Abstract: The paper deals with the problems of financing Public Private Partnership (PPP) projects with respect to the conditions in the Czech Republic. The paper aims to characterize the process of PPP project financial structure optimization within project financing, and to assess the possibility of utilization of mezzanine capital as a source of PPP project financing in the context of the conditions in the Czech Republic. Firstly, the essence and features of PPP projects are described. Secondly, mezzanine capital is defined and its advantages and disadvantages are assessed. Special attention is paid to optimization of the financial structure of PPP projects within project financing, both from the point of view of the structure of funding sources and from the point of view of the process of choosing the right ones. The final part concerns the present situation in funding PPP projects in the Czech Republic.

Key-Words: Public Private Partnership projects, financing, project finance, financial sources, mezzanine capital.

1 Introduction
The last economic crisis consequences and the threatening possibility of commencement of another economic crisis, together with growing public budget deficits and government debts, create an urgent need of individual government levels (on the central, regional, and local levels) for seeking new opportunities for ensuring the public needs. And one of such opportunities can be seen in Public Private Partnerships (PPP). From the point of view of the public sector, PPP projects represent an alternative way of ensuring the public goods and services, which might otherwise not be provided in the appropriate time, quantity, quality and price. From the point of view of the private sector, PPP projects represent a new opportunity for implementation of entrepreneurial intents and targets, which is, in the present demanding conditions, a possible way to success. From the point of view of both sectors, particularly the public sector, it is also necessary to draw attention to potential benefits in the form of know-how transfer.

In a number of the EU countries, but also of the world, PPP projects represent a standard way of satisfying the public needs. However, these projects have not developed in the Czech Republic yet. Although the government approved the public private partnership policy in 2004 already, and defined 5 pilot projects in the following year (they were extensive, strategically important projects from which the appropriate organizations were to learn), and these projects were subsequently redefined several times, none of them has been implemented so far. Only a few smaller PPP projects have been implemented by local governments.

There are a lot of reasons why the public private partnership concept has not developed in the Czech Republic yet. According to Jiraskova [13], they include lack of experience of the public sector, lack of information, missing examples of successful projects, limited human resources in the public sector, lack of interest of the private sector, and imperfect legislation. According to Sabolova [11], the barriers of PPP project implementation can be seen in lack of experience, low transparency connected with bribery, a political responsibility risk, or a high risk of project failure.

At the same time, most of the above reasons are closely related to the scope of knowledge in this area, where it is necessary to create a quality knowledge and experience basis. It is necessary to pay special attention to the process of PPP project implementation, where the key question is financial security of the projects. PPP project funding can be based on utilization of selected classic long-term financial sources, but it is also necessary to take into
account innovated financial instruments, including, for example, mezzanine financing tools.

The paper aims to characterize the process of PPP project financial structure optimization within project financing, and to assess the possibility of utilization of mezzanine capital as a source of PPP project financing in the context of the conditions in the Czech Republic. The authors of the paper used the following research methods: interpretative-theoretical research, descriptive research, correlation research and structured interviews.

2 Public Private Partnership Projects

According to Nijkamp, Burch & Vindigni [10], “A PPP is an institutionalised form of cooperation of public and private actors who, on the basis of their own indigenous objectives, work together towards a joint target, in which both parties accept investment risks on the basis of a predefined distribution of revenues and costs.”. Klijn & Teisman [7] note that “PPPs can be defined as co-operation between public and private actors with durable character in which actors develop mutual products and/or services and in which risk, costs, and benefits are shared. These are based on the idea of mutual added value.”. Bult-Spiering & Dewulf [2] summarize the following characteristics of PPP projects:

- A partnership involves two or more actors, including governmental actor and business actors.
- Each of the participants is a principal and can bargain on its own behalf.
- The partnership involves a long-term relationship among the actors, with some continuing interactions.
- Actors involved must be willing to invest material and non-material resources in the partnership.
- All actors have a shared responsibility for the outcomes of their activities.

Another feature of PPP projects is their significant financial scope, while the invested capital risk is borne by the private partner. Furthermore, it is typical for PPP projects that they are focussed on providing non-core services, where the desired effect of cooperation is the predefined outputs. [14] The PPP essence has been described by Yescombe [19] as follows. The public authority (public party) specifies its requirements in terms of outputs, which set out the public services which the facility (public infrastructure) is intended to provide, but which do not specify how these are to be provided. It is then left to the private sector to design, finance, build and operate the facility to meet these long-term output specifications. The project company (private party) receives payments (from the public-sector party or from the general public as users of the facility) over the life of the PPP contract on a pre-agreed basis, which are intended to repay the financing costs and give a return to investors. The facility remains in public sector ownership, or it is reverted to public sector ownership at the end of the PPP contract. PPP projects represent projects of building an extensive infrastructure implemented in the public interest using the financial resources of the private sector, where not only the financial resources of private enterprises, but also their know-how, organizational and innovative potentials are used.

3 Mezzanine Capital

Mezzanine capital “refers to that layer of financing between a company’s senior debt and equity, filling the gap between the two” [12]. Mezzanine capital is a collective term for hybrid forms of financing that combine elements of debt and pure equity financing [16, 17]. Table 1 shows the debt and equity features of mezzanine capital.

<table>
<thead>
<tr>
<th>DEBT FEATURES</th>
<th>EQUITY FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obligation to repay</td>
<td>Long-term liable capital</td>
</tr>
<tr>
<td>Ongoing, non-performance related basic rate of interest</td>
<td>Subordinated vis-à-vis existing creditors</td>
</tr>
<tr>
<td>Tax-deductible</td>
<td>Risk bearing through subordination</td>
</tr>
<tr>
<td>Covenant oriented</td>
<td>Profit sharing and equity return participation through an “equity kicker”</td>
</tr>
<tr>
<td>Security interest not always required</td>
<td></td>
</tr>
<tr>
<td>Equity optionality through conversion rights or warrants</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 – Mezzanine Capital Features

Source: Modified according to [5, 6].

Diverse features of mezzanine capital result in a wide range of mezzanine financing instruments in practice. According to Frank [5], mezzanine instruments include a subordinated debt, a convertible subordinated debt and a redeemable preferred equity. Merna, Chu & Al-Thani [8] differentiate a subordinated debt, a junior subordinated debt, bonds and preferred stocks and some of their combinations. According to the European Commission [4], mezzanine instruments take the form of a subordinated loan, a participating loan, silent participation, profit participation rights, a convertible bond and a bond with warrants.
Mezzanine capital is connected with a lot of advantages. It improves the balance sheet structure, offers a better access to additional financial sources (leverage effect), strengthens capital structure without the need for diluting equity holdings, and offers tax-deductible interest payments and flexible conditions. On the other hand, there are several disadvantages of mezzanine capital. Mezzanine capital is more expensive than debt capital, available for a limited period of time (in contrast to equity capital) and it is often difficult to obtain due to strict transparency requirements. [15, 16]

4 PPP Project Financing
PPP project financing is, in most cases, ensured solely by the private partner, and this financing is usually based on the project finance. According to Weber & Alfen [18], “project finance is defined as the financing of a standalone, clearly demarcated economic unit (project)”. Project finance refers to financing of a particular project mainly based on the project cash flow [3]. The main characteristics of project financing are the following: a special purpose company (special purpose vehicle), cash flow-based lending, a risk sharing structure, limitation of liability and off-balance sheet finance; see more [18]. An alternative way of PPP project funding is non-recourse forfeiting of instalments (a forfeiting model), whose essence resides in the fact that the private contractor of a PPP project sells claims for payments that result from the PPP contract with the public sector to the bank. [3] Project financing is based on the fact that project financing itself is separated from other activities of the private sector partner, who establishes, for the purpose of project implementation and financing, a special purpose vehicle. That is why the capital providers’ attention is focussed mainly on the quality of the project and its cash-flow unlike classic corporate finances, where the primary attention is paid to the financial health of the capital recipient. PPP projects represent extensive, financially demanding projects, which are suitable for combined funding from different financial sources. The private partner aims to create an optimal structure of such PPP project funding sources. An optimal financial structure of a project represents such a structure where funding sources are spread in the way the cost of their acquisition and maintenance is as small as possible, respecting all the limiting conditions. Selection of an optimal structure of project funding sources is based on choosing the best combination of equity and debt, or in the alternative concept internal and external, financial sources. In the case of PPP projects, which represent investment projects, it only concerns choosing from long-term financial sources, which are designated for covering long-term needs. Sudong Ye [1] states that “PPP projects are usually financed using a combination of equity financing and debt financing with varying ratios of equity to debt. Usually, debt financing exceeds 70%. Sometimes debt financing reaches nearly 100%,” Daube, Vollrath & Alfen [3], who state that debt capital represents the main source of capital in the project finance, also identify with this fact. Figure 1 presents an alternative financial structure of PPP projects, including, apart from equity and debt capital, also mezzanine and development capital. It also lists possible financial instruments and providers of individual capital forms.

![Figure 1 – Financial Structure of PPP Projects](source: Modified according to [18].)

Figure 2 shows the risk exposure and expected return related to equity, debt and mezzanine capital.

![Figure 2 – Risk and Return Profile of the Capital Types](source: Modified according to [18].)
The process of choosing optimal sources for funding PPP projects is based on evaluation of selected qualitative and quantitative criteria. It is necessary to consider, above all, the cost of individual funding sources, the legal form of the special purpose vehicle, the scope and life of the project, the expected project cash-flow, the project risk exposure, the current situation on the capital market, the number, character and requirements of individual capital providers (e.g. from the point of view of the return expectation, the guarantees, the ownership rights, or the binding force of payments), the information openness of the special purpose vehicle, the scope of the state administrative regulation related to individual financial sources, or the project managers’ experience and habitual practices. Qualitative evaluation should consist in assessment of advantages and disadvantages of alternative financial sources and their combinations. On the other hand, quantitative evaluation should be based on assessment of funding effectiveness using the criteria of the net present value of the capital and the internal rate of return, see more [14]. Comprehensive consideration of the above criteria will subsequently lead to choosing an optimal funding option.

5 PPP Project Financing in the Czech Republic

As it was already mentioned in the introduction, PPP project implementation in the Czech Republic is only starting to take off. The exclusive form of financing of these projects is the project finance, and it is possible to assume that this form of financing will prevail in the future, too. As for the structure of provided sources, as the structured interviews with representatives of financial institutions imply, it is a combination of equity and debt capital, where the share of debt capital prevails. There is an apparent difference compared to the financial structures of enterprises, where equity capital prevails over debt capital (in 2010, the share of equity capital in Czech businesses with 100 and more employees was 50.52%, while the share of debt capital was 47.52%, and 1.96% remained for other capital [9]). Mezzanine capital, which represents a possible funding alternative, still is not used in the Czech Republic for financing PPP projects, and in the context of its limited utilization within corporate finances, it is not possible to expect it to spread in the near future.

See Table 2 for potential sources of funding PPP projects that can be taken into consideration in the Czech Republic. The table also characterizes financial sources and evaluates their applicability within PPP projects.

**Table 2 – Financial Sources of PPP Projects in the Czech Republic**

<table>
<thead>
<tr>
<th>Capital classification</th>
<th>Financial sources</th>
<th>Application in PPP projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>external equity</td>
<td>common stocks and other forms of owners’ shares</td>
<td>standard source</td>
</tr>
<tr>
<td></td>
<td>subsidies</td>
<td>complementary source</td>
</tr>
<tr>
<td>debt</td>
<td>bank loans</td>
<td>standard source</td>
</tr>
<tr>
<td></td>
<td>corporate bonds</td>
<td>omitted source</td>
</tr>
<tr>
<td></td>
<td>supplier credits</td>
<td>complementary source</td>
</tr>
<tr>
<td></td>
<td>customer advancements</td>
<td>complementary source</td>
</tr>
<tr>
<td></td>
<td>financial lease</td>
<td>complementary source</td>
</tr>
<tr>
<td>internal equity</td>
<td>retained earnings</td>
<td>complementary source</td>
</tr>
<tr>
<td></td>
<td>depreciation and amortization</td>
<td>complementary source</td>
</tr>
<tr>
<td>debt</td>
<td>reserves</td>
<td>complementary source</td>
</tr>
</tbody>
</table>

From the point of view of the structure of used debt capital, given the European tradition of debt financing, classic bank loans prevail. Corporate bonds, which generally represent a standard PPP project financing tool, are not used in the Czech conditions.

6 Conclusion

Public Private Partnership projects represent extensive investment projects, which can be effectively financed through the project finance, whose essence consists in the fact that it is separated from other activities of the private entity. Within the framework of optimization of the PPP project financial structure, it is necessary to consider alternative long-term financial sources and their combinations. With respect to the risk and expected return, it is necessary to choose optimal proportions of individual capital forms, i.e. proportions of equity, debt, mezzanine and development capitals. It is also necessary to optimize representation of individual financial sources within these capital forms on the basis of the qualitative and quantitative criteria specified in this paper.

It is possible to state that mezzanine capital (a hybrid form of funding, having both the features of the equity capital and the features of debts) represents a potential source of PPP project funding.
even though it is a complementary financial source only. In the European conditions, it is possible to expect future development of mezzanine financing in the form of so-called private mezzanine, i.e. financial instruments of the private character, which are not placed directly on the capital market in the form of securities.

References: