no intermediary was appointed, therefore BVB suspended BHR20; as of July 28th 2014 BHR20 was transferred on the unlisted segment; since then no transaction was registered. In December 2014, it was announced that the town of Băile Herculane had paid a fraction (about 20%) of its arrears (Pricop, 2014). No further information was made available during 2015.

In November 2013, the mayor of Băile Herculane declared to the media that a request was forwarded to Caraș-Severin county government in order to assist the town with the payments of its arrears (Radu, 2013). In fact, this declaration was an indirect acknowledgement that Băile Herculane's own revenues were insufficient to cover the debt arrears and, therefore, the declared overcollateralization did not exist de facto.

The media also announced that only one institutional domestic investor, Certinvest¹⁴, used the existing administrative procedure and recuperated the due coupons and installments through foreclosure (Musgociu, 2013; Pricop, 2014). The actions of Certinvest were motivated by the ownership of what it considered to be an important number of BHR20 bonds. It is not clear when the legal action had taken place; the media mention the year of 2012. In February 2013, Certinvest sold the majority of its BHR20 bonds, according to Radu (2013), and the trading history indicated in February 15th 2013 a number of 14 transactions with a total volume of 6,275 bonds. The closing price for February 15th 2013 of BHR20 dropped by almost 12% compared to the previous day. It is not clear if Certinvest had notified FSA and, if notified, why the authority had not taken any action before July 2013. According to Certinvest representative, the security market regulator body was informed about the BHR20 situation; though it is not clear when (Musgociu, 2013; Pricop, 2014). The only explanation for any action or investigation in the case of BHR20 can be given by the creation of an integrated supervisory authority and by the transfer of responsibilities that took place at the end of 2012 and during the first months of 2013. This clarification offers

11 The official exchange rate on December 10th 2013 was EUR/RON = 4.4536, National Bank of Romania, [Online] available at www.bnro.ro.

12 According to Autoritatea de Supraveghere Financiară (Financial Supervisory Authority), [Online] available at http://www.bvb.ro/infocont/infocont13/BHR20_101213.pdf.

13 According to Bursa de Valori București S.A. (Bucharest Stock Exchange), [Online] available at http://www.bvb.ro/press/2013/Anunt_Primaria_Baile_Herculane_20122013.pdf.

14 Certinvest is a Romanian investment management company currently operating as fund manager for 11 open-end and closed-end domestic funds and also offering management services for private portfolios larger than RON 100,000.

no justification for what can be (mildly) interpreted as an indifferent attitude of the supervisory body. It only increased the mistrust of domestic individual investors regarding the protection of their rights. During 2013, allegations emerged regarding Certinvest BHR20 bond selling based on inside information. Given Romania's lack of clear regulations and procedures, these allegations cannot be proved. Moreover, the fact that BVB did not suspend BHR20 after the declaration of default, and only put it under monitoring due to the absence of a dedicated intermediary for handling (the absent) payments, indicates that there are no clear procedures for default even at the trading market level.

The complicated situation of BHR20 only reveals the fragility of the overcollateralization used as credit enhancement by Romanian local governments. The need for at least a reserve account or fund cannot be disputed.

The case of the town of Oravița (ORV27) seems simpler; Oravița managed to cover its missed payments, still the mistrust in its capacity to pay the coupons and installments persisted. During 2014 ORV27 was frequently traded and the price decreased abruptly from 92.32% as of May 2014 to 46.08% as of December 2014. The minimum price of 42% was reached on October 23rd after 12 trades, and a volume of 5,564 traded bonds; the activity on that day was 14 times larger than that on an average trading day for ORV27. Currently, as of the end of April 2015, the price of ORV27 recovered slightly, reaching 57%.

In November 2014, another small municipality, the town of Siret (SRE28), announced that it has difficulties in meeting the payments for the respective year; however, no default was declared (Ionescu, 2014). The announcement triggered a rapid reaction on the market and SRE28 price dropped from 98.99% as of October 2014 to 24% as of December 2014, with a minimum price of 23.90% reached on December 2nd. Currently, as of the end of April 2015, the price has begun slightly to recover, reaching 31.29%. The low price level continues to reflect the investors' mistrust despite the fact that the local government of Siret managed to pay the small arrears that occurred.

During 2014, several other municipal bonds fell under the influence of investors' mistrust concerning their issuers' capacity to meet the scheduled payments; these were: Predeal (PRD26), Alba-Iulia (ALB25A), Timișoara (TIM26), and the county of Hunedoara (HUE26). PRD26 is the only bond issued by a small municipality. ALB25A is issued by a medium-size town with other three outstanding series of bonds. TIM26 is issued by the city of Timișoara with a growing economy; thus the city also has four other outstanding series of bonds. HUE26 is issued by the county of Hunedoara; this county is one with a moderate poverty risk and a relative high unemployment rate due to the closure of the mining fields and of other industries within its territory.

The situations presented above show that Romania experienced what the academic literature has already revealed: that the bonds issued by small municipalities and underdeveloped counties represent risky investments. The absence of credit enhance-

ments, along with the absence of clear procedures to be followed, and the absence of a law regarding the default of municipalities, increase the respective risk even further.

3. Discussions and conclusion

Romanian authorities made an important change in 1998 when the new regulation allowed sub-national governments to use the capital market in order to access private financing sources. However, this important step followed by the opening of the municipal bond market segment at BVB, did not yield the expected results. In 2001, Romania's capital market had a low level of development as shown by Skully and Brown (2006), and Pop and Georgescu (2015), being deficient in providing important information like the risk free rate and easy accessible information regarding the revenue level for borrowing municipalities. Moreover, the Romanian domestic investors lacked the knowledge and sophistication for requiring and accepting the debt subordination as credit enhancement. Since the bond rating was not required, the need of external credit enhancement was completely ignored by the Romanian municipalities. The absence of appropriate credit enhancements can be considered among the factors that contributed to the underdevelopment of the Romanian municipal bond market segment mainly between 2011 and 2014.

Avoiding the transitional step represented by the municipal development funds (MDFs) in establishing a local credit market, Romania also missed out the expertise it could have acquired for the future growth of the municipal credit sector. Therefore, seeking to prove its new openness towards decentralization, Romania allowed any municipality, regardless of associated risk, to access the capital market through municipal bond financing, moreover without any appropriate credit enhancements. As presented in section 2, the capacity to reimburse the money borrowed by small municipalities came under pressure starting with 2009, in the aftermath of the financial crisis; the slowdown of economic growth and the difficulties in collecting local revenues generated cash flow gaps and delays in scheduled payments or, as in the case of Băile Herculane, the cessation of payments.

More appropriate for the Romanian municipalities would have been a segmentation of the local credit market, similar to the Czech Republic and Columbia, where the smallest municipalities borrow primarily from parastatal lenders, mid-size towns borrow principally from commercial banks, and large cities mainly use municipal bond financing, as shown by Peterson (2000).

Similar to the Czech experience, Romanian municipalities can borrow from commercial banks. However, the number of domestic banks that could be identified as offering loans for local governments through a special dedicated section on their websites is small, only five banks out of 28. The five banks are the Romanian Commercial Bank, Raiffeisen Bank, Bancpost, CEC Bank, and Eximbank; the last bank specifies that it offers only investment loans for municipalities. The dominant position of the Romanian Commercial Bank on the domestic credit market is highlighted by NALAS (2010). Also a German bank, Dexia Kommunalbank Deutschland is an active lender

to Romanian municipalities through its subsidiary Dexia Kommunalkredit Romania Ltd¹⁵. Given the relative small number of outstanding municipal bond issues, of which about one third are successive series launched by the same local government, it is reasonable to believe that currently, the bulk of private borrowing at local level relies on commercial banking. Due to the private nature of bank contracts, the collateral required by banks could not be determined.

In order to improve the municipal bond market profile, Romanian local governments should not ignore credit enhancements for any future bond issue. At the level of the internal credit enhancements, the existing overcollateralization should be completed by a reserve fund or account that can be rolled over at the level of every year, holding in reserve only the amount needed to cover the payments for the respective year.

The problems that occurred in 2013-2014 with the small municipalities of Băile Herculane (BHR20), Oravița (ORV27) and Siret (SRE28), and to some extent with Predeal (PRD26) indicate that these local governments need to be monitored even if the amount they borrow is small and their access to municipal bond financing is infrequent. Concerning this matter, for Romania the most appropriate solution is bond pooling, with all of its advantages. Given the recent evolutions in European Union countries such as Germany, France and Italy, the creation of a central Local Government Funding Agency (LGFA) or several LGFAs at regional level would be an important step ahead. Moreover, the creation of LGFAs in Romania could be supported by Europe 2020 Project Bond Initiative. LGFAs could either act as parastatal lenders or could be shaped using the model of municipal bond banks (MBBs). Either way, they will increase the sub-national governments' possibilities to access private financing sources at low costs, offering external credit enhancements and assistance, while lowering the risks for investors through the creation of a diversified loan portfolio.

Nevertheless, Romanian central and local authorities should also increase their transparency, mainly at sub-national level, through a standardized disclosure format of respective government financial position and audited financial situations. Moreover, the diffusion of accurate and timely information is of outmost importance in order to keep the investors' trust and interest alive.

Last but not least, there is a need for a clear legislation, monitoring and information release procedures in the case of local governments' default or bankruptcy.

The three municipalities with problems during 2013-2014 will have to face an increased investors' aversion in the years to come if they will consider municipal bond financing again. An external credit enhancement as bond pooling will be a better option, if it will be available.

15 According to European Banking Resources – ecbs.org, [Online] available at <http://www.ecbs.org/banks/romania/dexia-kommunalkredit-romania-s.r.l./view-details.html>, and Dexia Group, 2012; [Online] available at http://www.dexia-creditlocal.fr/DCL/informations-juridiques-financieres/annual-report/Documents/RA_2012_VA.pdf.

The future evolutions will reveal the path(s) chosen by Romanian local governments, and if there is a true willingness to develop a sustainable municipal bond market.

Currently, as of the end of April 2015, four municipal bond issues launched by the municipality of Bucharest undergone a successful public offering and their listing started May 4th 2015. It is expected that these four new bond issues will bust the trading on the municipal bond market segment. Nevertheless, they will not solve the above mentioned problems, and will not excuse the authorities from avoiding the necessary decisions concerning the sustainable development of municipal bond financing in the years to come.

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