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AN OVERWIEV ON PUBLIC-PRIVATE-PARTNERSHIP PROJECTS: A CASE OF TURKEY

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ABSTRACT

Purpose- The aim of this paper is to review the PPP projects that have undertaken in Turkey over a period of 1980-2018. Methodology- The statistics of PPP projects are examined in terms of the number of projects, values of investments, sectoral distribution. Findings- Turkey is one of the top users of PPP financing models to construct public projects by comparing the some other countries initiating lots of PPP projects over a long period.

Conclusion- In order to achieve success in this complex structure consisting of public, sponsors and financiers in PPP, it is critical to prepare a good project. Predictability of the project obligations will minimize the possibility of additional costs in the future. Ensuring that the tendering and contracting processes are correctly configured, hence, all project risks can be identified and the risk sharing can be done more accurately.

Keywords: Public private partnership (PPP), Turkey, efficiency, infrastructure, public projects. JEL Codes: G40, G41

1. INTRODUCTION

A public-private partnership (PPP) is an arrangement between a public authority and a private partner designed to deliver a public infrastructure project and service under a long-term contract. Under this contract, the private partner bears significant risks and management responsibilities. The public authority makes performance-based payments to the private partner for the provision of the service (e.g. for the availability of a road) or grants the private partner a right to generate revenues from the provision of the service (e.g. tolls from users of a bridge). Private finance is usually involved in a PPP project. When properly prepared, PPP projects can provide significant benefits to the public sector as well as to the project.

Properties of a public-private-partnership project can be summarized as a long-term contract between a public authority and a private partner focusing on the provision of services rather than assets (long term), the transfer of certain project risks to the private partner, notably with regard to designing, building, operating/maintaining and/or financing the Project (risk transfer), a focus on the specification of project outputs rather than project inputs, taking account of the whole life cycle implications for the Project (focus on output), the application of private financing (often "project finance") to underpin the risks transferred to the private partner (private financing), the public authority makes performance-based payments to the private partner for the provision of the service (e.g. for the availability of a road) or grants the private partner a right to generate revenues from the provision of the service (e.g. tolls from users of a bridge). (payments by public authority)

The question of why a PPP option instead of convetional public procurement preferred may be answered by the rationale for using a PPP instead of conventional public procurement rests on the proposition that optimal risk sharing with the private partner delivers better "value for money" for the public sector and ultimately the end users. PPPs can be more complex than conventional public procurement. They require detailed project preparation and planning and proper management of the procurement phase to incentive competition among bidders. They also require careful contract design to set service standards, allocate risks and reach an acceptable balance between commercial risks and returns. These features require skills in the public sector which are not typically called for in conventional procurement.

Six core principles of good governance in PPP projects may be listed as below;

- Efficiency use of resources without waste, delay, corruption, or undue burden on future generations
- Accountability the extent to which political actors are responsible to society for their actions
- Transparency clarity and openness in decision-making

- Decency development and implementation of rules without harming people
- Fairness equal application of rules to all members of society
- Participation involvement of all stakeholders

By utilization of PPP models on public projects some gains are expected to be obtained. PPP models are expected to lower cost of operations over the life of the project. produce more effective distribution of risks. increase in speed of completing the projects, increase in quality in public services. creating new sources for public revenues, and convey a more effective public administration.

This research paper covers the advantages of puclic-private-partnership project financing model over traditonal public procurement. The following section briefly covers an overview of PPP projects employed in Turkey in between years 1986-2018 and examines some other countries' PPP projects. Finaly, some considerations and suggestions are put forward to improve the way of implication of PPP financing.

2. PPP MODELS APPLIED IN TURKEY

The most commonly used PPP models in Turkish public projects are BOT, BO, BRT and TOOR. BOT model has used to build, motorways, airports, bridges, tunnels, national parks and covers 45% of whole PPP projects in Turkey. BO model has used to run coal power plants that covers 8%, BRT model has used to build and run cith hospitals that covers 45% and TOOR model has used to build custom facilities, marinas, turizm facilities and extract mines that covers 2% of whole projects in Turkey.

By employing various PPP mpdels in years 1980 and 2018, a total number of 242 public projects have been contructed with an investment value of 64.8 billion USD, a value of transfered rights of 76.2 billion USD. Table 1 below shows the number of PPP projects, sectors and investmen values in between 1986-2018.

PPP PROJECTS OF TURKEY (1986-2018)						
Sectors	ors Status		Model # of Projects		Value of Transfer of Rights (billion \$)	
	Operating	вот	9	2,23	3,35	
Airports	Operating	TOOR	8	1,44	11,18	
	Under Construction	вот	2	14,97	38,13	
	Operating	вот	28	5,05		
Motorways and Service Facilities	Operating	во	8		0,23	
	Under Construction	вот	6	16,30		
	Operating	вот	4	0,13		
Seaports		во	18	-	2,08	
	Under Construction	TOOR	1	-	0,58	
Lealth Drainate	Operating	BRT	8	3,14		
Health Projects	Under Construction	BRT	12	8,16		
	Operating	вот	25	4,88		
Energy Projects		TOOR	61		19,39	
		во	5	4,42		
	Operating	вот	10	0,97		
Marina and Turizm		TOOR	1		0,12	
Facilities	Under Construction	вот	5	0,82		
	onder construction	TOOR	1	-	0,75	
	Operating	вот	12	0,37		
Custom Stations and Facilities	Operating	TOOR	2		0,07	
	Under Construction	вот	4	0,13		
Railways	Operating	вот	1	0,27		
Cultural and Turizm Facilities	Under Construction	вот	1	0,14		
Industrial Facilities	Operating	вот	2	1,42		
Mining	Operating	TOOR	8		0,36	
TOTAL			242	64,84	76,24	

Table 1: PPP Project of Turkey (1986-2018)

Table 2 presents the sectoral distribution and investment value of PPP projects in Turkey. The largest sector in PPP projects is the energy covering 36.6% of all with an investment value of 28.71 billion USD. The second and thrid largets sectors of PPP, respectively, are airports and motorways covering 7.9% and 17.4% of number of PPP projects with an investment values of 71.3 and 21.2 billion USD.

Table 2: Sectoral Distribution of PPP Projects in Turkey

Sectors	%	Billion \$
Energy	36,6	28,71
Airports	7,9	71,3
Motorways	17,4	21,2
Health	9,3	11,3
Seaports	9,8	2,79
Industrial Facilities	0,9	1,43
Marinas and Facilities	7,6	1,79
Railways	0,4	0,27
Custom Stations	6,7	0,51
Cultural and Turizm Facilities	0,4	0,14
Mining	3,3	0,37
Total	100	139,81

Table 3 below presents the numbers and values of PPP projects in Brasil, Argentina, South Afrika and England. In the period of 1990 and 2018, 911 PPP projects with a total investment value of 388 billion USD have undertaken in Brasil. 226 projects with an investment value of 56 billion USD has constracted in Argentina while 100 PPP projects with an investment value of 23 billion USD has contracted in South Africa in the same period. In the period of 1993 and 2017, England has undertaken 214 PPP projects with an investmen value of 161 billion USD.

Table 3: PPP Projects Undertaken in the Other Countries

1990 - 2018	Brasil		Argentina		South Africa	
Sectors	# of Projects	Billion \$	# of Projects	Billion \$	# of Projects	Billion \$
Seaports	64	12,5	16	0,9		
Telecommunicaton	35	34,5	3	1,2	4	0,8
Airports	22	28,6	5	2,4	4	0,2
Motorways	73	49,7	45	5,5	9	1,8
Railways	20	35,7	18	5,6	1	3,5
Water-Sanitation	153	16,3	19	8,2	8	0,09
Natural Gas	21	10,5	10	9	2	1,2
Electric	523	200,6	110	23,5	72	16
TOTAL	911	388,4	226	56,3	100	23,59

1993 - 2017	England			
Sectors	# of Projects	Billion \$		
Health	64	12,5		
Education	35	34,5		
Sanitation	22	28,6		
Housing	73	49,7		
Military Facilities	20	35,7		
TOTAL	214	161		

Table 4 shows the biggest projects to be contracted in the World in 2018. The first three biggest projects among the world's largets projects list belong to Turkey. The Dardanelles Bridge costs 3.1 billion Euro, the Ankara-Nigde Motorway costs 1.2 billion Euro and the Gironde Network cost 1,2 billion Euro.

Table 4: The Biggest PPP Projects (2018)

Rank	Country	Project Name	Billion€
1	Turkey	Dardanelles Bridge	3,1
2	Turkey	Ankara-Nigde Motorway	1,2
3	France	Gironde Network	1,2
4	Holland	Blankenburg Tunnel	1
5	Holland	A16 Rotterdam Motorway	0,93
6	Holland	Afsluitdjik Dam	0,81
7	Turkey	Bilkent Labs	0,71
8	Germany	A10/A24 Neuruppin-Pankow Motorway	0,65
		TOTAL	9,6

5. CONCLUSION

Urbanization, population increase, climate changes, technological developments, macroeconomic targets of governmests have been changing. Additions and renovations are needed in infrastructures. World Banks estimates that a 94 billion USD is needed for infrastructure investments up to year 2040. PPP projects have oftenly applied for transportation, health and energy sector. PPP model is expected to apply for less scaled projects and other sectors in the future. The existing PPP regulations should be consalidated and revised to meet the needs of new PPP models and sectors. The decision must be made based upon economic, social, financial physibility and return of expenditures. Viable PPP projects must be subject to sectoral and projects vise prioritization in order to use resources for the macraeconomic and strategic targets.

Moreover, a large number of PPP projects competes in international markets. In order to reach financing, the projects presented to investors should cover all detailes, well documented and provide good returns for the country. The whole procedures of PPP projects must be transparent for all parties. Effective monitoring, evaluation and performance management ensure improved PPP management. The preparation of PPP guidelines to be transferred to new PPP projects from previous projects ensures the standardization and predictability of PPP processes, while ensuring the institutional capacity of the public. Alternative financing methods appropriate to PPP should be evaluated and technical and legal infrastructure should be prepared. In order to achieve success in this complex structure consisting of public, sponsors and financiers in PPP, it is critical to prepare a good project. Predictability of the project obligations will minimize the possibility of additional costs in the future. Ensuring that the tendering and contracting processes are correctly configured, hence, all project risks can be identified and the risk sharing can be done more accurately.

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