

CONFERENCE PROCEEDINGS/FULL PAPERS ISBN: 978-625-97566-5-3/May 2025

"39th RSEP International Conference on Economics, Finance and Business, 18-19 April 2025, HCC. ST. MORITZ HOTEL, Barcelona, Spain"

Analysis of the public private partnership model applied in infrastructure services: The example of Turkiye

Fevzi Keskin

Ph.D. student,, Kirikkale University, Turkiye fevzieskin@hotmail.com

Seda Bayrakdar

Assoc. Prof., Ankara Haci Bayram Veli University, Türkiye servetgurra@gmail.com

DOI: https://doi.org/10.19275/RSEPCONFERENCES349

Abstract

Neo-liberal policies implemented in the world after 1980 have also changed the role of the state in the provision of public services. Instead of providing services directly, the state has started to take part in the provision of public services through the private sector and in cooperation. In this context, market-oriented public-private partnership models based on price have been used to ensure efficiency in the provision of public infrastructure services. In parallel with these developments in the world, neo-liberal policies implemented in the same period in Turkiye have paved the way for the use of public-private partnership models, and this tendency has increased significantly in recent years. The public-private partnership model is an agreement that is used in the financing of large infrastructure projects required for the provision of public services and is increasingly applied especially in developing countries, and aims to distribute risks in a balanced manner between the public and private sectors. In this study, projects carried out with the public-private partnership model, which is especially applied in investment projects in Turkiye, are analyzed.

Keywords: Public-private partnership, infrastructure investments, contingent liabilities

Jel codes: L16

1. Introduction

Public infrastructure investments are necessary for the provision of public services, while on the other hand, they have positive effects on economic growth. In order to ensure and sustain economic growth, infrastructure investments must be carried out at an adequate level and effectively. Urbanization and population growth have led to significant increases and changes in the quantity and quality of these investments. This change also brings with it the question of financing needs and where this financing will be provided. In this context, in order to effectively carry out investments without creating great pressure on public finances and by benefiting from the experience and expertise of the private sector, governments, especially in the last thirty years, have started to prefer financing methods that can be called public-private partnership (PPP) models by working together with the private sector.



The articles on the RSEP Conferences website are bear Creative Commons Licenses either CC BY or CC BY-NC-ND licenses that allow the articles to be immediately, freely, and permanently available on-line for everyone to read, download, and share.

PPP is a practice preferred by governments due to reasons such as the fact that expenditures are not included in the budget and significant investment expenses correspond to a small percentage in the current period. In fact, this situation can also be preferred by governments trying to ensure fiscal discipline by controlling public expenditures and borrowing due to the difficulty of monitoring non-budget expenditures and deficiencies in supervision (Karasu, 2011: 255). Considering that the duration of governments in power is generally shorter than the operational duration of these projects, it may be more attractive to adopt an attitude towards these projects with costs that are reflected in the current period in a smaller amount. In the first part of this study, the situation of Public-Private Partnership in Turkiye will be explained, and in the second part, comparisons will be made on world examples. The last part includes the policy proposal created as a result of the analyses.

2. Public-Private Partnership Model: Turkiye

Since the 1800s, PPP has shown itself in the fields of water, gas, sewage and transportation, and today it has a much wider range of applications. The increase in population, technological developments and the parallel increase in the service demands of citizens in the country have caused the public sector to focus more on infrastructure investments, but this situation has started to create a significant burden on the state budget. In an environment where financial fragility is high and crises are experienced from time to time, the efforts of private companies to obtain a regular income for a long period instead of risky investments have encouraged them to cooperate with the public and provide resources for large investments and ultimately make significant profits. The PPP model is gradually replacing the classical model in which investments made by the state are financed by taxes, which are the main source of income, and services are carried out by public personnel, and this method makes it possible to carry out large-scale and high-budget projects. However, the long-term costs of these projects to the public and the fact that these costs and risks are not disclosed make the model controversial. PPP, which can be expressed as a partnership between the public and private sectors aiming to provide the construction, financing, renewal, management, maintenance and provision of services of an infrastructure investment (EC, 2004: 4), is a cooperation/financing method in which the costs of projects related to these infrastructure investments, the risks they carry and the returns they will provide are distributed between the public and private sectors with a long-term contract, especially in the process of realizing public infrastructure investments in countries where the level of savings is insufficient, and the private sector provides the goods and services needed for the public (Şahin Duran, 2018: 319). PPP is a concession agreement between the public and a private company for the realization of a certain public infrastructure investment and sharing the risks (Batırel, 2017: 3).

When the distribution of investment amounts of projects carried out with PPP in Turkiye between 1993-2023 is examined by years and models; it is seen that the highest investment with approximately 31 billion dollars was made in 2013, approximately 10 billion dollars were invested in 1999 and 2010, after the 6.5 billion dollar investment in 2017, only 428 million dollars were invested until 2021, this amount increased to 5.6 billion dollars in 2021, no investment was made within the scope of PPP projects in 2022, and only 367 million dollars were invested in 2023. On the other hand, 2/3 of the approximately 103 billion dollar investment made in this period, 67 billion dollars, was realized with the build-operate-transfer model, followed by the transfer of operating rights, build-lease-transfer and build-operate models, respectively. It is noteworthy that 102 projects, corresponding to 37.5% of the total 272 projects carried out with PPP in Turkiye since 1993, were implemented in the field of energy, followed by 46 highway projects with 16.9%, and airports, marinas and tourism facilities with 21 projects each with 7.7%. The share of the 18 health facilities opened with PPP to date in the total projects was 6.6% (CSBB, 2024).

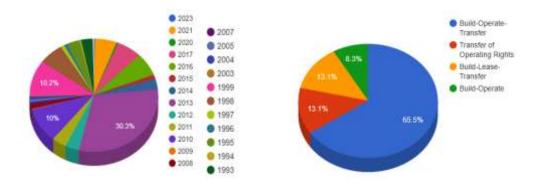


Figure.1.Distribution of investment amounts by year according to models

Figure.2. Distribution of investment amounts

Note: The database only covers projects with signed implementation agreements. Projects were updated as of September 2024. Source: CSBB (2024). https://koi.sbb.gov.tr/ (Accessed: 07.11.2024)

Among these projects, highway projects have the highest investment amount with approximately 34 billion dollars, which corresponds to 1/3 of the total investments, airport projects are in second place with approximately 25 billion dollars, which corresponds to 24.4%, followed by energy projects with 21.7% and approximately 22 billion dollars. Health facilities are in fourth place with 13.1% and approximately 13 billion dollars (CSBB, 2024).

When we look at the total amount to be paid to the public in return for the transfer of operating rights during the operating period, it is seen that airport projects are in second place with approximately 81 billion dollars, which corresponds to 72.2%, and energy projects are in second place with 20.8% and approximately 23 billion dollars (CSBB, 2024).

City hospital projects, which are among the health facilities are also carried out in Turkiye with the build-lease-transfer model. Here, the private sector builds the health facility, provides its physical equipment and operates it for a contract period of usually 25 years, during this period the state makes annual rent payments to the company, and at the end of the period, the ownership of the facility is transferred to the public.

As of the second half of 2023, a total of 20 city hospitals are providing service in 16 provinces in Turkiye, and these projects are on the agenda due to the fact that the contracts related to these projects are not disclosed to the public, administrative problems caused by the size of the scale, transportation problems caused by the hospitals being built in places far from the city centers, and issues arising from the service provision that have emerged over time (Karaman, 2023: 63-64). In Europe, three of the eight largest projects in terms of investment amounts that have reached financial closure as of 2018 are in Turkiye, with the Çanakkale Bridge ($\mathfrak{C}3.1$ billion) and the Ankara-Niğde Motorway ($\mathfrak{C}1.2$ billion) projects being the two largest investments in Europe. The Bilkent Laboratory ($\mathfrak{C}711$ million) is the seventh largest project in this field (CSBB, 2019: 10).

3. Public-Private Partnership Models: World Examples

The PPP has been used for several centuries. In the 16th and 17th centuries, French roads and bridges were the result of this partnership. In the 1820s, there were six private water companies operating in London. At the beginning of the 19th century, almost all of the water works in the USA were private. A number of developed OECD countries currently have well-established PPP programs (Tabassum, 2013: 482). The PPP model is a preferred practice in the European Union countries, especially in the UK. The Maastricht Treaty of 1993, which limited the budget deficits and borrowing levels of member countries, led these countries to cooperate with the private sector in financing public infrastructure investments. The incentives of the International Monetary Fund and the World Bank have been effective in the spread of this model in developing countries (Tokatlıoğlu and Şen, 2019: 210). PPPs have been implemented in the health sector in the UK for many years, and this experience is taken into account by many countries. It has been criticized that the results of services in public-private partnerships are mostly measured in monetary values, and this criticism has been kept current because it sometimes leads to excessively expensive hospital investments and the high costs of public administration cooperation after the completion of the projects (Top and Sungur, 2018: 260). According to World Bank data, 9,066 PPP projects with a total investment amount of 2.22 billion dollars were implemented in the 1990-2023 period, and the sector with the largest investment share was electricity. On the other hand, approximately 3.75% of the total projects were implemented in low-income countries (World Bank, 2024).

According to World Bank data, 9,066 PPP projects with a total investment amount of \$2.22 billion were implemented in the 1990-2023 period, and the sector with the largest investment share was electricity. On the other hand, approximately 3.75% of the total projects were implemented in low-income countries (World Bank, 2024). According to the annual report published by the World Bank (World Bank Group, 2023: 1-4);

In 2023, the investment of \$86 billion, which is approximately \$5 billion lower than in 2022, was realized at a level close to the last five-year average covering the 2018-2022 period (\$85.5 billion). While the number of projects was 260 in 2022, this number increased to 322 in 2023, above the average of the last five years (305 pieces).

In East Asia and the Pacific, investment commitments increased by 28% compared to the previous year, reaching \$51.4 billion, driven by increased commitments in China and the Philippines. In Europe and Central Asia, investment commitments increased by 4% compared to the previous year, reaching \$4.1 billion in 2023, but 48% below the five-year average. Decreases in Russia, Ukraine and Turkiye were influential in this decline. Investments in the Middle East and North Africa increased by 104% compared to 2022 and by 37% compared to the five-year average, reaching \$2.9 billion, driven by the expansion of investments, particularly in Egypt.

With the decline in private investment in Brazil and Mexico, in Latin America and the Caribbean, it decreased by 43% compared to the previous year and 27% compared to the last five-year average, to \$15.8 billion. In South Asia, where investment declines were seen throughout the region except Sri Lanka, it decreased by 40% compared to the previous year and 32% compared to the last five-year average, to \$8.2 billion in 2023. Finally, in Sub-Saharan Africa, where investment of \$3.5 billion was made in 2023, it decreased by 24% compared to 2022 and 45% compared to the last five-year average.

The public-private partnership model has been successfully implemented in different sectors in England, France, the USA, China, Hungary, Poland and many other countries (Varnalı, 2024: 103). It is seen that in England, one of the countries where the model has been successfully implemented, projects related to transportation infrastructure are financed with this model.

The Private Finance Initiative (PFI) method, which was implemented in England in 1992, utilized the usability pricing principle and payments were made to the private sector by the public regardless of the beneficiary. In England, where public-private partnerships are concentrated on social infrastructure investments, the Private Finance Initiative was adopted because user-based pricing, which is applied in privilege models, could not be applied in these areas (Kahyaoğulları, 2013: 258-259). In late 2012, this method was updated as Private Finance 2, systematically developed through open discussions with representatives of both sectors and aimed to take into account the criticisms of the public and parliament (OECD, 2015: 10). A total of 1031 projects were carried out in England through public-private partnerships between 1990 and 2021, and the investment amount in these projects was around 160 billion Euros. The education sector ranks first in this field with 332 projects, followed by health with 298 projects, and public order and security with 80 projects. In terms of investment amounts, the transportation sector ranks first with approximately 56 billion Euros, followed by health with 30 billion Euros and education with 28 billion Euros (Europen Investment Bank, 2024).

4. Conclusion and Policy Recommendation

Both developed and developing countries in the world are resorting to PPP applications in a widespread and ever-increasing manner in order to benefit from the experience and expertise and financing power of the private sector in order to meet public needs and achieve policy objectives. On the other hand, the fact that these projects take the costs of the increasing infrastructure demand from the public in the short term causes governments to prefer these applications. The fact that PPP applications, which are also widely used in Türkiye, remain outside the control of the Parliament or the Court of Accounts, that the risk distribution between the public and private sectors is largely transferred to the public sector, that Treasury guarantees impose significant financial risks on the budget, and that direct purchase, rental payments or usage guarantees create uncertain financial burdens are the important problems of these projects.

The risks and obligations imposed on the public by the contracts related to the projects should be shared with the public and the statistics related to these should be kept regularly. It is important to eliminate the fragmentation of legislation specific to these investments, which causes uncertainty about the extent to which they will put pressure on public finances in the coming years and may create problems in terms of fiscal transparency, and to ensure that the distribution of risks and liabilities between the public and private sectors is made in a way that also takes into account public interests.

References

- Batırel, Ö. F. (2017). Kamu Altyapı Yatırımlarında Kalite ve Kamu-Özel Ortaklığı. Journal of Life Economics, Sayı:12, 1-8.
- CSBB. (2019). Kamu-Özel İşbirliği Raporu 2018. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı.
- CSBB. (2024). Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı. https://koi.sbb.gov.tr/ (Erişim: 07.11.2024).
- Europen Investment Bank. (2024). https://data.eib.org/epec/ (Erişim: 08.11.2024).
- Kahyaoğulları, B. (2013). Public-private partnerships in developing and developed countries: the UK and Turkish Cases. Afyon Kocatepe Üniversitesi. İİBF Dergisi, 15(2), 243-276.
- Karaman, S. (2023). Sağlık Yönetimi, Güncel Konular ve Pratik Bilgiler. (Editörler: Sema Dökme Yağar, Fedayi Yağar). 1. Baskı, Ekim 2023, Eğitim yayınevi, İstanbul.
- Karasu, K. (2011). Sağlık Hizmetlerinin Örgütlenmesinde Kamu-Özel Ortaklığı. *Ankara Üniversitesi SBF Dergisi*, 66 (03), 217-262. DOI: 10.1501/SBFder_0000002221
- Tabassum, S. (2013). Public Private Partnership: An Overview. *The Indian Journal of Political Science*, 74(3), 479-488. Retrieved April 18, 2021, from http://www.jstor.org/stable/24701058
- Tokatlıoğlu, M, Şen, S. (2019). Kamu Hizmetlerinin Sunum ve Finansmanında Kamu Özel İşbirliği Modeli: Avrupa Birliği ve Türkiye. *International Journal of Public Finance*, 4 (2), 205-235. DOI: 10.30927/ijpf.624471
- Top, M., & Sungur, C. (2019). Opinions and evaluations of stakeholders in the implementation of the public-private partnership (PPP) model in integrated health campuses (city hospitals) in Turkiye. International Journal Of Health Planning And Management. 34 (1), 241-263. https://doi.org/10.1002/hpm.2644
- OECD. (2015). Organisation for Economic Co-operation and Development. *OECD Review of Public Governance of Public-Private Partnerships In The United Kingdom.* Public Governance and Territorial Development Directorate, Public Governance Committee. GOV/PGC/SBO (2015)8.
- Varnalı, T. (2024). Kamu-Özel İşbirliği Modellerinin Altyapı Yatırımlarındaki Rolü: Küresel Analiz, Türkiye Örneği ve Başarılı Uygulama Örnekleri. Uluslararası Sosyal Siyasal Ve Mali Araştırmalar Dergisi, 4(2), 99-117. https://doi.org/10.70101/ussmad.1447123
- World Bank Group. (2023). Private Participation in Infrastructure (PPI). 2023 Annual Report. https://ppi.worldbank.org/content/dam/PPI/documents/PPI-2023-Annual-Report-Final.pdf
- World Bank (2024). https://ppi.worldbank.org/en/visualization#sector=&status=&ppi=&investment =®ion=&ida=&income=&ppp= &mdb=&year=&excel=false&map=&header=true (Erişim: 07.11.2024).