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Local Government Bonds: Capital Market Financing of Local Governments in Hungary

Theses of Doctoral Dissertation

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The Significance of the Research Topic and its Actuality

Following the 1990s, after the termination of the economic transition the Hungarian local government system had to meet new challenges and expectations. In the first place local governments ,which are short of resources, have had to perform probably one of their most important tasks: *to develop their resource absorption and fund-raising capacity,* which would ensure the necessary financial tools execute development (Kopányi-Vigvári 2003). One of the diverse methods of using outside resources is the usage of loan resources, among which resource acquisition via local government bond issuance should be listed as well.

What are the factors and the phenomena accordingly which *motivate a new and deeper examination of the topic?* The enhancement of the resource-deployment capacity of the local authority sector is a fundamental condition to ensure the necessary development resources at local level. The extension of the capital absorption capacity at sub-national level is of high importance also from the EU's support opportunities' aspect. Resources provided by outside players – exactly motivated by business reasons - and thus strictly monitored ones play an important role in the improvement of public utility services' efficiency as well. At the same time higher costs of loan sources can be counterbalanced by social costs of postponed investment, by intergenerational sharing of borrowing burdens or by potential stabilization function of borrowing. The issue of local government bonds means an attractive alternative while financing local expansion against bank loans or even central investment loans thus increasing local governments' financing scope for action.

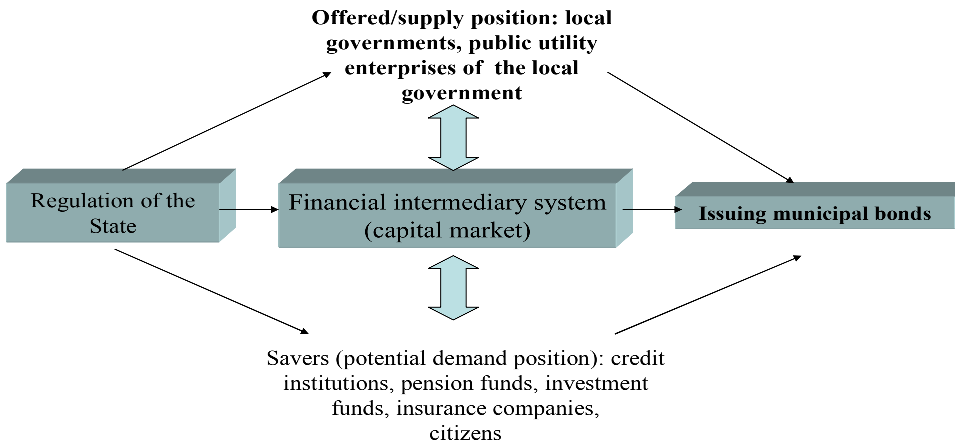
Bond financing possesses *several valuable and unique characteristics, which directly result from the bond's stock character.* By reason of a bond's *marketability* it also raises savings of numerous market players and makes it possible to serve local development. Moreover, by its *negotiability* compared to bank loans it is more elastic in general and tailor-made instalment schemes, cash flow constructions can be elaborated. At the same time there is an opportunity − taking advantage of strength of potential *local linkages* − to raise and use funds for expansion at favourable than market conditions resource costs through public issue of bonds.

The timeliness of my research is primarily proved by the fact that compared to the mid-1990s considerable changes have happened to several outside and inside conditions which affect local governments' financing both directly or indirectly. Since these changes, in their entirety, can be considered positive according to me, I reckon that in a manner by the beginning of the 21st century bond issue can be regarded again as a true alternative which is based on market economy conditions and regulation systems.

Enlargement of Research Goals

Three players (parties concerned) can be detected in the procedure of local government bond issue for the sake of local developments. I refer to the Supply Side as potential issuers of bonds, i. e. players at subnational level, primarily settlement-level local governments accordingly. *Demand side* comprises savers and investors who are willing to purchase bonds. The model's third player is *central government*. Since local governments belong to the state budgetary system and institutional investors are the most considerable representatives of the potential demand side though belong to the profit-oriented competitive sector, different approach should be used while examining both the demand and the supply side. In accordance with the previous it is both logical and feasible the partly separated analysis of the two sides.

FIGURE 1



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According to this *the theoretical-methodological part* makes up the framework for the results of the empirical surveys to be presented in later chapters of the dissertation to do the assessment of the Hungarian situation. So the aim of the research is to establish such a general model along with forming the theoretical background relating to the topic which will then help describe and understand the interactions and the connection system of players taking part in bond financing - local governments, central government, financial mediator system and partly savers.

The second group of the research aims includes the examination of inside and outside conditions of Hungarian bond financing at present. I understand “outside environment” primarily as the frameworks regulating the issue of a bond as a stock and loan financing of local governments. Under the notion “inner conditions” I mean potential issuers’ are adequately informed, professionally trained and motivated. The aim of the research is to survey local governments' attitude towards bond financing as well, that is to determine factors not necessarily rational but sometimes subjective, which can result in impeding resource deployment through bond issue.

The third group among the research aims includes the examination of *future opportunities* of bond financing in Hungary. In relation to this I aim to survey the willingness of Hungarian local governments to issue bonds, along with the determination of outside and inside factors - here enumerating the potential problems of regulation as well -, which can be the barriers or obstacles to spread of bonds.

To sum up, the aim of the research in relation to the supply side is *to create the theoretical model of local government bond financing; the critical analysis of the ongoing Hungarian practice and its outside and inside conditions. Based on the previous I aim to judge the feasibility of bonds at national level andto conceive assumptions and solution proposals concerning the future.*

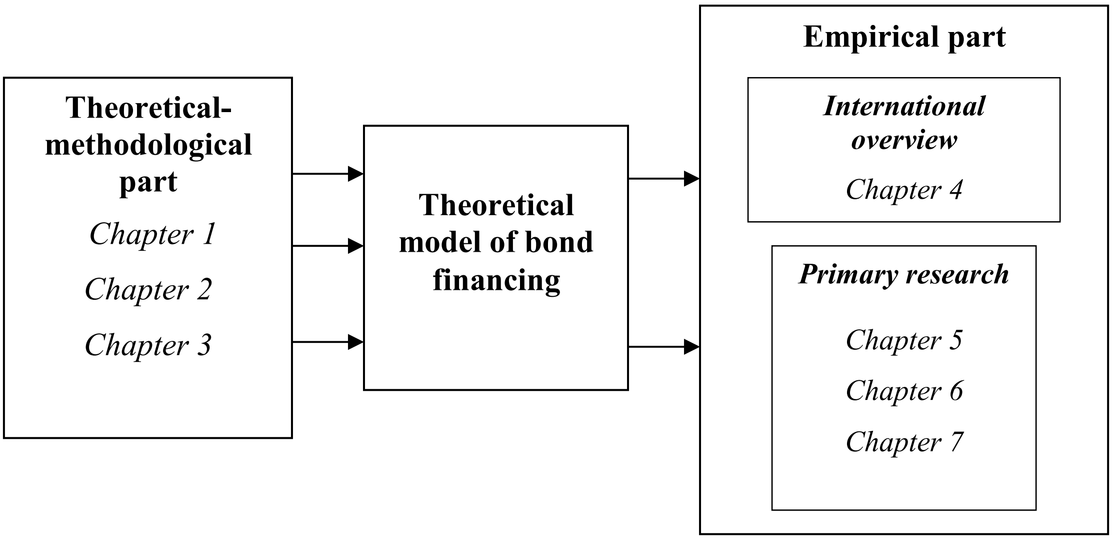
The Structure of the Dissertation

In the sense of the research aims exposed earlier the dissertation contains *theoretical and methodological parts and independent empirical researches. In the three first chapter*s of the dissertation research aims are determined and the significance and actuality of the research topic examination was mentioned. I defined the essential concepts needed for additional research, e. g. the definition of local government bond. *In the third chapter I examined the connection system of local governments, i. e.* the supply side, *with the central government,* the latter being the third important player involved in the process of the bond financing,meanwhile concentrating on central regulation of loan financing primarily.

Following the first three theoretical chapters of the dissertation *the consecutive four chapters include empirical researches and analyses. In chapter four I pictured an international overview and a comparison* about bond financing of given countries' local governments. *In chapter five* - based on the theoretical model built up in the earlier one - *I* *measured and assessed the outside conditions of Hungarian local governments' bond financing.*

FIGURE 2

The Structure of theDissertation



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In the next chapter, namely Chapter Six of the dissertation *I presented and analysed Hungarian local government bond issues in the past few years* – this way testing hypothesis four of the research concerning the Hungarian practice of local government bond financing. *In chapter seven* I tested *the inside conditions* of the Hungarian *local governments' bond financing* at first. In the last extended thought flow of the dissertation I tried to complete *the theoretical model* of local government bond financing built up earlier *with empirical content,* presenting the most important correlations and characteristics revealed earlier.

Preliminary hypotheses

I had the following hypotheses concerning the previously expounded research aims related to the above described general theoretical model functioning with Hungarian characteristics and to the players' connection system:

H.1. Central Eastern European countries experiencing identical periods of economic transition, local government loan and capital market creation have the same sections, problems and solution approaches.

H.2. It is true that by the beginning of the 21st century institutional frameworks and systems of regulation relating local governments' bond financing were created in Hungary, the regulation at its actual form and state is not suitable to meet challenges deriving from the joining to the European Union.

H.3. One of the determining obstacles of the development of the Hungarian local government bond market is the market's negligible size and the low liquidity level of the bonds.

H.4. Contrary to the changes in the outside factors the practice of local governments' bond financing follows the pattern detected in the past decade even today and observing its economic features it hardly differs from bank borrowing in practice.

H.5. In today's Hungary the majority of local governments at settlement level are not only short of knowledge about principles of economics relating loan financing that includes bond financing, but compared to the real situation they judge the actual Hungarian conditions of bond issue in an irrealistically negative and pessimistic way.

H.6. Although an increasing number of Hungarian local governments at settlement level will take advantage of the opportunity of bond issue resource acquisition expectedly in the forthcoming years, several changes are needed to benefit from all of a bond's positive characteristics and advantages deriving from it being a stock as well and the organization and operation of the local government bond market.

The Results of the Research

The most essential elements of the evidence for the six research hypotheses can be summed up as the following theses:

T.1. Among Central Eastern European countries the development of local governments' loan and capital market in the Czech Republic, Poland and Hungary can be described with identical sections, problems and solution approaches. All this means that the economic transformation is identical in the case of countries being in the same period - in time almost totally parallelly to each other - *in their characters practically identical sections, developmental periods can be observed.* During the period from the beginning of the political transition to the joining to the EU can be devided into three parts unambiguously. *The first section's* most important feature is local governments' loan resource deployment with an almost negligible measure, primarily in the form of short and intermediate-term loans; bank sector's minimal interest in local government sector and the appearance of the first local government bonds at the end of the period. *The second section* can be described with the significant increase in the measure of the outside loan resource deployment; along with commercial bank credits, various environmental funds and loan sources provided by credit programs appeared and in its totality the central regulation was unsettled and liberal at that time. The *third*, in its totality restrictive *period* can be described as follows: with a regulation concerning local governments' loan resource deployment though getting stricter; the creation of a practically existing and valid system of regulation; and as a result a considerable decrease in local governments' borrowing and bond issue; and within credit financing the increase of state investment credits' proportion.

T.2. It is true that by the beginning of the 21st century institutional frameworks and systems of regulation relating local governments' bond financing were created, the regulation at its actual form and state is not suitable to meet challenges deriving from the joining to the European Union such as regionalisation and self-organisation of local communities. The law itself does not allow for regions and multipurpose regional associations to issue bonds and significantly limits such opportunities for local government service companies. At the same time it is to be welcomed that capital market regulation treats local governments in a different way in the course of the issue, facilitates their administrative burdens and thus expresses investors' special information need towards the sub-national issuer. The regulation of local governments' credit financing is primarily based on the limiting effect of the credit margin, that is a one-sided approach of the problem in my opinion; *in any case it would be worthy to apply more sophistic systems,* even with subjecting the borrowing level of the local government sector to public finance indebtedness or defining different limit values by settlement categories. Likewise, I consider justified the treatment of credit limit obligations based on different weights. I think Local Government Bankruptcy Act creates an optimal basis and background to judge the credit risk of bonds, although other alternative forms of risk management are not replaced by it.

T.3. One of the main obstacles to the development of the Hungarian local government bond market is the firm crowding-out of government securities. At the same time regulation relating to the management, borrowing and debt settling makes it possible at least in theory that *local government bonds appear with an independent risk profile, which differs from government securities'.* Though risk transparency, standardization of bonds as financial tools and the adequate issue volume are all necessary. In the case of local government bond financing *I deem reasonable to differ and determine three economies of scale*, based on the economic characteristics and benefits of the bond which prevail during the issue. The first limit of economies of scale is in connection with the economic problem of the choice between bonds and bank borrowing of which value is based on my estimation is 500 million HUF at public issue. The size of the second obstacle, which is in connection with bonds' marketability, can be defined at sectoral of which volume is around 150-200 billion HUF at present based on my calculation. The third limit of economies of scale derives from another level of liquidity and can be characterised and determined by the transformation of maturity. Based on my estimation the value of this limit is about 5,000 billion HUF in the Hungarian bond market.

T.4. *Though* s*ome changes have happened* after the expansion of income and foreign securities bonds and after call option, which makes bonds' cash-flow more flexible - appeared in bond contracts; the practice of national local government bond financing follows the scheme that estableshed in the previous decade: the characteristically medium-term bonds are almost solely of private placement. The value of customer loan banks issue usually does not exceed 2-3bnHUF, i.e. this type of resource raise *slightly differs from bank borrowing considering its economic characteristic*. Contrary to this issuer local governments consider positive to deploy outside loan resources, which derives from the more flexible cash-flow construction, the fact that the resources are at disposal in one sum and the relatively low transaction costs and the tolerable administration burdens at issuance. At the same time in Hungary *there are valuable hidden potentials in bond financing*, for both the expansion of local governments' scope of action – local resources and by capital-deployment from institutional investors − and relating to the management of financial risks deriving from loan financing.

T.5. Knowledge relating to loan and bond financing of Hungarian local governments is extremely low, 30-40% of financial managers of settlements have not any learnings relating to the topic in practice. The least right answers were given to statements relating to bond financing itself though most people knew that borrowing's prioriy is investment. Local governments' knowledge level can be divided into and described by *three different levels*: factual knowledge of loan financing, knowledge of legal and economic studies and of capital market. In addition, it renders even more difficult that *12-18 % of the settlements clearly believe in fallacies* relating to outside loan resource deployment, that is they have negative preconceptions. As far as the local governments, which have not been involved in any opportunities of bond financing recently, *consider outside conditions, actual Hungarian circumstances* – relating information duties, duration of bonds, the extent of resource and transactional costs − *unduly negative.*

T.6. Even if the outside conditions of bond issuance are permanent one can unambiguously state that *the proportion of local settlements choosing bond financing will significantly increase in the following years*. In the evolution of this increase it can be important to represent the auspicious experience of settlements issuing bonds earlier, i.e. its indicator effect and the defeat of prejudices and negative stereotypes in relation with loan and bong financing. At the same time examining the potential demand side I can reckon that local government bonds will constitute purchase targets for institutional investors – out of which primarily investment funds – in case they succeed in ensuring the actual risk hole in the Hungarian capital market standing between the two types of stock: government securities and shares being positioned on the opposite edges of the risk scale. Consequently, in order to benefit from the economic advantages deriving from local government bonds being stocks during financing, I consider inevitably *necessary that the settlements appear together and united in the capital market at regional level*; which would result in higher issue value appearing coordinated and periodically in time, the alignment and standardisation of bonds' cash-flow and united risk profile.

Bibliography/Literature Referred to in the Thesis Booklet

Kopányi M.-Vigvári A. (2003): Az önkormányzati szektor forrásbevonó képességének növelésével kapcsolatos gazdaságpolitikai kérdések. -*Pénzügyi Szemle*, 48. évf., 11. sz., 1071-1088 o.

Vigvári A. (2005): Forrásabszorpció és forrásszabályozás.- Vigvári A. (szerk.) *Félúton. Tanulmányok a helyi önkormányzatok finanszírozási rendszerének továbbfejlesztési lehetőségeiről*. Budapest, TIMP Kft. 185-206 o.

The Author's Publications and Conference Papers Relating the Topic

Publications

Kovács Gábor (2005a): Future Perspectives for Local Government Finance in Hungary by issuing Municipial Bonds. *Európai Kihívások III. Tudományos Konferencia tanulmánykötete,* Szegedi Tudományegyetem, Szeged, 87-92 o.

Kovács, Gábor (2005b): Financing Local Investments by Issuing Municipal Bonds. *„Átalakulási folyamatok Közép-Európában" konferencia tanulmánykötete*, Széchenyi István Egyetem, Multidiszciplináris Társadalomtudományi Doktori Iskola, Győr, 107-113 o.

Kovács Gábor (2005c): Az önkormányzati hitel és kötvény a hazai és a nemzetközi irodalomban. *OTKA-tanulmány*. Magyar Tudományos Akadémia Regionális Kutatások Központja, Pécs.

Kovács Gábor (2006a): A helyi fejlesztések finanszírozása önkormányzati kötvénykibocsátás által. „*Kihívások és trendek a gazdaságban és a közszférában napjainkban*" *konferencia CD*, KHEOPS Automobil - Kutató Intézet, Mór.

Kovács Gábor (2006b): Az önkormányzati kötvénypiac kialakulása és fejlődése a kelet-közép-európai országokban: tanulságok és lehetőségek *„A magyar gazdaság versenyképessége" konferencia tanulmánykötete*, Budapesti Műszaki Egyetem, Gazdálkodás- és Szervezéstudományi Doktori Iskola, Budapest, 184-197 o.

Kovács, Gábor (2006c): Financing local governments in Hungary by issuing municipal bonds: Experiences and future prospects. *„Fiatal regionalisták V. országos konferenciája" konferencia tanulmánykötete*, (megjelenés alatt).

Kovács Gábor (2006d): Elméleti alapvetés az önkormányzati beruházások nyilvános kötvénykibocsátás útján történő finanszírozásáról, *„Tavaszi Szél 2006" konferencia tanulmánykötete*, Doktoranduszok Országos Szövetsége, Budapest, 465-468 o.

Kovács, Gábor (2006e): Financing local investments in Hungary by issuing municipal bonds. *„European Scientific Conference of PhD. Students in Brno"*, *konferencia CD,* University of Brno.

Kovács Gábor (2006f): Az önkormányzatok kötvénykibocsátásának állami szabályozása, mint pénzügyi stabilitásuk fenntartásának záloga. *„Pénzügyi stabilitás mikro-, mezo- és makroszinten" konferencia tanulmánykötete*, Széchenyi István Egyetem KGYGI, 101-114 o.

Kovács Gábor (2007a): Félúton. Tanulmányok a helyi önkormányzatok finanszírozási rendszerének továbbfejlesztési lehetőségeiről (recenczió). -*Tér és Társadalom* (megjelenés alatt).

Kovács Gábor (2007b): Következtetések és javaslatok a hazai önkormányzatok kötvénykibocsátás által történő finanszírozásával kapcsolatosan. *„A helyi közigazgatás korszerűsítése és kapacitásépítése képzési programok, tanácsadás és infrastrukturális fejlesztések révén*", Magyar Közigazgatási Intézet, szakértői tanulmány (megjelenés alatt).

Kovács Gábor (2007c): Municipal Bonds in Hungary. *OTKA-tanulmány*. Magyar Tudományos Akadémia Regionális Kutatások Központja, Pécs (megjelenés alatt).

Kovács Gábor (2007d): Önkormányzati kötvénykibocsátások Magyarországon. *-Tér és Társadalom* (megjelenés alatt).

Kovács, Gábor (2007e): Financing Local Governments in Hungary by issuing Municipal Bonds: Experiences and Future Prospects. *„Leadership and Management in the Public Sector: Values, Standards and Competencies in Central and Eastern Europe", The Network of Institutes and Schools of Public Administration in Central and Eastern Europe*, Conference Proceendings (megjelenés alatt).

Conference Papers

Kovács, Gábor: Future Perspectives for Local Government Finance in Hungary. *„EDAMBA 8th International Science Conference within European system in doctorands education"*. Nove Zámky, 8 April 2005.

Kovács, Gábor: Future Perspectives for Local Government Finance in Hungary by issuing Municipal Bonds *„III. Európai kihívások" konferencia, Szegedi Tudományegyetem*, Szeged, 2005. november 3.

Kovács, Gábor: Financing Local Investments by Issuing Municipal Bonds *„Átalakulási folyamatok Közép-Európában*", *Széchenyi István Egyetem Multidiszciplináris Társadalomtudományi Doktori Iskola*, Győr, 2005. december 2-3.

Kovács Gábor: Az önkormányzati kötvénypiac kialakulása és fejlődése a kelet-közép-európai országokban: tanulságok és lehetőségek. *„A magyar gazdaság versenyképessége"*, *Budapesti Műszaki Egyetem, Műszaki Menedzsment Gazdálkodás- és Szervezéstudományi Doktori Iskola*, Budapest, 2006. február 1.

Kovács Gábor: Elméleti alapvetés az önkormányzati beruházások nyilvános kötvénykibocsátás útján történő finanszírozásáról. „*Tavaszi Szél 2006", a Doktoranduszok Országos Szövetsége*, Kaposvár, 2006. május 4-6.

Kovács Gábor: A helyi fejlesztések finanszírozása önkormányzati kötvénykibocsátás által. „*Kihívások és trendek a gazdaságban és a közszférában napjainkban*" *I. Kheops Tudományos Konferencia*, Mór, 2006. május 31.

Kovács Gábor: Az önkormányzatok kötvénykibocsátásának állami szabályozása, mint pénzügyi stabilitásuk fenntartásának záloga. *„Pénzügyi stabilitás mikro, mezo és makro szinten" Szervező: Széchenyi István Egyetem Jog- és Gazdaságtudományi Kar, Kautz Gyula Gazdaságtudományi Intézete*, Győr, 2006. szeptember 21.

Kovács, Gábor, : Municipal bonds in Hungary „*New tasks, approaches and spatial perspectives in public policy*" *conference, org. by International Geographical Union Commission on Geography and Public Policy*, Bratislava, 19-21 October 2006.

Gábor Kovács: Financing local governments in Hungary by issuing municipal bonds: Experiences and future prospects. **„***Fiatal regionalisták V. országos konferenciája*." *MTA*

RKK-Széchenyi István Egyetem Multidiszciplináris Társadalomtudományi Doktori Iskola, Győr, 2006. november 10-11.

Kovács, Gábor: Financing local investments in Hungary by issuing municipal bonds. *„European Scientific Conference of PhD Students in Brno" org. by University of Brno*, Brno, 29 November 2006.

Kovács, Gábor: Financing Local Governments in Hungary by issuing Municipal Bonds: Experiences and Future Prospects. *„Leadership and Management in the Public Sector: Values, Standards and Competencies in Central and Eastern Europe" conference, org. by The Network of Institutes and Schools of Public Administration in Central and Eastern Europe (NISPAcee)*, Kiev, 17-19 May 2007.