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Course: Public Administration and Government

Research Project

Municipal Bonds Market in Brazil: a study on local financial performance and alternatives

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1. Introduction

On the development or transitional economies the combined effects of decentralization and urbanization have increased the demand for public services provided and financed by the local government. Against this, tight fiscal policies have constrained the government budgetary transitions from central to local governments. Scarce budgetary resources have resulted in big gaps on local levels investments. What is expected is that, in this scenery, private capital would be necessary if the local services wanted to maintain the minimum patterns that could support the urban demand.

The local governments have been taking responsibilities from the state and federal government because of their incapacity and even growing and job policies have been local governments' charges.

The largest municipalities have assumed a range of functions, public service provisions, infrastructure, antipoverty and job policies, not considering if their budgetaries can sustain these pressures. (REZENDE, 1997:89)

This scenery of decentralization, urbanization and fiscal adjustment has put the Brazilian municipalities in a critical situation in terms of developmental projects financing, mainly those ones for urban infrastructure.

What we notice is that nowadays all over the world there is a huge pressure to the development of suitable financing mechanisms to the local level. (FERNANDES, 2000:2)

In Brazil and all over the world local governments have been assuming major attributions on the last decades because of the urbanization process acceleration and the growing fiscal decentralization; the federal governments have repassed to the subnational powers, incomes, charges and responsibilities. This phenomenon has demanded that the projects of urban infrastructure of financing market and instruments have to be rethought. We have to provide new elements to the municipality and state public future investment discussion, in this new context that appears with the *Lei de Responsabilidade Fiscal (Fiscal Responsibility Act)*, act that rules the local financials.

In its majority the decentralization is stimulated or persued only as a mechanism of reducing central governments' deficits and as an instrument to intercept the public sector expenses. The mainly result is that local governments are assuming more responsibilities not only restricted by the execution of many tasks before performed by the government superior entreaties, as well as in the planning and financing investment projects. (AFONSO & ARAUJO, 2000)

These reasons have highly increased, in the last decades, the importance and the onus from the local credit, mainly the ones concerning to the municipalities.

However, there is a central government worry to control the public deficit, and this has created seriously restrictions to the local government indebtedness. The local indebtedness' risk to the central governments are relatively high. They can have their credit completely ruined into the international markets for subnational governments defaults. There is a real danger of the fiscal decentralization emphasizes the lack of transparency problem and tight fiscal policy.

These are the reasons why the controls and rules of local indebtedness are multiplying. In a sense, the *Fiscal Responsibility Act* , recently sanctioned in Brazil, among other rules, radically forbids a new postponement of the local indebtedness by Federal Government. It represents a fundamental improvement to neutralize the risk. Besides, as the Federal Government does not help the subnational governments, it decreases the moral hazard risk of a government to accomplish, respect and make an effort to keep the fiscal balance while the other keeps a fiscal irresponsibility because the Federal Government help is known.

2. Main question definition

With the presented situation the main question that guides the paper is:

Why there is no municipal public bond market in Brazil?

It is known that a market like this existed in Brazil but it was practically extinguished with the restrictions imposted by the government with the propose to make the fiscal adjustment. How did this market work out? Which were the features that ruled the market before its suspension? How were the incomes used with these bonds and how were they classified? Which municipalities used this mechanism?

To answer the main question, other subjacent questions must be explored. As an example:

Which are the technical and political limits to this market implementation?

Which are the municipalities' economical, political and social environmental features that should be affected by this market implementation?

How are the main actors behaving? Government, financial market, benefited actors?

How should be constituted beyond new institutional and working out market rules? Which variables should be important for the risk constitutional classification of the municipalities?

Which rules should guide the destination of the received resources for the bonds issues?

How should they be paid?

How can we classify the Brazilian municipalities by their risks?

These questions contributions will be easily seen with our object of study presentation.

3. Object of study

In our point of view, an increasing resource gap, the social and the infrastructure demand grow make the need for search of a major efficiency in the policies toward the development and of the infrastructure expansion and the maintenance.

So, the private sector participation and the enlargement of the capital expenses are indispensable subjects that should be in the government agenda, both municipal and state governments. As the current expenses, in the majority of the cases, are not enough to finance larger investments, so financing issue and the posterior indebtedness will be the subject.

The paper stars by the idea that it is necessary to create a new model for the public policies financing, that should be coherent with the municipal financial needs respecting the strictness budget and considering the new political and institutional scene created by the LRF (*Fiscal Responsibility Act).*

We are sure that the LRF does not limit neither it is impracticable for the municipal financing, but, on the contrary, it creates conditions for the development of the credit and capital market to be more reliable and transparent.

In this scenery ways and possibilities of concessions should be discussed to the local governments, analyzing the world trends and watching the conditions for an existence of a municipal bonds' market as an incentive way for the local financing. The bonds risks and the potential investors are key elements in this analysis.

Recent studies (LEIGLAND, 2002), (DAHER, 2002) show that the advantage of using municipal bonds to finance the urban infrastructure are more evident to the policy makers on the emergent economies, and some of them are making efforts to accelerate the bond market development in their countries. Lots of these efforts use the American municipal market strength as a guide to suggest kinds of features that are necessary to attract senders and investors to the market.

It is often hard to recreate the American market features at short term in these countries, but the policy makers are using high technology to approximate the essential market features. Some experiences from the countries that established bond market should be deeply analyzed, and some of their innovations should be as basis for the creation of new policies. A deep study towards it should be encouraged.

United States municipal bonds finance projects in the education area, electric energy, transportation, health and others. Local governments depend more and more on the debt issue as a primary source of resort of the capital projects. State and local government increasingly depend on debt issuance as a primary source of funds for capital projects. The main objective of municipal bonds is to raise funds at the lowest possible cost and risk to the jurisdiction. The purchase of municipal bond entails a risk and the buyer expects to be compensated accordingly. A municipality whose security is perceived would consequently have to pay a higher interest rate when issuing bonds. The municipal security market provides an efficient mechanism for financial local government capital projects.

The rating that a municipality's bonds receives from the rating agencies has some implications on its financial well being. Municipalities will have an incentive to improve their ratings if it can be demonstrated that the change will significantly reduce their net interest cost.

The discussion about local development financing in Brazil is leading to a moment that more discussions should be necessary about the alternatives to be followed. Talking about indebtedness, the more emphasized theme, it is important that the rules allow the utilization of this important financing instrument in the local level, searching for ideas together with international experiences that converge to financial rescue operations, with presence of the monetary and fiscal suitable controls, and not allowing the irresponsibility fiscal.

We can say that the problem has been already discussed among expressed non-governmental actors and technical institutions liked by the government So, what is expected is that the local financing is a theme that will be in the government agenda in the near future.

4. Preliminary Literature Review

Few authors have the concern to discuss the municipal bonds in Brazil. Excepted by FERREIRA (1999) that made a comparison between the indebtedness in Brazil and the USA, with some mentions of the municipal bonds market and GREMAUD (2000) that studied the municipal possibilities of indebtedness, including suggestions for the municipal bonds market existence. The authors are much more worried about to discuss the credit market to the municipalities as the capital market. FERNANDES (2000) says that in a suitable law context and with all the macro foundation in order we can say that local governments can have access to the domestic and international credit market to finance great size projects under the capable authorities to control with transparency and following pre-established rudiments from fiscal responsibility. GREMAUD (2000) agrees with this position and adds that we can notice a lot of critical positions about the municipal indebtedness showing that the macro economical control should be condemned if it was possible to the subnationals entreaties take loans. However, in his opinion as long as you build an institutional compatible apparatus this risk is less or even eliminated. No matter how is the apparatus, the idea is that the budget restriction will be strict to the subnational entities. PETERSON (2000) believes that local credit system has been becoming an important element on the developmental strategy because they are located at a crossroad among the three more important trends that affect the developing world: quickly urbanization, decentralization and fiscal adjustment.

These factors have increased the participation of the ones involved with the propose to find effectives ways for the local and state authorities has the capital market access.

These concerns are enough for us to imagine that this subject will be in discussions about the agenda definitions in Brazil. About the financing via bonds the laws today are more strict, and in the majority cases it is completely prohibited.

An indicator that the issued bond market by subnationals' entities are presenting a major importance, is the fact that the financial market is already been prepared to a public bond issue from the states and the municipalities, even with the existent impossibilities.

The perception is that the LRF opened room to the risk classification of the states and municipalities. This classification will measure the payment capacity of new indebtedness to be done in the future from the state and municipal public bonds issue. This risk is also known as sub sovereign or subrating, because it is different from the *Risco-Brasil* (country risk) measured by international agencies and it refers to bond risks from subnational entities. This risk will be reflected on the interest rates required by these papers buyers. This is the financial market consultants and economists expectation.

Today, if the states and the municipalities were in the market to catch resources (in fact, the majority is obstructed because they did nor reach the conditions that were imposed in the last debt postponed agreement with the Federal Government, previewed by LRF) they would be subjected to Brazil-risk measured by international agencies and represented by the risk prize of the external debt bonds of long term that were negotiated at the international market.

With the *Lei Fiscal* (Fiscal Act), Federal Government is forbidden to assume states and municipalities debts. The consequence is that the state and municipality governments have to go to the market to finance them. As the National Treasure will not pay the "bad payers" sending the moral hazard, the resources will be more and more scarce, and when lending from the public sector the creditors will use the same criteria that are used to finance a company.

The Fiscal Act seems to insert in Brazil the risk notion into the financing system. Until the act it was settled that to finance the public sector was a low risk operation and with high profitability. It happened because the Federal Government could help the states and the municipalities in financial difficulties (forbidden fact by the LRF). History confirmed the perception of the Federal Government never would allow a breaching state or municipality in a bad situation, because if it did so it would infect the National Treasure papers. The LRF strictness, if it is done as predicted, will bring credibility and transparency to the system. With the Fiscal Act the market can start a new era with distinguished features that will collaborate to create a good environment for new issues. When a public paper is bought or lent to the states and municipalities the creditor will do the same criteria analysis adopted for the credits to the private companies that emphasizes the federal financial system – *Caixa Econômica Federal* (CEF), *Banco do Brasil* (BB), *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES) – will be much more selective in the credit concession.

These institutions, that were always great resources suppliers to the states and municipalities, reduced their financing and the alternative that will last, in our point of view, is the market mechanisms improvement.

If a municipality wants to be in debt and it gets a good classification because it has a good record of "good payer", probably it will obtain a better grade than the *risco-Brasil*. The most probable is that the sub sovereign risk evaluation is limited to measure the payment capacity in local current rate, as only the biggest states and capitals would have conditions to issue papers abroad and assume a dollar debt.

The LRF is not consolidated, and even the implementation of a market of subnational bonds are not in the government agenda, nothing obstruct that rating companies start to develop a methodology to measure the sub sovereign risk, that signalizes the retalking about the indebtedness and the local bonds market.

Today the state and municipality public bonds are practically eliminated. The existent papers were federalized on the last debt postponed agreement and to issue them again the state and municipality governments need to reduce their indebtedness level to the ones established on the contracts. However, a room should be opened with the new indebtedness limit definitions to the Federal Government, states and municipalities.

To MATIAS & CAMPELO (1999), capture resources from the municipality direct administration into the capital market have not presented the needed development to allow that it could be the mainly source of resort to rise the development. We have to understand now why this situation is happening and propose actions that can collaborate with this long term financial source, that has used for years in the developed countries like USA, and that has been developed today by several emergent countries.

In general, some authors agree that theses facts happens because of the lack of specific education of technicians and directors, of the constant ingestion politics in the market, of the short term vision from investors and because of the inexistence of continuity mechanisms. Adding it to the inexistence of the co-signer's agreement mechanisms, warranties and insurance, besides specific rules necessary to the action of the municipality's public administration into the capital market. (GREMAUD, 2000), (DAHER, 2000), (LEIGLAND, 2002).

We can mention some factors that until today did not allow the strengthening of municipalities bonds in Brazil, among them: the capital market is still incipient, there is no medium and long-term planning, there are no mechanisms of transparency budget control, there is a lack of technical knowledge to the public finances technicians and a lack of specific law to the financial issue from the municipalities.

The process of the municipalities' public administration should be reviewed, elaborated and developed aiming to create a transparency and effective relation, beyond to start a long-term strategic process planning that consider several municipalities' sectors, their agents and possible alternatives.

There were several attempts on creating and developing the municipalities bonds market, although they do not continued because of the lack of transparency and the local governments' capacity to accomplish its obligations and mainly to put into effect the resources into the projects that they were captured in the market.

Nowadays, the law does not allow the access to the capital market, except to refinance the total debt amount. Besides, the present law empowers Banco Central (Central Bank) and Federal Senate for them decide the indebtedness course in the subnationals governments. These factors reflect in the specific public bond case that suffer the effects of a incipient capital market, of a lack of mechanisms of budget control and specific laws as the Senate resolutions on the indebtedness limits and on Banco Central to assume new debts.

To MATIAS & CAMPLEO (1999) the attempts of trying to create and develop the bonds market collided with the lack of transparency and the local government capacity to accomplish its obligations and mainly to put into effect the resources into the projects that they were captured in the project. (GREMAUD, 2001)

The LRF meets these market needs, installing rules that increase the transparency and are strictness with the budget planning and control.

The North-American literature about public bonds and especially about municipality bonds is rich it is focused on themes as profitability and the specificities of the tax-exempt bonds and in the determination on the variables that determinate the municipalities risk classification.

Authors study the sender features with the bonds classifications to determine the costs of the borrowing. LIU & SEYYED (1991) look carefully into the social-economical impacts and the bond ratings of a municipal bond issuer on its borrowing costs . CAPECI (1994) and RIVERS & YATES (1997) study the impacts of certain internal and external municipal factors on municipal net interest costs The authors noticed that although the exact formulas used by the rating agencies are secret and confidential, the empirical analysis show that the sender features insignificantly influence the bond classification, as the current debt, the indebtedness capability, the incomes stability and the per capita income. Many of these factors are linked to regional economists and are exogenous to the government control. (DENILSON, 2001)

SIMONSEN, ROBBINS & HELGERSON (2001) look carefully if the population and the kind of sales influence the interests' taxes. They . examine if population and sale type influence interest rates. They proxy financial management capacity using government population size and test whether this has an effect on interest rates. The method of selling the municipal bonds is also examinated. The authors test if the bond are sold competitively or through negotiation.

POTERBA & RUEBEN (1999) try identify if fiscal institutions affect municipalities´ borrowing costs and the risk premia on their bonds. They pay attention to the effect of tax and expenditure limits on borrowing costs, and find that state fiscal institutions affect the required return that lenders demand when states enter the market for tax-exempt bonds. For the authors, "a state with a binding tax limitation statute will face, on average, a borrowing rate between 15 and 20 basis points higher than a state without a tax limitation law" (p. 204). They also confirm that antideficit provisions in the state constitution have na important effect on borrowing costs. Those states with weak antideficit provisions face borrowings costs 10 to 15 basis points higher than similar stricter antideficit rules.

5. Methodology

As it is a scarce theme in the economical Brazilian scenery the bibliography referring to the main theme is based on the international periodicals. Among them we can highlight magazines directed to the economy, finance, public administration and political science , with releases that varies on monthly to trimester, besides daily newspapers and general publications.

We try to develop a methodology to evaluate the government performance and credibility. We will elaborate a pattern of determination of the mainly variables that affect the municipalities' financial situation and beyond them present a map of the municipalities' financial performance and their possible risk classification.

The utilization of a comparative analysis with in development countries that are having this experience, observing their institutional features or the remodeling that allowed the local financial mechanism increased via capital market. They should be analyzed in a specific way, the variables that allow the success of this kind of mechanism for us to develop a pattern that can serve as supporting or collaborates to the implementation of a local financial alternative based on municipalities' private bonds. Among these variables we can highlight the institutional arrangement that rules these bonds issues, the control over the subnationals governments indebtedness, the transparency and the market credibility.

The countries where this market is still established has to be a reference for analysis providing elements that contribute to the maintenance of its market as an important source of subnational financing.

The paper must be developed with comparative studies and a case. After the bonds' market pattern elaboration it could be proposed the simulation of some municipalities based on the established criteria to a risk classification to the municipalities showing or not that pattern viability.

Some patterns were developed and applied in the American bonds' market. We will use as basis the pattern developed by ANMAR, DUNCOME, HOU, JUMP and WRIGHT (2001). This pattern develops a methodology to evaluate the government financial performance and credibility and shows this approach to an American municipalities sample. The authors use FRBS (fuzzy rule-based system) that uses the economical, fiscal and financial information as a measurement of producing financial performances rankings from the municipalities. The FRBS credit ratings are highly correlated with actual Moody's ratings for these cities. FRBS have the potential of enhancing the rating process by standardizing the information used and encouraging consistent rules about what combinations of inputs result in good, fair, or poor performance.

Bond ratings may directly affect the marketability of such bonds and ultimately the interest rates jurisdictions must pay on their debt. Not surprisingly, there has been significant interest in the bond rating process.

A number of studies have tried with mixed success to replicate bond ratings and determine what factors most influence ratings. The rating agencies themselves have been fairly vague about the key information that influences rating decisions. Moody's Investors Service, Standard & Poor's, and Fitch all indicate that economic, fiscal, debt, and administrative factors are considered and identify a core of ten to 20 variables that receive attention. However, as indicated by LOVISCEK & CROWLEY, "Rating agencies have never publicly revealed either what variables are, on average, the prime determinants of bond ratings, or the weight to assign each variable." (1996, p.34)

Like the rating process, our approach uses both quantitative and qualitative factors and reflects the contextual judgment of evaluators. In contrast to the rating process, however, a FRBS includes an explicit set of rules or judgments about how inputs should be combined into a performance measure that is applied consistently to all cities in the sample.

We begin by providing a brief review of the factors that rating agencies discuss as being important in developing bond ratings and the findings of statistical analyses of the determinants of bond ratings. Based on the factors identified in this review, we develop an FRBS emulating the credit rating process.

6.Cronogram

The prevision of the research realization, including the comparative analysis, a case study, the pattern elaboration and the simulations' applications, writing the chapters and conclusions will be done throughout the next twenty four months for the examining board evaluation at the end of the second semester of 2005.

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