
**Czech University of Agriculture**

**Faculty of Economics and Management**

**The Thesis on**

# BUILD-OPERATE-TRANSFER PROJECT

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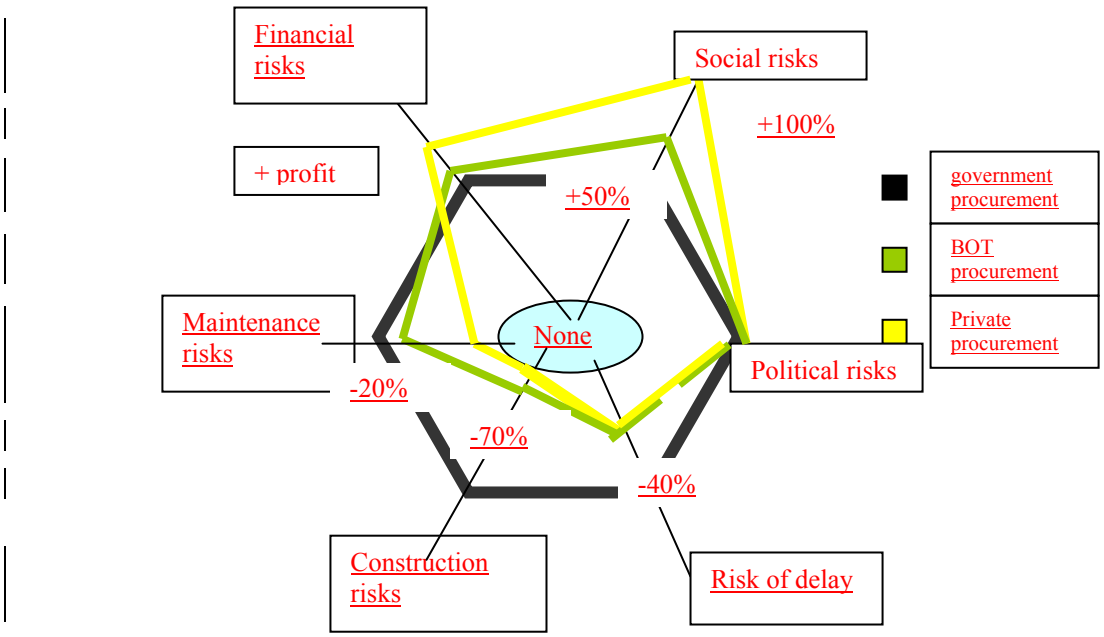
The principal identifying characteristics and success of a project is a step into unknown, fraught with risk and uncertainty. No two projects, especially those infrastructure ones, are alike and they are extremely sensitive to the factors remote from the headquarters' sphere of influence. The recent years call for infrastructure projects, which incur special risks, problems of organization and communication; require massive capital investment, and deserve (not always get) rigorous management of progress, finance and quality.

The higher and more sophisticated requirements for project implementation and management gave rise to a new way of its feasibility. The Built Operate Transfer (BOT) approach represents a growing trend emphasized by governments in many countries worldwide to solicit investments for public projects from the private sector. The concept has gained quite a considerable popularity due to its clear organization structure. The essence is that the private sector takes responsibility for the detailed design, construction, commissioning, and operating of a particular project. In return then, it receives a payment in form of tolls either from the public sector or the end users. The form of payment is one of the basic issues, which needs to be discussed in advance since we are usually talking about long-term contracts concerning several years. BOT's life cycle ranges typically from 10 up to 30 years. After an agreed period the project is transferred back onto the public sector either free of charge or for a symbolic fee.

The Diploma Thesis is the result of a consistent research made on the scheme of BOT. The prime objective is to prove the feasibility and suitability of BOT concept when applied to the infrastructure toll road projects in the Czech Republic and derive the general model, which would be valid for all infrastructure projects**.** Since there have not been any other projects introduced in the Czech Republic yet, most conclusions of the general model are referring to the construction of D47. The analysis using several sophisticated methods is based on the principle of project management going from the assessment of possible alternatives, stating analogies with similar projects applied in the world and finally deriving general conditions for the BOT successful implementation.

There are three major alternatives being analyzed from the perspective of the theoretical critical factors of infrastructure projects. Traditional public procurement and sole

private procurement represent two extremes of public-private dilemma. While entrepreneurs are pushing for the appropriate rate of return, the state interest is approaching more the general public interest and satisfaction, resulting in much lower profits and rates of return. Thus, the evaluation of the risks of each alternative way, including the BOT procurement, varies from one another and the following spider diagram shows the differences.




From the overall perspective of the risk evaluation the traditional procurement proves to be the best alternative for infrastructure projects. This is due to the fact that the prime objective, which needs to be fulfilled, is to serve the private interest. However, if the economic conditions, namely the national indebtedness, and the lack of money in other sectors point at the urgency of another financial alternative, then the BOT model application is justified. There is a number of advantages; however, the greatest one for the government is the subcontracting of the majority of the risks to the private sector. Anyway, for every risk the contractor concedes to, the government (usually taxpayers) has to pay. As a result the total amount of money outflow is higher than if the project was realized by government itself. However, the government has the certainty that the project will be constructed more efficiently and effectively than if it was done by the

private procurement since the government monitoring secures the appropriate qualitative and social level as well as the level of financial means for the building, operation and transfer phase of the project.

The worldwide boom has already proved several critical mistakes made by either the government or the private sector. The analogies derived from other case studies give us the clue what conditions each infrastructure BOT like project necessitates. Any successful model stems from its overall suitability for public-private cooperation, transparent tender, existing concessionaire policy and thorough monitoring exerted by the participated parties

Czech republic is an absolute novice in the application of BOT, however, while adhering to the proposed conditions necessary for the successful implementation, the model can be feasible and suitable for any infrastructure project and it can serve the value for money. The real trend in application can come up after eliminating the deterrents that now hinder the BOT from wider application and better credibility (bad reputation, higher costs, thorough definition of conditions in the contract, preference of profit maximization experienced by private sector). Only then, the opportunities can outweight the threats and the real boom of the project can be started.

# 1 Bibliography


1. Denis, L.: The Essentials of Project Management. Gover Publishing Limited, Hampshire 1996
2. Horáková, I.:Marketing v současné světové praxi. Grada Publishing, Praha 1992
3. Kotler, P.:Marketing management-analýza, plánování, využití, kontrola. Victoria Publishing, Praha 1992
4. Liou, Donald, D:Barricades on roads, Civil Engineering, April1997, Volume 67, Issue 4
5. Machala, K.: The Lights and Shadows of the Czech Economy, Top Finance, May 2004
6. Menheere, S.:Case Studies on Build-Operate-Transfer projects. Delf University of Technology, Delf 1996
7. Ministry of Finance ČR: Public Private Partnership, Ministry of Finance 2004
8. Mitzberg, H.:Mitzberg on Management: Inside our Strange World of Organizations. Free Press, New York, 1989
9. Němec, V.: Projektový Mangement. Grada Publishing, Praha, 2002
10. Nielson, Kris R.:Design-build &Co.: A brave new world, Civil Engineering, June1997, Vol.67 Issue 6, p.58
11. Pollaris, W. and company: Project Management and Real Estate Development. Harvard Design School, Harvard, 2001
12. Ředitelství silnic a dálnic ČR: Dálnice D47. HBH Projekt, Brno, 2003
13. Ředitelství silnic a dálnic ČR: Silnice a dálnice V České republice, Ředitelství silnic a dálnic, 2003
14. Short, J.W. : Preparing a Proposal for a Build, Operate and Transfer, Sweet &Maxwell, London, 1998
15. UNIDO: Guidelines for Infrastructure Development through the Build-Operate-Transfer (BOT) Projects. United Nation Industrial Development Organization, Vienna, 1996
16. Veber, J.: Management (Základy, prosperita, globalizace), Management Press, Praha, 2001

17. Wu, Soushan and Co: BOT Projects in Taiwan, Journal of Project Finance, Volume 5, 2000
18. Yearbook of Hospodarske Noviny, volume 7, Economia, 2003
19. Žižka, Jan: Highways according to British Standards, EURO 5/2003, p.25-27, Europress 2003

20. http://d47.dbm.cz
21. http://detizeme.cz
22. http://fdimagazine.com/news/fullstory.php/aid/542CzechRepublic.html
23. http://greenpeace.cz
24. http://icegec.org/publications/_doc/newsof themonth10.pdf
25. http://wtd.vlada.cz/files/rvk/rases/souvislosti_integrace_eng.pdf
26. http://www.vlada.cz