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Principles of  
PPP financing

# Principles of public-private partnership financing – Polish experience

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## Abstract

**Purpose** – Public-private partnerships (PPP) are contractual relationships influenced by different legal traditions. The main purpose of the paper is to provide insight into the principles of PPP financing and the impact of two legal provisions in Poland.

**Design/methodology/approach** – Appropriate regulation and documentation were investigated. Discounted subsidies, internal rate of return (IRR), economic internal rate of return (EIRR) were calculated and risk was analysed for three variants of a selected case study.

**Findings** – The two PPP-related legal provisions are well-suited for cooperation, although they do not generally correlate. Partnership is just one of the available modes of cooperation; therefore, a complete financial and economic analysis should be performed to prove value for money.

**Research limitations/implications** – The paper was limited to one case study in three variants. Additional cases can be studied to confirm the findings and increase the usefulness of the methodological framework and improve its application.

**Practical implications** – The interrelation of the two PPP-related legal provisions is useful for public managers searching for partners and private investors looking for opportunities. Since the proposed framework supports assessing investment advantages from the perspective of the two provisions, it supports decision makers. The experience of the Polish market also may support development of public-private partnerships in other countries.

**Originality/value** – The two PPP-related legal provisions are compared to determine which provides the optimal method for management of PPPs. Studying both successful and abandoned projects can help towards better management and understanding of PPPs. The work is novel providing insights into PPP financing from a legal perspective and addressed financial consequences.

**Keywords** Public-private partnership, Private finance, Infrastructure, Poland

**Paper type** Research paper

## 1. Introduction – study justification, aim, methodology

Investment activity in the public sector is not only economic in character. Public investment differs significantly from the private investment in terms of objectives, financial analysis and sources of funding (Markowski, 1999; Alford, 2001; Gertner *et al.*, 2007; Misterek, 2008). Its main objectives include infrastructure improvement, creating employment, environmental protection and economic stimulus (Ustawa, 2001). Local government investments are geared towards improving the local community, and not just the profit of an individual. Investment selection is therefore primarily influenced



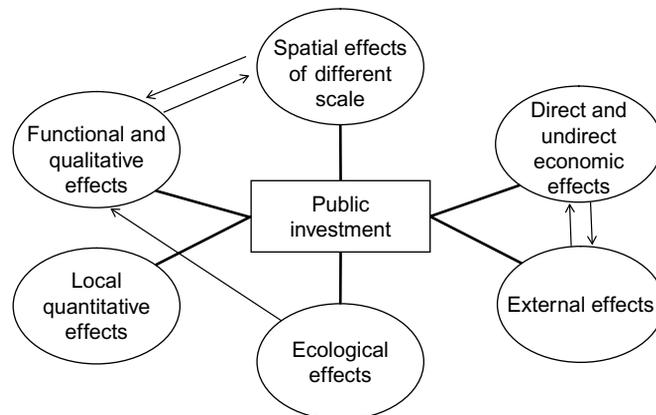
by statutory requirements and economic drivers rather than financial prudence. A specific feature of public sector investments is the wide range of positive impacts, which are shown in Figure 1.

The most important tasks stemming from public sector investment include (Misterec, 2008; Markowski, 1999):

- better access to public service;
- improvement of the local community’s standard of living;
- positive impact outside the region – for example, investments in roads improve the living standard of users from the region and the outside of the region;
- economic activation of the region;
- encouragement of growth;
- creation of employment;
- improvement of the ecological situation of the region; and
- increase in income base for future years.

Public investment mainly involves infrastructure and real estate (Finkensteller *et al.*, 2010) and is characterized by continuity and a systematic burden on the budget. This burden results from infrastructure use, the development of local governments and the formation of new settlement areas (Misterec, 2008). What is more, financing public investments involves the cost of the infrastructure maintenance. The specificity of public investment therefore results from both real estate and infrastructure characteristics, as shown in Table I.

The key problem with public investment is the choice of an appropriate financing model. Funding is limited by the extent of investors’ resources, while financial markets offer many potential funding sources (grants, debt instruments, equity instruments). Traditionally, infrastructure investment is a domain of the public sector, but this is impractical due to budget constraints. Private sector investment is therefore desirable. A private partner provides access to substantial capital and optimal financial structuring, and can speed up important investments.



**Figure 1.**  
External effects of the public investment

**Source:** Based on Jarosinski (2003) and Misterek (2008)

Characteristics	Effects
Long lifetime	Forward planning
Impossibility of import	
Long completion time	
Technical and economic indivisibility	Large capital expenditure
Long period of completion	Long /lock-in period
Large proportion of fixed costs	
Technical and economic indivisibility	Lack of correlation between expenditures and outcomes
Incremental costs	
Economies of scale	
Coordination of activities	The need for control/management

**Source:** Based on Wojewnik-Filipkowska (2008) and Finkenzeller *et al.* (2010)

**Table I.**  
Real estate and  
infrastructure  
characteristics

Moreover, the public sector rarely fulfils its property management service and investment task properly because of inflexible policies. Many countries have experienced this problem for many years (Brzozowska, 2005; Wilson *et al.*, 2010). In developed countries, infrastructure investments models are evolving towards increased private sector participation. Researchers all over the world have been analysing public-private partnership (PPP) markets and looking for effective models. Their efforts have been providing advice for practitioners regarding project organization, project financing, and risk management (Li *et al.*, 2005; Eaton *et al.*, 2006; Sachs *et al.*, 2007; Zou *et al.*, 2008; Singh and Kalidindi, 2009; Wilson *et al.*, 2010; Fischer *et al.*, 2010; Adair *et al.*, 2011; Babatunde *et al.*, 2012; Chandan, 2012; Cheung *et al.*, 2012a, b; Hampton *et al.*, 2012; Jin *et al.*, 2012; Mouraviev and Kakabadse, 2012).

PPPs are growing globally as governments cannot finance all essential investment. When public budgets are limited, the government has to play an administrative role and create new opportunities and conditions for private investors. These conditions also depend on the law. Well-prepared PPP law is conducive to better-structured transactions and may contribute to a more reliable, transparent and efficient investment process. In Poland, public-private cooperation is based on Municipal Management Act. There is also a comprehensive legislation for PPP: the Public-Private Partnership Law and the Concession Law. These two new laws offer a number of advantages for public-private cooperation. The most important is more extensive engagement of private partners and risk transfer. Other advantages include: flexibility in private partner selection, possibility of transfer of public assets ownership rights to private partner and taxation preferences. The aim of the study is to compare these two relatively new legal dimensions and analyse their practical consequences. Research results should be useful for both public real estate managers searching for partners and private investors looking for opportunities. The research has also a wider impact. Public investments are vital to the economic development not only of individual countries, but also communities such as the European Union. The capital-intensive nature of such investments is a major barrier for governments in various developing countries. For this reason, the problem of financing public investments, including the development of PPPs, is particularly important. The problem is especially relevant for countries such as Poland where the

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market economy and democracy are relatively young. The experience of the Polish market can help develop PPPs in other countries.

This article applies research in urban economics, real estate markets, spatial planning, and development as well as proper regulation and project documentation. This research was conducted as quantitative and qualitative research with interviews, with a review of a selected case study. The case study in question was chosen – because authors had the possibility of participating in a project feasibility study as consultants.

## 2. Nature and origin of PPP

According to the European Commission (2003), a PPP is:

[...] a partnership between the public sector and the private sector for the purpose of delivering a project or a service traditionally provided by the public sector. PPPs recognize that both parties have certain advantages relative to the other in the performance of specific tasks. By allowing each sector to do what it does best, public services and infrastructure can be provided in the most economically efficient manner.

The US Chamber of Commerce (2003) defines PPPs as:

[...] a method of procurement that brings together the public and the private sectors in a long-term partnership for mutual benefit. The crucial feature of a PPP is that it is designed to achieve both social and commercial goals.

Finally, Zysnarski (2003) defines PPPs as various options of cooperation between public and private entities.

The essence of public-private cooperation is a combination of private capital, private project execution and the delivery of public services and-or facilities. A PPP is a combination of the tasks and objectives of the two sectors. Since these sectors have different objectives, their cooperation may seem unlikely. However, increased private sector involvement in the economy has led to public-private cooperation in order to maximize investment effectiveness. The public sector invests within the PPP because of social well-being, while the private sector participates for commercial purposes. Private partners expect certain rates of return at a satisfactory level. Thus, PPP investments are a combination of two objectives: social and commercial.

PPPs are an investment model with a great development potential (European Commission, 2003; Li *et al.*, 2005; Eaton *et al.*, 2006; Zlenlewski and Sześciło, 2008; Zou *et al.*, 2008; Hampton *et al.*, 2012; Fischer *et al.*, 2010; Liu and Wilkinson, 2011). Their potential benefits include:

- combination of public capabilities with private financing effectiveness;
- best practices, fair and transparent cooperation principles;
- division of tasks and risks between the partners;
- better quality of public property management;
- reduction of political influence on investment and maintenance decisions;
- diversification of sources of public development financing; and
- possibility of implementation of long-term projects with many objectives, as opposed to public procurement oriented at short-term completion and narrowly defined objectives.

The partners achieve benefits proportionate to their contribution and involvement as shown in Table II.

PPPs' ability to reduce significant and growing public sector debt via their promotion of partnerships among local and central authorities also accounts for their growth. The origins of the idea of PPP can be traced back to sixteenth-century France. PPPs developed the fastest and most dynamically in Great Britain. In the eighteenth century, Great Britain developed and applied a model of financing water and land route construction by private investors, who realised their profits via charges for infrastructure use (Yescombe, 2003; Zlenlewski and Sześciło, 2008). From the mid-nineteenth century to the 1970s, the PPP model almost disappeared, because of WWI and WWII and the nationalization of most sectors of the economy. Since the early 1980s, PPPs have grown dynamically both in European countries and the USA (PricewaterhouseCoopers, 2005, 2008). According to European Commission (2003) and Wilson *et al.* (2010), the prerequisites for PPP development are:

- budgetary constraints faced by the state in the implementation of large public investments;
- benefits offered by cooperation with a private partner: know-how, methods of work; and
- change of the government's role in the contemporary economy – instead of directly managing the economy, the government organizes, regulates, and controls economic life, which leaves more space for private investors.

### 3. Experience and legal determinants of public-private cooperation in Poland

Though PPPs in Poland are a relatively young and promising investment model, they are still poorly developed. The level of development and use is low because of (Zysnarski, 2003; Wojewnik-Filipkowska, 2008):

- habits of public officials who are not interested in closer cooperation with the private sector;
- lack of knowledge about the nature, benefits and opportunities offered by PPPs;
- lack of experience of cooperation with the private sector;

Benefits for public sector	Benefits for private sector
Acceleration of infrastructure development	Stable, long-term contract
Services' higher quality	Independence from the public sector annual budget
Increased innovation in the services' provision	Flexibility in determining the specifications of the final product or service
Greater operating efficiency	Incentives for good performance, and delivery of quality services
Taking into account full lifetime of assets	Ability to generate additional revenues from third parties
Reduction of total project costs and more efficient use of public money	Opportunity to exploit commercial innovation
Better understanding of the total cost of investment and its operation and maintenance	
Value for money	

**Source:** Based on European Commission (2003), Eaton *et al.* (2006), Nisar (2007) and Urbaniec *et al.* (2009)

**Table II.**  
PPP benefits for the public and private sector

- uncertainty associated with cooperation with a private partner;
- a minimal number of positive examples of investments accomplished using PPP; and
- negative associations with privatization.

PPP development is therefore constrained by psychological, educational, institutional and legal factors (Wojewnik-Filipkowska, 2008; Cenker, 2011). Generally, PPPs are based on contracts strongly influenced by different legal traditions. Some of the contracts fall under civil law, especially private and company law. The agreements are based on a simple “design-build” (DB) contract for a public utility. The agreements may take a number of variations (Buljevich and Park, 1999; Yescombe, 2003); DBs are plain contracts to design and deliver. All risks are sustained entirely by the public sector. DB contract modification brings more variations in the distribution of responsibility and risk among the sectors. In this way, the public sector makes use of the greater expertise of a private partner.

In Poland, PPP arrangements are based on the Public-Private Partnership Law, hereinafter the PPP Act (Ustawa, 2008) and the Concession Law, hereinafter the CC Act (Ustawa, 2009). The PPP Act provides guidance for the establishment and enforcement of the partnership and is coherent with other legal acts in the legal system (Investment Support, 2010). It also specifies projects (tasks) that can be realized under PPPs. These are:

- construction or renovation of a building;
- provision of services;
- execution of a task, in particular increasing asset value; and
- other services connected with asset maintenance or management (the asset is used to execute a public-private project or is related to it).

Public-private cooperation is also envisaged within the above-mentioned CC Act and the Act on public procurement law (Ustawa, 2004). The choice of the appropriate law depends primarily on the procedure for private partner selection. With the PPP Act, if the private partner’s remuneration is the right to obtain benefits from the object constructed within the project, the choice of the partner is made by applying the CC Act subject to the provisions. In other cases, the partner is chosen by applying the Act on public procurement law subject to the provisions of the PPP Act. The subsequent ability to use European funds significantly increases the attractiveness of PPP.

In 2009, public entities reported 41 public-private projects (Investment Support, 2010), including:

- one concession under the old regulations (based on the public procurement law, before the PPP Act and the CC Act came into force);
- 32 concessions by the CC Act;
- four PPP projects under the concession regulations (that is, the private partner was selected under the concession regulations); and
- four PPP projects under the public procurement regulations (public procurement notices, whose legal basis is the PPP Act, expressly invited to enter a PPP).

Some of projects planned with the new law were cancelled or re-advertised after reformulation, while others were repeatedly the subject of notice. The final number of concession and PPP projects in 2009 was 34, and in 2010-2052. In 2009-2010, as many as 56 announced tenders were cancelled, interrupted or implemented in a different formula (Investment Support, 2010; Fundacja Centrum Partnerstwa Publiczno-Prywatnego, 2010). According to 2010 statistics, more than 220 projects were prepared and considered for PPP or concession in Poland (Fundacja Centrum Partnerstwa Publiczno-Prywatnego, 2010). At the end of June 2011, 25 projects were still at the stage of negotiations. According to the 2011 data, the public sector was considering the implementation of about 100 PPP projects, for which the tender procedure was not yet launched. The scheduled projects mostly were sports, recreation and municipal infrastructure (including car parks). The law does not clearly state whether the cooperation can involve the execution of a commercial goal – therefore, the solution is the implementation of a commercial goal as a supplement for non-commercial infrastructure. There are relatively few projects in Poland in education, environment and health when compared to Europe (Fundacja Centrum Partnerstwa Publiczno-Prywatnego, 2011; PricewaterhouseCoopers, 2005, 2008).

#### 4. Case study

The project was defined by the local government of a city with over 100,000 residents. Its aim was to build a hotel with a swimming pool as part of the infrastructure accompanying a sport and entertainment arena. The project assumed the completion of two buildings connected by a corridor:

- (1) economy-class hotel offering 100 beds in 50 rooms (a total surface of 3,600 m<sup>2</sup>; one facility with one underground and four above-ground stories); and
- (2) indoor swimming pool (the size of 25 × 12.5 m and the total surface of 1,500 m<sup>2</sup>; one-story building set deep in the ground; the floor of the swimming-pool was to correspond to the level of the first floor of the hotel).

Table III shows the key project participants and their role in the investment according to the law.

Based on the organizational and business possibilities, three investment variants were analysed:

- “A” variant – hotel with a swimming pool in PPP;
- “B” variant – hotel without a swimming pool in PPP; and
- “C” variant – hotel with a swimming pool as a concession for construction works.

Conclusions of the financial analyses are shown in Table IV. The city’s financial commitment in the project encompasses capital expenditures, the value of contributed land, and the sum of discounted subsidies from the budget. The subsidies were priced on the date of the preparation of the analysis. The city’s involvement (subsidies) was necessary for ensuring the project’s liquidity.

The analysis shows that the project could not generate a surplus sufficient to finance capital expenditures. As a consequence, the required internal rate of return for a potential private investor was not obtained, regardless of the business and

**Table III.**  
The role of project participants according to the laws

Public partner (concession grantor)	Private partner (concessionaire)
<i>PPP</i>	
Cash contribution (shares in an SPV)	Cash contribution (shares in an SPV, a subordinated loan)
In-kind contribution (e.g. real estate input);	In-kind contribution (such as project's documentation)
<i>Concession</i>	
Granted access to the property	Cash contribution
Sale of rights to exploit the property and draw benefits from it	In-kind contribution (e.g. in a form of documentation)
Acquisition of property developed on the concession contract	Acquisition of the right to exploit the property and draw benefits from it
Subsidies to project operation	Sale to the concession grantor of the object developed on the concession contract

**Source:** Based on Trojanowski (2010)

**Table IV.**  
Financial and economic analysis

Comparison categories	The "A" variant	The "B" variant	The "C" variant
Cash contributed by the city	–	–	–
Discounted subsidies from the city	7,887,015	–	8,583,873
Ground contributed by the city	1,140,000	1,140,000	–
Total value of city's contribution	9,027,015	1,140,000	–
Project's budget	23,470,563	16,473,730	22,330,563
Financial participation of the city (%)	38.46	6.92	38.44
City's average annual subsidies	672,000	–	732,000
City's monthly subsidies	56,000	–	61,000
Internal rate of return on equity (IRR) (%)	10.32	10.80	10.22
Economic internal rate of return (EIRR) (%)	11.42	14.27	12.20

**Source:** Based on Trojanowski (2010)

organization variant. The project needed significant subsidies from the city budget in "A" and "C" variants (with the construction of the pool). The "B" variant did not need subsidies from the city, but this variant assumed the construction of the hotel without the pool.

In the analysis of the project's economic rate of return the following socio-economic benefits were identified and quantified:

- tax revenues from the project to the local and state public budget, including property and income taxes;
- benefits of new jobs in the constructed facilities;
- increase in tourist attractiveness; and
- residual value – additional cash flow generated thanks to the implementation of the project.

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An additional effect of the project would be the positive impact on health, reduced cases of drowning, and the creation of complementary services for the sports and entertainment arena. Indeed, the hotel would complement the range of services provided by the arena and its associated facilities.

The detailed risk analysis carried out for project's variants included:

- risk distribution between the partners;
- probability of risk in terms of value;
- risk impact on the project in terms of value;
- total value of a given risk in the project, taking into account both impact and probability;
- calculated risk involved in the project;
- ways to prevent or minimize the consequences of the risk; and
- impact of risk on the public debt.

The 47 project risks were identified and evaluated as illustrated in Table V.

The ratings were based on the probability of the potential risk and its impact on the project. An expert assessed risk probability on a three-grade scale (3 – high, 2 – medium, 1 – low). Then, the risk impact was assessed on a similar three-grade scale. The final value of individual risks was established by multiplying the risk's probability and impact grade. This assessment is obviously qualitative. Risk analysis results of are shown in Table VI.

The “A” and “B” variants were dominated by shared risk which results from the construction of a special purpose vehicle (SPV) owned by the city and the private partner. The majority shareholder was the private partner, who – in consequence sustained more risk. The remaining risks were assigned to the public partner, who bore them related to the tendering procedure for the selection of the concessionaire (private partner). In all the variants, the probability of risks was as follows: medium grade – 24 types of risks, low grade – 19 types of risks, high grade – four types of risks. The impact of risks on the project was as follows: medium grade – 23 types of risk, low grade – 17 types of risk, and high grade – seven types of risk. The following risks have the highest share in the total risk analysis:

- risk of inflation;
- risk of interest rates;
- risks associated with the private partner remuneration;
- failure to find a private partner;
- failure to rise financing declared by the private partner; and
- failure to meet conditions for the loan instalments.

The “C” variant had the lowest risk value expressed in points. In all the variants, most of the risks were borne by the private partner. In the “A” and “B” variant the risk value was the same. However, a failure to provide subsidies by the city for the SPV in “A” variant would have resulted in a considerable increase in risk.

Project sensitivity analysis in all the variants was carried out according to following variables: the level of capital expenditure, the value of earnings before income, tax,

Type	Risk
Construction	<ol style="list-style-type: none"> <li>1. Delays in completion of works</li> <li>2. Incompatibility with agreed construction standards</li> <li>3. Cost increase</li> <li>4. Mistakes in the specification for a private partner selection</li> <li>5. Impact of external factors</li> <li>6. Inadequate solutions in the project's documentation</li> <li>7. New technologies</li> <li>8. Physical or legal defects that reduce the value or usefulness of an asset</li> </ol>
Demand	<ol style="list-style-type: none"> <li>9. Occurrence of competition</li> <li>10. Cycle of demand</li> <li>11. Changes in prices</li> </ol>
Project preparation	<ol style="list-style-type: none"> <li>12. Availability of information</li> <li>13. Changes of the criteria for the private partner choice</li> <li>14. Procedure of a private partner selection</li> <li>15. Abandoning the project</li> </ol>
Market	<ol style="list-style-type: none"> <li>16. The inability to obtain input of a certain quality (e.g. materials for the construction of facilities)</li> <li>17. Inability to obtain input of a certain quantity</li> <li>18. Inability to obtain input within a specified period</li> <li>19. Changes in prices</li> <li>20. Related to logistics</li> <li>21. Related to the labour market</li> </ol>
Political	<ol style="list-style-type: none"> <li>22. Changes in the politics and attitude to PPP</li> </ol>
Legislative	<ol style="list-style-type: none"> <li>23. Risk of changes in law affecting PPP</li> </ol>
Macroeconomic	<ol style="list-style-type: none"> <li>24. Inflation</li> <li>25. Interest rates</li> <li>26. Exchange rate</li> <li>27. Demographic changes</li> <li>28. Economic growth</li> </ol>
Revenue	<ol style="list-style-type: none"> <li>29. Related to the functioning of a private partner remuneration;</li> </ol>
Force majeure	<ol style="list-style-type: none"> <li>30. Natural and unavoidable catastrophes</li> </ol>
Dispute settlement	<ol style="list-style-type: none"> <li>31. Risks whose occurrence affects the manner and effectiveness of the settlement of a dispute arising in the background of the contract with a private partner</li> </ol>
Condition of natural environment	<ol style="list-style-type: none"> <li>32. Risks which cause the obligation to take action to improve the condition of the environment before the project starts, or risks of deterioration of the environment as a result of the project</li> </ol>
Location	<ol style="list-style-type: none"> <li>33. Related to legal status of real estate</li> <li>34. Archaeological discoveries or other related to cultural heritage</li> <li>35. Resulting from features of existing infrastructure</li> <li>36. Availability of labour force</li> </ol>
Transfer of assets	<ol style="list-style-type: none"> <li>37. State of the assets before they are transferred</li> <li>38. Flow of information concerning assets involved in the project</li> <li>39. Fulfilment of obligations and execution of rights associated with the transfer</li> </ol>
Terminal value	<ol style="list-style-type: none"> <li>40. Occurrence of liability or other right related to a given asset</li> <li>41. Value of assets at the date of completion of the contract with a private partner</li> </ol>

**Table V.**  
Project risks  
identification

*(continued)*

Type	Risk
Lack of social acceptance Financing	42. Risk of protests and objections of local communities, particularly during the organization and implementation of infrastructure projects in PPP
	43. Failure to find a private partner
	44. Failure to rise financing declared by private partner
	45. Withholding of funding already granted
	46. Failure to meet conditions for the loan instalments
	47. Credit default

**Source:** Based on Trojanowski (2010)

**Table V.**

Specification	The "A" and "B" variant	The "C" variant
Shared risks (of 47) (number)	43	10
Risks borne the city (number)	4	7
Risks borne the private partner (number)	0	30
Risks (points)	145	139
Risk borne the city (points)	12	21
Shared risks (points)	133	118

**Source:** Based on Trojanowski (2010)

**Table VI.**  
Risk analysis results

depreciation, and amortization (EBITDA – sums of 30-year period of operation), and the interest rate. The analysis results for all the project variants indicated that the project internal rate of return (IRR) was most sensitive to a decrease in EBITDA. The IRR decreases the quickest with a 10 percent change of EBITDA. The project was also very sensitive to changes in the capital expenditures; it was the least sensitive to changes in loan interest rate. IRR assumed a level below the profitability threshold, when selected variables decreased by 10 or 1 percent for interest rate.

Based on the conducted analyses, it was recommended to implement the project in "B" variant which offered cooperation with a private partner in the PPP formula but without the construction of the swimming pool. The second rating was given to "A" variant with the swimming pool, as required lower subsidies than the "C" variant.

## 5. Conclusions

The new PPP Act and CC Act laws offer a number of advantages for public-private cooperation. The key benefits include the opportunity for extensive involvement of a private partner, the transfer of risk, flexibility for private partner selection, possibility of public asset ownership rights transfer to private partners and preferential tax treatment. The acts are interrelated through the procedure of the private partner selection (Art.4 of the PPP Act). The PPP Act prescribes the application of either the public procurement procedure or the CC Act selection procedure depending on the sources of private partner remuneration. A new procedure for choosing a partner (concessionaire) concerns projects where the main risk is transferred to the private party. Thus, the Public Procurement Act will still be applicable, and the PPP Act will give a justification for the commercial investments, establishment of an SPV and tax advantages. Table VII presents a comparison of the basic principles of PPP and concessions.

Item	PPP		Concession
Nature of relevant regulation	Framework legislation		Procedure-defining legislation (the procedure of concessionaire selection)
Project scope	The project as the entirety of comprehensive activities		Construction work, services or supplies
Scope of cooperation	Broad – the legislation allows various organisational (commercial company established upon the PPP agreement) and contractual arrangements (various types of contracts)		Broad – yet without the possibility of an SPV creation by the concessionaire and the entity granting the concession
Equity involvement of the public entity	Yes		No
Delivery of services	Delivery of service in operation stage must be connected with construction phase		No need to use an asset for delivery of services
Studies and analyses	No obligation to define risk and perform risk analysis		The following have to be performed/studied User identification Financial, and organisational capacities of the parties Meeting actual needs through concession performance
Risk allocation	Risk allocation as a PPP characteristic. No guidelines on risk allocation		Transfer of most of the business risk on the concessionaire
Asset management	The Act gives legal grounds for asset management, including the transfer of ownership		No possibility of asset ownership transfer
Remuneration	Other than shown in the next column	The right to benefits of the PPP or this right in the first place (more than 50 percent) and a sum of money paid	Exclusive right to operate the structure (service), or that right plus a payment from the concession granting entity (public sector)
Nature of contract Partner (concessionaire) selection procedures	PPP agreement Public procurement law	The CC Act	Concession agreement

**Table VII.**  
The differences between PPP and concession

**Source:** Based on Ustawa (2008, 2009), Investment Support (2010) and Korczyński *et al.* (2010)

It appears that the PPP Act has a guideline character and will be less useful to the public administration than the CC Act. Investors might be concerned about the terms undefined in the Act. Still, partnership is just one of the available models, and not a universal solution. Complete financial and economic analysis, as in the example, should always be conducted, in order to prove the value for money of the selected model. An SPV can also be established by the application of the regulations of the Municipal Management Act, Civil Code and Commercial Companies Code.

The structure of the new acts raises a number of questions that can be answered only by the practice and implementation of projects. The PPP Act should not be assigned to complex projects, nor the CC Act to simpler ones, where, in exchange for certain services, the public sector pays remuneration or public sector authorizes to draw benefits. This may lead to a situation in which instead of using new tools, potential partners will use the extant means of public procurement. Apart from the selection procedure, there is lack of correlation between the two acts. The PPP Act was prepared by the Ministry of Economy, and the CC Act – by the Ministry of Infrastructure.

Ultimately, the project was not implemented either in the recommended variant, or any other variant, because of the term of local government, as well as purely political reasons. The preparation of a PPP project takes a long time, which no doubt is a disadvantage. Therefore, many such projects, which are private, or in concession, in Western Europe, will still be implemented in a traditional public procurement procedure in Poland. The analysis of the presented project is an example of PPP disappointment.

It can therefore be concluded that the Polish way of implementing PPPs has many drawbacks. The procedures are still too formal and difficult to be carried out by inexperienced local governments. The problems of investment projects are intensified by political issues. The political risk seems to be the most important for ensuring the continuity of the project's preparation, implementation and operation. The priority for Polish local governments in PPP projects is investment financing by the private partner, with a minimum public financial commitment. At the same time, a local government wants to minimize the risk. Such local government reveal lack of PPP.

In developing countries, where the PPP projects are intended to be formalized much more emphasis should be placed on promoting the idea of a partnership, thereby educating future partners. The law itself should be simple and practical, so that the political aspects do not become more important than rational arguments.

## References

- Adair, A., Berry, J., Gulatin, M., Haran, M., Hutchison, N., Kashyap, A.L., McCord, M., McGreal, S., Oyedele, J. and Tiwari, P. (2011), "The future of private finance initiative and public private partnership", *RICS*, available at: [www.rics.org/site/download\\_feed.aspx?fileID=9846&fileExtension=PDF](http://www.rics.org/site/download_feed.aspx?fileID=9846&fileExtension=PDF) (accessed 30 August 2012).
- Alford, J. (2001), "The implications of 'publicness' for strategic management theory", in Johnson, G. and Scholes, K. (Eds), *Exploring Public Sector Strategy*, Prentice-Hall/Pearson Education, London.
- American Chamber of Commerce (2003), *Public-Private Partnership as a Tool to Develop Infrastructure in Poland*, available at: [http://amcham.pl/File/pdf/PPP\\_report\\_english.pdf?PHPSESSID=a60a155bc93d9ab6ad3ce0b7278927](http://amcham.pl/File/pdf/PPP_report_english.pdf?PHPSESSID=a60a155bc93d9ab6ad3ce0b7278927) (accessed 30 April 2012).
- Babatunde, S.O., Opawole, A. and Akinsiku, O.E. (2012), "Critical success factors in public-private partnership (PPP) on infrastructure delivery in Nigeria", *Journal of Facilities Management*, Vol. 10 No. 3, pp. 212-225.
- Brzozowska, K. (2005), *Finansowanie inwestycji infrastrukturalnych*, CeDeWu, Warszawa.
- Buljevich, E.C. and Park, Y.S. (1999), *Project Financing and the International Financial Markets*, Kulwer Academic, London.

- Cenkier, A. (2011), *Partnerstwo publiczno-prywatne jako metoda wykonania zadań publicznych*, Oficyna Wydawnicza SGH, Warszawa.
- Chandan, S.C. (2012), "Determinants of PPP in infrastructure in developing economies", *Transforming Government: People, Process and Policy*, Vol. 6 No. 2, pp. 149-166.
- Cheung, E., Chan, A.P.C. and Kajewski, S. (2012a), "Factors contributing to successful public private partnership projects: comparing Hong Kong with Australia and the United Kingdom", *Journal of Facilities Management*, Vol. 10 No. 1, pp. 45-58.
- Cheung, E., Chan, A.P.C., Lam, P.T.I., Chan, D.W.M. and Ke, Y. (2012b), "A comparative study of critical success factors for public private partnerships (PPP) between Mainland China and the Hong Kong Special Administrative Region", *Facilities*, Vol. 30 Nos 13/14.
- Eaton, D., Akbiyikli, R. and Dickinson, M. (2006), "An evaluation of the stimulants and impediments to innovation within PFI/PPP projects", *Construction Innovation: Information, Process, Management*, Vol. 6 No. 2, pp. 63-67.
- European Commission, Directorate-General, Regional Policy (2003), *Guidelines for successful Public Private Partnerships*, European Commission, Directorate-General, Regional Policy, Bruxelles, available at: [http://ec.europa.eu/regional\\_policy/sources/docgener/guides/ppp\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docgener/guides/ppp_en.pdf) (accessed 30 April 2012).
- Finkenzeller, K., Dechant, T. and Schäfers, W. (2010), "Infrastructure: a new dimension of real estate? An asset allocation analysis", *Journal of Property Investment & Finance*, Vol. 28 No. 4, pp. 263-274.
- Fischer, K., Leidel, K., Riemann, A. and Alfen, H.W. (2010), "An integrated risk management system (IRMS) for PPP projects", *Journal of Financial Management of Property and Construction*, Vol. 15 No. 3, pp. 260-282.
- Fundacja Centrum Partnerstwa Publiczno-Prywatnego (2010), *Przedsięwzięcia PPP w Polsce – stan na sierpień 2010*, Fundacja Centrum Partnerstwa Publiczno-Prywatnego, Warsaw, available at: [www.centrum-ppp.pl/templates/./ppp\\_w\\_polsce\\_sierpien\\_2010.pdf](http://www.centrum-ppp.pl/templates/./ppp_w_polsce_sierpien_2010.pdf) (accessed 25 May 2012).
- Fundacja Centrum Partnerstwa Publiczno-Prywatnego (2011), *Przedsięwzięcia PPP w Polsce, Stan – czerwiec 2011*, Fundacja Centrum Partnerstwa Publiczno-Prywatnego, Warsaw, available at: [www.centrum-ppp.pl/templates/download/Przedsiwziecia\\_PPP\\_w\\_Polsce\\_czerwiec\\_2011.pdf](http://www.centrum-ppp.pl/templates/download/Przedsiwziecia_PPP_w_Polsce_czerwiec_2011.pdf) (accessed 25 May 2012).
- Gertner, D.M., Miller, N.G., Clayton, J. and Eichholth, P. (2007), *Commercial Real Estate, Analysis & Investment*, Cengage Learning, Stamford, CT.
- Hampton, G., Baldwin, A.N. and Holt, G. (2012), "Project delays and cost: stakeholder perceptions of traditional v. PPP procurement", *Journal of Financial Management of Property and Construction*, Vol. 17 No. 1, pp. 73-91.
- Investment Support (2010), *Rynek PPP w Polsce 2009*, Investment Support, Warsaw, available at: [www.paiz.gov.pl/files/?id\\_plik=12280](http://www.paiz.gov.pl/files/?id_plik=12280) (accessed 25 May 2012).
- Jarosiński, K. (2003), *Finansowanie inwestycji komunalnych w Polsce w warunkach samorządności lokalnej*, Oficyna Wydawnicza SGH, Warszawa.
- Jin, X., Zhang, G. and Yang, R.J. (2012), "Factor analysis of partners' commitment to risk management in public-private partnership projects", *Construction Innovation: Information, Process, Management*, Vol. 12 No. 3, pp. 297-316.
- Korczyński, T., Kozłowska, A., Kozłowski, K., Mednis, A. and Nowaczek, A. (2010), *Koncesja na roboty budowlane lub usługi a inne formy realizacji inwestycji publiczno-prywatnych*, ABC, Wolter Kluwer Business, Warsaw.

- Li, B., Akintoye, A., Edwards, P.J. and Hardcastle, C. (2005), "Perceptions of positive and negative factors influencing the attractiveness of PPP/PFI procurement for construction projects in the UK: findings from a questionnaire survey", *Engineering, Construction and Architectural Management*, Vol. 12 No. 2, pp. 125-148.
- Liu, T. and Wilkinson, S. (2011), "Adopting innovative procurement techniques: obstacles and drivers for adopting public private partnerships in New Zealand", *Construction Innovation: Information, Process, Management*, Vol. 11 No. 4, pp. 452-469.
- Markowski, T. (1999), *Zarządzanie rozwojem miasta*, Wyd. Naukowe PWN, Warszawa.
- Misterec, W. (2008), *Zewnętrzne źródła finansowania działalności inwestycyjnej jednostek samorządu terytorialnego*, Difin, Warszawa.
- Mouraviev, N. and Kakabadse, N. (2012), "Conceptualising public-private partnerships: a critical appraisal of approaches to meanings and forms", *Society and Business Review*, Vol. 7 No. 3.
- Nisar, T.M. (2007), "Value for money drivers in public private partnership schemes", *International Journal of Public Sector Management*, Vol. 20 No. 2, pp. 147-156.
- PricewaterhouseCoopers (2005), *Delivering the PPP Promise: A Review of PPP Issues and Activity*, PricewaterhouseCoopers, London, pp. 1-57, available at: [www.pwc.com/gx/en/.../pdf/promisereport.pdf](http://www.pwc.com/gx/en/.../pdf/promisereport.pdf) (accessed 5 March 2012).
- PricewaterhouseCoopers (2008), *Building New Europe's Infrastructure, Public Private Partnerships in Central and Eastern Europe*, PricewaterhouseCoopers, London, pp. 1-9, available at: [www.pwc.com/gx/en/engineering-construction/assets/building-new-europe-infrastructure.pdf](http://www.pwc.com/gx/en/engineering-construction/assets/building-new-europe-infrastructure.pdf) (accessed 5 March 2012).
- Sachs, T., Tiong, R. and Wang, S.Q. (2007), "Analysis of political risks and opportunities in public private partnerships (PPP) in China and selected Asian countries: survey results", *Chinese Management Studies*, Vol. 1 No. 2, pp. 126-148.
- Singh, L.B. and Kalidindi, S.N. (2009), "Criteria influencing debt financing of Indian PPP road projects: a case study", *Journal of Financial Management of Property and Construction*, Vol. 14 No. 1, pp. 34-60.
- Trojanowski, D. (2010), *Analiza prawno-biznesowa, ekonomiczno-finansowa, oraz analiza ryzyka i wrażliwości dla trzech rozważanych form realizacji inwestycji dotyczącej budowy Hotelu z basenem, Kancelaria Majętkowa Trojanowski*, DS Consulting, Sopot.
- Urbaniec, M., Stec, P. and Dolata, S. (2009), *Partnerstwo publiczno-prywatne jako instrument rozwoju zrównoważonego*, WAP Educator, Częstochowa.
- Ustawa (2001), Ustawa o samorządzie powiatowym art. 1 (Dz.U. z 2001 r. nr 142, poz. 1592 z późn. zm.).
- Ustawa (2004), Ustawa z dnia 29 stycznia 2004 r. Prawo zamówień publicznych (Dz. U. z 2007, Nr 223, poz. 1655 j.t.).
- Ustawa (2008), Ustawa z dnia 19 grudnia 2008 r. o partnerstwie publiczno – prywatnym (Dz. U. z 2009, Nr 19, poz. 100).
- Ustawa (2009), Ustawa z dnia 9 stycznia 2009 r. o koncesji na roboty budowlane lub usługi (Dz. U. z 2009, Nr 19, poz. 101).
- Wilson, D.I., Pelham, N. and Duffield, C.F. (2010), "A review of Australian PPP governance structures", *Journal of Financial Management of Property and Construction*, Vol. 15 No. 3, pp. 198-215.
- Wojewnik-Filipkowska, A. (2008), *Project Finance w inwestycjach infrastrukturalnych*, CeDeWu, Warszawa.
- Yescombe, E.R. (2003), *Principles of Project Finance*, Yescombe Consulting Ltd, London.

Zlenlewski, M. and Sześciło, D. (2008), *Co zmienić by rozwinąć PPP? Fundacja For, DLA Piper, Forum Rozwoju Edukacji Ekonomicznej*, Warszawa, available at: [www.for.org.pl/upload/File/raporty/Raport\\_PPP\\_FINAL.pdf](http://www.for.org.pl/upload/File/raporty/Raport_PPP_FINAL.pdf) (accessed 30 April 2012).

Zou, P.X.W., Wang, S. and Fang, D. (2008), "A life-cycle risk management framework for PPP infrastructure projects", *Journal of Financial Management of Property and Construction*, Vol. 13 No. 2, pp. 123-142.

Zysnarski, J. (2003), *Partnerstwo publiczno-prywatne*, Teoria i praktyka, ODDK, Gdańsk.

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