

Pregledni rad
UDK: 336.763.3:336.1
Datum primitka članka u uredništvo: 30. 9. 2018.
Datum slanja članka na recenziju: 10. 10. 2018.
Datum prihvatanja članka za objavu: 21. 11. 2018.

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INNOVATIVE BONDS IN FINANCING PUBLIC TASKS

INOVATIVNE OBVEZNICE U FINANCIRANJU JAVNIH POTREBA

ABSTRACT: The realization of public tasks often requires debt fundraising. Basically, bonds are the main type of debt instruments used by the public sector. However, a high level of public debt and its permanent increase over the past few years force public managers to seek new solutions, other than debt creation, to finance public tasks. The main goal of this paper is to present and discuss new, innovative solutions on the construction of bonds in the light of financing public tasks by means of this very instrument.

JEL Codes: E60, G20, H40, H63, H74, H81, O35, O38

KEY WORDS: bonds, debt instruments, public finance, innovations in the public sector

SAŽETAK: Ispunjenje javnih potreba često se financira izdavanjem dužničkih instrumenata. Načelno govoreći, u javnom se sektoru za prikupljanje kapitala najčešće služimo obveznicama. Međutim, visoke razine javnog duga i njegov stalni rast tijekom proteklih nekoliko godina prisilile su menadžere u javnom sektoru da nađu nova rješenja za financiranje javnih potreba i izbjegnu stvaranje duga. Glavni cilj ovoga rada je predstaviti i razmotriti nova, inovativna rješenja u strukturi obveznica koje se izdaju sa svrhom financiranja javnih potreba.

KLJUČNE RIJEČI: obveznice, dužnički instrumenti, javne financije, inovacije u javnom sektoru.

1. INTRODUCTION

A shortage of fiscal resources and the willingness to provide public services at high standards push central and local powers to seek the funding of public tasks realization by means of taking debt. Generally, central government and local self-government units seek financial support in banks, which provide them with loans, and in financial markets

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by means of issuing debt instruments, bonds in particular. Unfortunately, loans and bonds increase the level of public debt, which is controversial, and which European and national regulations attempt to put a curb on. Therefore, authorities try to find new, alternative ways to support the realization of public goals without enlarging public debt. In this paper, the author tries to indicate new possible innovative ways of solving public problems without increasing public liabilities or increasing them less than proportionally, by means of using bonds in a non-standard way.

2. INNOVATIVE BONDS IN BONDS' CLASSIFICATION

Generally, a bond is a debt security that promises to make payments periodically for a specified period of time (Mishkin, 2004, pp. 3-4). Conventional bonds are standard debt instruments which mainly represent the liability of their issuer to pay interest in the future and to return the principal (par or nominal value) of the debt. Such a security is called a "straight", "plain vanilla" or "bullet" bond, which signifies that there are no additional features attached to this liability (Choudhry, 2006, p. 3). This approach is common in raising debt capital to finance private and public activities, and these bonds account for the majority of debt instruments traded globally.

Different forms of such debt instruments can also be found in financial markets. They have a different construction, some additional privileges and risks for the issuer and investor, in particular. For example, a bond may not pay coupons, so it may be sold below par value (zero-coupon bond). What is more important – under specified conditions, a bond can be converted into a stock (convertible bond), or it can give the bondholder the right to decide about the issuer company, the right to receive a part of income (as a stakeholder), or the right to subscribe to stocks of a new issue ("privileged" bonds) (Socha, 2003, p. 120-125). However, such constructions of bonds tend to be dedicated to the private sector only.

In turn, as mentioned above, the public sector typically uses a conventional, standard type of bonds. It follows from the public finance construction – the realization of public tasks should be financed from public incomes, particularly from taxes or other public burdens. The lack of irreclaimable resources pushes public authorities to use additional forms of financing, which are repayable (loans, debt securities), and the use of which results in public debt creation. Such ways of funding public tasks can, on the one hand, allow achieving goals immediately, but on the other hand, the resultant debt becomes a burden for future budgets, in this way restraining the future plans of the authorities and societies. The public debt service is simply a transfer payment between bondholders and future taxpayers (Backhaus, Wagner, 2004, pp. 198-199).

Considering the problems of the public issuer connected with excessive debt growth, problems to meet debt limitations in particular, there exists a set of different solutions to funding public tasks. Sometimes these solutions resemble the financial constructions used by the private sector.

In this paper, the author focuses on the use of bonds by the public sector; therefore, only **public bonds** shall be considered. To set the presentation in order, a classification of different types of public bonds can be found in Table 1. Public bonds can be classified using different criteria. The author suggests applying the following three ones: the payments construction, the responsibility for the debt and the purpose of financing.

Under the first criterion, we can distinguish between coupon bonds, zero-coupon bonds and perpetual bonds. Coupon bonds consist of securities which repay the principal and the coupons – an additional value, which can be fixed, indexed to market interest rates or the inflation rate, or revisable (e.g., as an effect of discussion between issuer and holder, mainly junk bonds, Brady bonds). In turn, zero-coupon bonds do not pay coupons; hence, they are issued at a price lower than the nominal value, and promise to pay the par value on redemption date. A rare type of debt instrument is the perpetual bond. Basically, those bonds are not to be redeemed and the issuer is obliged to pay coupons for an indefinite period (Yglesias 2013). For example, in Poland, the first possible redemption of such a debt can be made after five years from the date of issuance, or following issuer bankruptcy (the Act on Bonds of 2015, art. 23). The first well-known example of this type of bonds is the English consols (consolidated annuities) which were issued by the British Government in the 1700's. The consols paid interest on an annual basis just like regular bonds, but with no requirement that the government ever redeem them by repaying the face value (Yglesias 2013). Perpetual bonds are now becoming increasingly popular, especially in the USA, where the value of new issues in 2015 exceeded 38 billion dollars (Atkins, Hale 2015). Their popularity seems to be the effect of very low interest rates in recent years, and investors' need for the relatively higher yield of these bonds compared to regular debt instruments.

Generally, the debt incorporated in bonds may be either collateralized or unsecured – in case of the public sector, bonds are mainly backed by the full faith, credit, and the taxing power of the central and local government, which is why they are called general obligation bonds. Nonetheless, they can also be secured on a particular entity's assets and revenues – revenue bonds. Such an entity will be separated from the authority (Fabozzi 2005, pp. 3-4). Thus, the second criterion used to distinguish bonds is issuer responsibility for the debt. Basically, the majority of securities traded on financial markets are general obligation bonds. These securities are not backed by any assets, but by the power of the authority (issuer). The other group of bonds include securities which reduce – in different ways – the responsibility of their issuer (a public sector entity), and they are: revenue bonds, project bonds, social impact bonds.

Table 1. Public bonds classification

Bonds' classification criteria	Types of bonds				
Payments construction	coupon bonds			zero-coupon (discount) bonds	perpetual bonds
	fixed-coupon bonds	indexed-coupon bonds	other		
Responsibility for the debt	bonds with full issuer responsibility for the debt		bonds with limited issuer responsibility for the debt		
	general obligation bonds		revenue bonds	project bonds	social impact bonds
Purpose of financing	theme bonds				
	general bonds	war bonds	railway / highway bonds	green / climate bonds other	

Source: author's own work.

The idea behind funding public tasks by using revenue bonds is to separate the realization of certain public goals from the basic activity of the public entity involved. With this kind of funding, it is required to create a special purpose vehicle (SPV) which is an entity separated from the authority, but which operates on a specified public task. Such a form of activity is typically called project finance, and it can be used to realize public, private or public-private targets. The SPV can raise capital for its activity by issuing revenue bonds. The investor's gains (interest and par value) are generated from the activity of the SPV, and they are backed by the assets and/or on the revenues of the SPV, which means they seem to be safe securities. On the other hand, the authority (SPV owner) can exclude its full responsibility (and limit it to the value of the collateral) when a project financed by those bonds fails. In case of general obligation bonds, the authority would be fully responsible, even if the project does not succeed.

Another kind of bonds with limited engagement of public entities in the realization of public tasks, which also uses the concept of SPV, is project bonds (PBs). The idea behind project bonds is to enable the private sector to achieve public goals with a partial financial support of the public sector. The main part of SPV funding needs to be provided by the private sector, whilst the relatively small but significant part of SPV's liabilities consists of public funds, or of private funds, guaranteed by public authorities. This approach allows the government to obtain public goals "with private hands", and the private sector is also interested in such projects because of public guarantees which increase the creditability of the project and lower its funding costs. Moreover, a project supported by the authorities in some way ensures its success.

Another solution to ensure the provision of public services, without fully engaging the public sector in their realization and funding, is social impact bonds (SIBs). This instrument is not a standard bond as it is a conditional commitment of the authorities. The idea behind these securities is connected with a financing model called "payment for result". The authority promises to pay for certain services, which are of public character but provided by a private entity (Callanan, Law, 2012, p. 3). The private entity organizes social intervention (e.g., resocialization activities, reducing the homelessness rate, supporting the education among the youth with family problems), and when its actions succeed, the authority pays for it (Costa, Shah, Ungar 2012, p. 3; Griffiths, Meinicke, 2014, pp. 7-9). This model requires private financial resources, funds from social investors in particular, who are ready to take the risk of their capital not being repaid in case of project failure (Marchewka-Bartkowiak, Wiśniewski, 2015, pp. 220-221).

Using the third criterion – the purpose of financing, we can distinguish between general bonds, which are used to obtain funds for all kinds of public activities, and "theme" bonds, which allow obtaining financial resources to finance certain type of tasks. For example, during wartime, many countries used bonds, the so called war bonds, to finance their military needs. In history, we can also find bonds issued to raise money for huge infrastructural investments such as the construction of railroads (railroad bonds) or highways (highway bonds). Lately, following the observed climate changes, climate or green bonds have become a popular kind of securities.

The contemporary development of the green bonds (GBs) market is a sign of our time. The growing role of green investments, as a goal of sustainable development, shows that the economic and social evolution cannot be carried out without nature preservation.

Green projects need green finance, and it is a reason to label bonds and create contemporary “theme” bonds, i.e. green bonds (Wiśniewski, Zieliński, 2017).

Green bonds are similar or even the same as regular bonds in terms of their structure. The main question is “how green” a project should be to be included in a green bond issue, and how stakeholders will go about measuring greenness (Wood, Grace, 2011, p. 3). The International Capital Market Association (ICMA) in *Green Bond Principles*, published in 2016, defined the green bond as a security differentiated from a regular bond by its label that the issuer undertakes to exclusively use the funds raised to finance or re-finance Green Projects, assets or business activities. All designated Green Project categories should provide clear environmental benefits which will be assessed and quantified by the issuer. Thus, in addition to evaluating standard financial characteristics (such as price, coupon, maturity and credit quality of the issuer), investors also assess the specific environmental allocation of the projects that the bonds will support (ICMA, 2016, p. 2).

The presented classifications demonstrate a great variety of bonds. As mentioned before, most bonds on the market consists of regular securities, constructed in a simple way. However, the contemporary world seeks innovative financial solutions also to fund public tasks realization. That is the reason why more sophisticated constructions of bonds are applied.

In order to specify which bonds can be called innovative we should consider their potential to accumulate funds intended for public activities, particularly the accessibility of resources, and their cost. In this respect, we should distinguish the two following groups of these instruments:

- the “new” kind of bonds (invented and applied lately):
- project bonds,
- social impact bonds,
- green bonds,
- the “old”, well-known kind of bonds, used in an innovative way (e.g., revenue bonds, perpetual bonds).

The first group of bonds must be regarded as innovative bonds, because of their newness. The second group represents all the well-known solutions, which can also be called innovative because of their application in an atypical way (e.g., revenues bonds without exclusion of the issuer’s responsibility), or because they just have been adopted in legislation in certain countries (e.g., perpetual bonds in Poland).

3. EXAMPLES OF INNOVATIVE PUBLIC BONDS

Having defined the concept of different kind of bonds, the author now wishes to present the application of those instruments using a number of certain examples, showing potential opportunities and threats that the application of those instruments poses.

The best-known example of using **project bonds** to finance public tasks is the concept known as the Project Bond Initiative launched in 2012 by the European Commission and the European Investment Bank. The initiative was addressed to finance infrastructure

projects in the TEN-T, TEN-E or information and communication technology. It aimed to respond to the expectations of the institutional investors, with €230 million EU budgetary funds allocated, and it was expected to stimulate up to €4.4 billion worth of investments with a multiplier of 19x on EU budgetary funds. (EIB 2012a).

The founding idea behind this initiative was to widen access to financial resources and to minimize overall funding costs. Under the Project Bond Initiative, the EIB was able to provide eligible infrastructure projects with the support called Project Bonds Credit Enhancement (PBCE) in the form of a subordinated instrument – either a loan or contingent facility – to support senior project bonds issued by the project company (senior bonds). The main benefit of this action is the enhancement it brings to the credit ratings of the senior bonds. Moreover, the PBCE could bring additional depth to the infrastructure mezzanine finance market and, particularly in its unfunded form, an innovative approach to credit enhancing infrastructure transactions in a straightforward manner. The pilot phase of the initiative was conducted until 2016 (EBI 2012b, p. 5).

The described initiative provides two ways of credit enhancement, which results in a relatively lower cost of the funded project: (1) funded subordinated option – the mezzanine loan, and (2) unfunded subordinated option – the guarantee (see Figure 1).

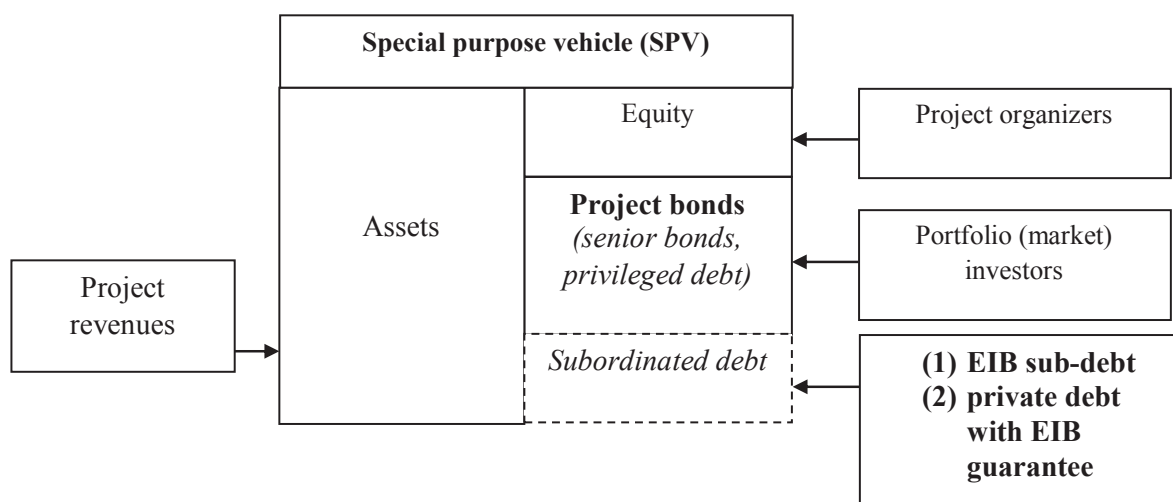


Figure 1. General mechanism of project bonds financing

Source: author's own work on the basis of: EIB 2013; Marchewka-Bartkowiak, Wiśniewski, 2014, pp. 147-148.

In financing PPP projects, the government can provide direct financial support and this mechanism is particularly important if the project is not financially self-sufficient, or is at risks of private investors or creditors being unable to operate effectively. The described initiative is more of an indirect public support, the purpose of which is to achieve a certain result or certain quality of infrastructure services, in which the government, instead of direct participation in project financing, assumes indirect financial obligations (Shuliuk, 2016, p. 259).

The first results of the initiative show that the idea of project bonds does work. In the pilotage phase, seven projects were supported by the EIB, and in each case, credit enhancement translated into a higher creditability evaluation and lower cost of the project.

For example, in case of the Castor project in Spain, the credit rating of the issued project bands was even higher than the credit rating of Spain itself. In Belgium, the PBCE, together with a subordinated debt tranche of the EIB, increased the credit rating of the bonds by three notches to A3. Without the PBCE the underlying credit quality would have been Baa3 (Ernst&Young, 2015).

The next innovative type of bonds described above is **social impact bonds**. The SIBs, which are a form of payment-by-result (PBR) model, differ from earlier approaches to the financing of service providers in such a way that their financing is structured. They are financed by initial investments undertaken exclusively by private or philanthropic investors, and the government will pay the investors if and only if the results have been achieved. Financial rewards for the SIBs are attached to social outcomes (the results). The SIBs are intended to transfer financial risk away from the public sector to the private sector, and at the same time they give investors and service providers a greater freedom in designing and delivering their services. In this way, the government hopes to improve both accountability and quality in the provision of public services. SIBs also differ from PBRs in that funds (the initial investments) are usually paid upfront (Mulvaney, Kriegler, 2014, pp. 3-4).

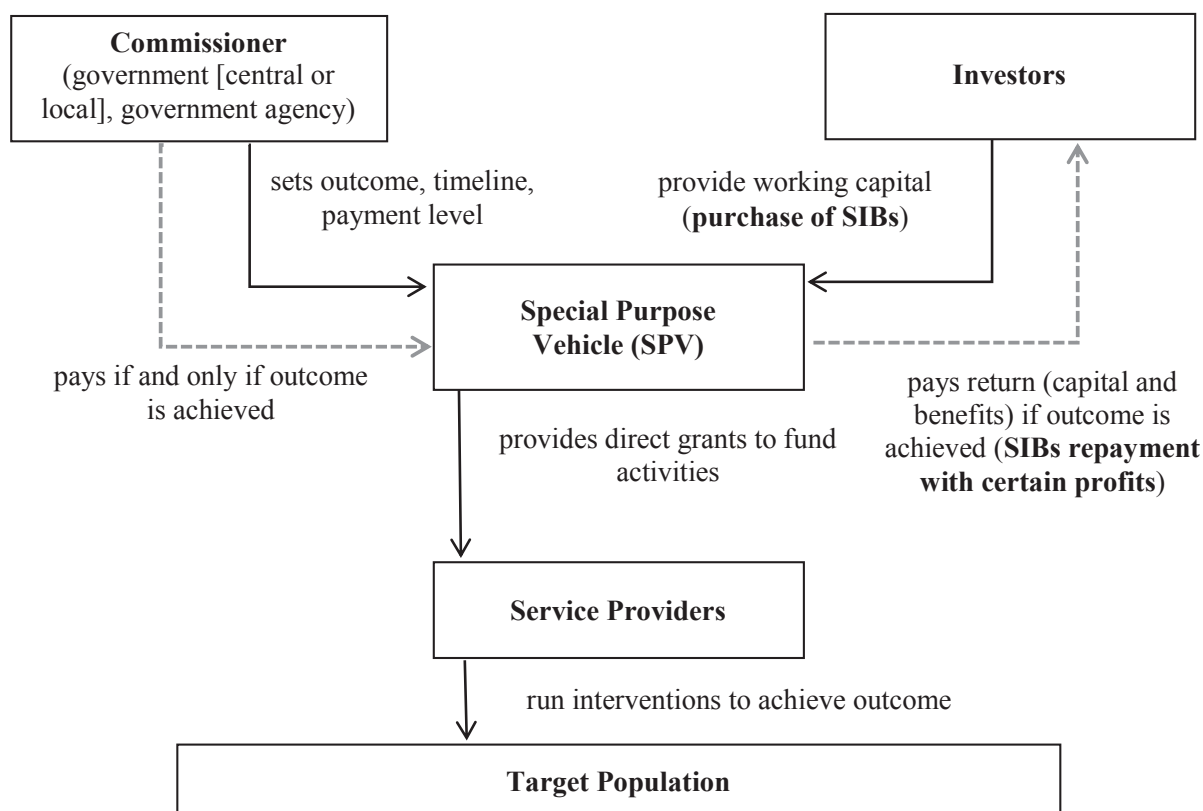


Figure 2. The general mechanism of social impact bonds financing

Source: author's own work on the basis of: Griffiths, Meinicke, 2014, pp. 7-9; Costa, Shah, Ungar, 2012, pp. 3-4; Callanan, Law, 2012, pp. 3-4; Marchewka-Bartkowiak, Wiśniewski, 2015, p. 211.

In the UK, the first SIB was launched in 2010 – the intervention was taken to reduce the rate of recidivism amongst prisoners at Peterborough Prison, all of whom were serving one year periods or less and classified as low risk. The money raised from SIBs allowed hir-

ing an NGO to manage the program to reduce reoffending. Recidivism had to be decreased by at least 7.5 per cent to trigger the dividend payments in each of the six years of the bond's lifetime. An independent assessor was to determine the outcome. If the predefined outcomes were not achieved, no money would be refunded to investors (Ministry of Justice, 2012, pp. 1-3).

While preparing this paper, 77 SIBs have been implemented in 20 countries, and at least 34 new SIBs were at the design stage (Instiglio 2017). About a half of interventions concerned social welfare projects – the next policy areas were as follows: employment, education and criminal justice. The SIB contract duration was from 20 to 120 months, but most projects were launched for up to 50 months (Noya, Galitopoulou, 2016).

The idea of SIB is being adopted in Poland, too – the Polish Ministry of Development launched a contest for SIBs in 2016, in two approaches (direct SIB and SIB's accelerator) for more than PLN 30 million, financed from the resources of the European Social Fund (the Ministry of Development, 2016). The pilot phase starts in 2017 – five direct SIBs and three SIB's accelerator projects were chosen for financing.

Another innovative instrument, which can be used by the public sector, is **green bonds (GBs)**. The green bond market is a rising segment of the financial market, and the GBs are an increasing part of climate-aligned securities. In 2016, the annual issuance of GBs exceeded USD 80 billion, which is to be almost doubled this year (CBI, 2017a). The biggest GBs issuers so far have been: the World Bank, the European Investment Bank, the Asian Development Bank, the African Development Bank, the Nordic Investment Bank, and the International Investment Corporation – entities with the highest creditability grades (Climate Brief, 2012, p. 3). Therefore, 78% of GBs are investment grade (with BBB rating and higher) (CBI 2016, p. 4).

Green investments are also supported by the public sector. Local self-government issued GBs for the first time in 2013 (the Commonwealth of Massachusetts), but by December 2016 no country had decided to issue green bonds (Green City Bonds Coalition, 2016, p. 9). The first state that issued green bonds was Poland. The issuance took place on 13 December 2016 and was welcomed with great interest by investors, which subsequently allowed increasing the issuance amount from 500 to 750 million worth of euro. The profitability of this type of securities is a bit lower than the standard profitability of bonds on the euro market. (the Ministry of Development and Finance, 2016). Through this Poland became the first country to have issued a sovereign Green Bond.

The second issuance of sovereign GBs took place in France in 2017 for the value of 7 billion euro. The next issuance is expected in Nigeria also in 2017 (CBI, 2017b). These examples show that GBs are a new trend in financial markets and public finance.

Apart from the securities described above, we can also point to some other bonds, which have been used for a long time, but due to some changes in their construction and legal regulations investors may take an interest in them. Firstly, **revenue bonds (RBs)** still stand a great chance to become a popular form of financing public tasks. For example, in Poland until 2014, this type of bonds would have been issued only by the municipal companies (transportation or water and sewage companies). Even though they were backed by the SPV's assets, the attractiveness of these securities was reduced. The main reason for this was that cities, which are owners of those companies, on the one hand, limited their responsibility for the debt to SPV's assets and revenues, but on the other hand, they kept

determining fare rates for the public transport or fee rates for water supply, which are the real revenues of the companies – issuers of RBs.

A turning point occurred in 2014 when the City of Lublin itself issued its own RBs, rather than one of its companies. The following year the City of Nysa duplicated this idea. In both the cases, the municipalities did not exclude their responsibility for the debt (Wiśniewski, 2016, pp. 191-192). This evidence shows that perhaps RGs should be issued without limiting the issuer's responsibility to certain assets, but with the use of these assets only as extra collateral to general obligation of the public sector entity. Moreover, in Poland, the additional advantage to local self-government for using GBs is the possibility to exclude such a security from the legal debt limitation.

Finally, yet another type of bonds, which is considered innovative is the **perpetual bond**. This instrument, as mentioned in the previous section, has for long been used to finance public tasks. Apart from the British consols of 1700's, we can also find this type of bonds for example in financing infrastructural projects (water dams) in the Netherlands in 1600's (Cummings, 2015). Nowadays, these bonds are generally used by banks, because they can be counted as Tier I in capital calculations. However, there are no obstacles to using those bonds by public sector entities, too.

4. THE NECESSITY AND EFFECTIVENESS OF USING INNOVATIVE PUBLIC BONDS – FINDINGS

Basing on the examples presented in the previous sections, we shall now discuss the pros and cons of each type of innovative bonds. The author will focus in particular on the need to introduce new bonds solutions and on using them in a rational way. As it was stated, innovative bonds should show the potential to raise funds for public activities, regarding the accessibility of the resources and their cost.

We might argue that if there does appear a new kind of bond, it means that there is a need for it. But it could just as well be an attempt to solve a problem in a different way, an attempt which may not be a perfect solution. In order to analyze this problem, we should carry out a certain kind of strengths and weaknesses analysis for each bond type. It is obvious that the reason why all of the bonds discussed in this paper are issued is that the issuer expects a greater demand for them which translates into lower costs of financing, which in turn can be considered to be their common strength. Some other strengths, as well as weaknesses, of the indicated types of innovative bonds are presented in Table 2.

Table 2. The strengths and weaknesses of innovative public bonds

Type of bonds	Strengths	Weaknesses
Project bonds	- good solution to increase the creditability of the projects and to lower their costs	- to be applied in commercial and semi-commercial projects only
Social impact bonds	- the public sector pays only for results - innovative design of interventions – to be applied in the future as a common activity of the social policy of the State	- problems of scaling – a certain intervention focuses on a certain group, rather than on the whole population - problem of accessibility of the resources – the lack of social responsible investors - the dilemma: why must SIB intervention be done? Does it mean that the previously applied social policies were not effective?
Green bonds	- „green-labelling” to foster creditability of the project and to summon socially responsible investors	- abuse of „green-labelling” – possible loss of its significance
Revenue bonds	- realization of public tasks with private resources - possibility to obtain inexpensive funding, while issuing bonds without excluding the public entity responsibility for the debt – the assets and revenues which back the liability are additional (not the only one) collateral for the creditor	- financing commercial or semi-commercial projects only
Perpetual bonds	- suitable for „hard times”	- more adequate to private financial needs than the public ones - expensive and risky if used by irresponsible politicians

Source: author's own work.

The construction of project bonds and green bonds is rather clear and correct. The tasks financed by those bonds are generally of commercial or semi-commercial character, and maybe that is why it is advisable to engage the private and third sector in their realization. In such a case, the public sector acts as a guarantor of the projects, which is fruitful for the creditability assessment of the projects, and which lowers their financing costs. The partial participation of the public sector or its guarantees or “green-labelling” are enough to enhance the creditability of the project.

It looks different in the case of social impact bonds. The public authority pays some other entities for providing public services, and decides to pay for the actual effects only. This solution is more controversial. From the public point of view, the use of these bonds means that the public sector is not able to fulfil public tasks on its own. Therefore, perhaps there is a need to modify the previous methods of solving public problems by the public sector rather than commissioning its realization to private or non-governmental organizations. Such a problem occurred in the case of the Peterborough SIBs – the first SIBs ever. Because the UK government changed the “prison policy”, which now pays more attention to rehabilitation, today such an intervention would not stand a chance of success. The same problems can be faced with regard to many other social interventions.

Social activities are delicate in their nature, but their cost and economic effectiveness should be the main targets for optimization. Many examples show that the projects financed by SIBs help solve certain problems that ought to be solved by the public sector. The main objection to using SIBs is that they only solve social problems in one particular case (or a restricted group of cases) – e.g., they reduce recidivism in Peterborough Prison, while inmates with the same needs cannot receive the same assistance at any other penitentiary institutions. Therefore, we should be satisfied with the results from certain interventions, but we should be concerned with the fact that this solution is not widespread. Obviously, this is a problem concerning the scale of the intervention, but the real problem lies in the following question – is intervention (financed with SIBs) really necessary? The answer is difficult because the SIBs financing model occurs only in the “intermediate” models of the social policies of the State. In the fully interventionist or fully liberalistic approaches to public tasks realization there is no place for SIBs. The State either fully supports social needs or it does not altogether.

The next dilemma concerning SIBs is the possibility to find socially responsible investors. In the author’s opinion, it depends on the welfare of particular societies. We should emphasise that SIBs projects were introduced in Anglo-Saxon countries, i.e. relatively wealthy countries with societies that are largely socially aware. In other countries, the success of SIBs issuance depends on the existence of philanthropic investors, which may pose problems in emerging economies or third world countries.

Despite of the negative features of SIBs, as described above, they can truly set a new direction in solving social problems. An analysis conducted by SIBs market researchers shows that there is an enormous variation in the deals with respect to the structure, mechanics, and stakeholder roles, which is one reason for optimism in that this demonstrates a great deal of flexibility in how a deal can be structured. (Gustafsson-Wright, Gardiner, Putcha, 2015, p. 49). The added value of SIBs projects is their innovative, unusual, and even unpredictable design, made by experts with experience in both commercial and social fields. Thus, the SIBs projects realized these days may serve as a typical model for public sector activities in the future.

Yet another type of bonds – green bonds (GBs) – is the contemporary theme bond. Green-labelling of bonds can enhance the creditability of the project and summon socially responsible investors. The main danger of using these bonds is the abuse of green-labelling, as a result of which the attribute “green” can possibly lose its significance for investors in the future.

The next discussed type of bonds – revenue bonds – can be used in project finance in particular. Their mechanism can be applied to setting up a public-private partnership,

which can ensure the realization of public tasks with private resources. On the other hand, revenue bonds – as shown above – can be issued by a public entity without exclusion of its responsibility for the debt. Hence, the revenue bond can be the general obligation bond with the reinforcement of separated assets and the revenue they generate as the collateral of the bond. It can enhance the creditability assessment of a certain debt, thus lowering its cost. In these two ways, RBs are to be considered a desirable form of financing public tasks.

The final type of bonds to be discussed is perpetual bonds. Even though they were used to finance public goals in the past, today their use in this respect is rather controversial. These bonds – in comparison to general bonds – by their very nature should provide extraordinary profits. It means that demand for such bonds could be above average, but their costs would be also too excessive. In case of these bonds, some debt limitations provided for in the legal system are the proper solution. They ought to protect the society against some irresponsible decisions of policy makers, who might be tempted to use this instrument not accountably. It seems that the perpetual bond may be used by the public sector in the face of danger, e.g. state of war, when huge amounts of financial resources are needed while the time of their repayment is not predictable.

5. CONCLUSIONS

The considerations carried out in this paper show a huge diversity in bonds mechanisms. Apart from regular bonds, which account for the majority of public debt securities, we can also find many types of bonds used in non-standard way. For example, they can be applied to create a special funding for some public-private partnership special purpose vehicle (i.e. project bonds), or they can be used in some conditional arrangements, in which the public sector pays on condition that some specified objectives have been achieved (i.e. social impact bonds). This type of funding is like having your cake and eating it too – a public manager can achieve some public goals without being fully involved in financing them. Such an approach reduces the financial engagement of the public sector in the realization of public tasks. Public goals can be achieved by letting the private sector or NGOs participate in their realization. Obviously, the problem lies in assessing the effectiveness of such actions, but as long as it helps to solve some problems with a decreased engagement of public finances, it is a solution to be considered.

The present-day need for a sustainable, green development forces the application of a special instrument – green bonds. The use of labelled instruments is an answer to this need, an answer which can obtain resources from the socially responsible investor. The above presented examples show that sovereign green bonds issuances meet surplus demand; therefore, this is the way to find creditors for public activities in the future.

Of all the standard bonds used for a long time, which can still help finance public tasks, only revenue bonds deserve attention. The public sector can still design a new, innovative mechanism of these bonds, e.g. the construction of public side responsibility for the debt. In turn, the other kind of bond described in this paper – the perpetual bond, is basically meant for “hard times”, and its application by authorities in standard conditions remains controversial.

The main goal of this paper was to show the diversity of public bonds solutions. The considered pros and cons of different types of this security demonstrate that there exist

broad possibilities for bonds construction, which can in various ways contribute to the improvement of public tasks financing.

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