

THE FINANCING OF TECHNICAL INFRASTRUCTURE SYSTEMS EUROPEAN UNION PRACTICES AND TURKEY*

Yazar / Author: Yrd. Doç. Dr. Abdullah YİNANÇⁱ

Abstract

Financial source alternatives for infrastructure projects, advantages and disadvantages of financial alternatives and different sources, the carefully selection of success subject and the fundamentals of outer financial sources are very important in terms of finance.

It can be said that neither the EU countries have different experience for infrastructure investment of finance sector nor the financing of infrastructure investment supported by public sector. Approaching of nowadays, financing supported by private sector are preferred. The used methods of private sector financing are generally ordered as “public-private cooperation models”, “infrastructure banks”, “capital markets”, and “the pension funds”.

In this study, the related infrastructure Project financing, the development of financment supply models were examined in similarities and shareholder in EU countries. The situation in our country (efficiency, the increasing of alternatives source usage and new system alternatives) and EU countries were examined by the light of successful sample models.

Keywords: infrastructure, systems, resources, funds, efficiency.

1. The Financing of Technical Infrastructure Establishment And Practices of Europe

1.1. The Public-Private Cooperation Models (PPM)

The processability of infrastructure investment in EU countries are the bases of the responsibility of local management. However, there are a few difficulties, such as the high cost of investment, and the long time period to complete the investment. Due to the these difficulties, local managements prefer to use the financing of private sector instead of own sources. Together with mostly member of EU countries have different legal circumstances and applied sectors. The weight of private sector and public-private cooperation (PPC) investment are more effective than public sector. Some countries, such as England, France and Italy are rather oward in terms of PPC applications, the new member of EU countries are used PPC evaluations at improving level. The widespread and experience of PPC evaluations are the advance level of the countries of England, France, Germany and Italy (advanced PPP adopters); mid-level of the countries of Spain, Portugal and Holland (Intermediate PPP adopters); late starting countries except for some sectors of Luxemburg, Sweden, Belgium and Greece [1]. France passed the regime of public private cooperation “contrat de Partenariat” (partnership agreement) at 2004 [2]. Private finance initiative (PFI) developed by one of the variety of PPC model has passed buying the services from private sector instead of public associations and administrators [2]. PPC models (PFI/PPPs-England) are greatly

* Bu çalışma 26-27 Kasım 2016 tarihlerinde, İstanbul’da düzenlenen International Congress of Management Economy And Policy isimli uluslar arası bilimsel kongrede bildiri olarak sunulmuştur.

ⁱNamik Kemal University, General secretary of Namik Kemal University, Degirmenalti Campus, 59030, Tekirdag, Turkey. e-mail: ayinanc@nku.edu.tr

increased the development of infrastructure investment especially at transportation, health, education, sheltering, apology, telecommunication, the urban management of waste and water sectors [1].

1.2. Infrastructure Banks

To decrease of political risks, infrastructure banks used infrastructure investment as a vehicle. They supply long-time credit and predictable investment as the direction of financing bank rules. The duty of infrastructure banks encourage infrastructure projects supported by private sector, constitute of convenient conditions and middle and long term improvement of economy. In addition, the aim of infrastructure banks produce more investment than other financial banks. To supply this aim, the bank should be independent from government politics and needs to be wide hands [3].

2. Results & Discussion

2.1. Investment Partnerships

In addition to companies, investment partnerships and collective investment vehicles supply directly fons at infrastructure projects. Investment partnerships in various bourses, capital stocks obtained from exclusion goods transfer infrastructure projects. In addition, real estate investment partnerships (REIP) supply financing support to infrastructure projects. REIPs prefer both organizational investors and individual investors [4].

2.1.1. Capital Markets

The increasing usage of public and private cooperation model at world is an important factor and financing vehicle at long term and dense investment supplying of infrastructure project finance. With the circumstances of PPC model, public associations created by infrastructure investment finance, international corporations, private sector delegates tend to the capital market vehicles due to the possibility of long term finance. Public associations and companies used capital market vehicles were given in

Figure 1.1.



Figure 1.1. Capital market vehicles

Capital markets as the bases of infrastructure project financing divide 3 different methods, which are called as borrowing, partnership, and capital stocks.

- **Borrowing:** Regional / global development supported by international corporations, such as European investment bank, Asia developing bank, World bank etc. give long-term financing credits for infrastructure investments.
- **Partnership:** This method mostly used for economical infrastructure projects. Bond coupon payments were financed by these projects.
- **Capital stocks:** In this method, credits, which were given for infrastructure investments, were used obtained from these debts. Privite corporations except for the bases of these capital stocks present to the investors. To these debts include one or more than one project [4].

In the time period of 2014-2020, European Union middle-term plans, as an alternative financing model inspite of increasing infrastructure investment needs, give way to “European Project bond initiative”. Coventional models of infrastructure investment financing, bond issue enclosure of “European project bond initiative and how the infrastructure financing occurs related financing models were given in **Figure 1.2.** [5] (Europe 2020 Project Bond Initiative).

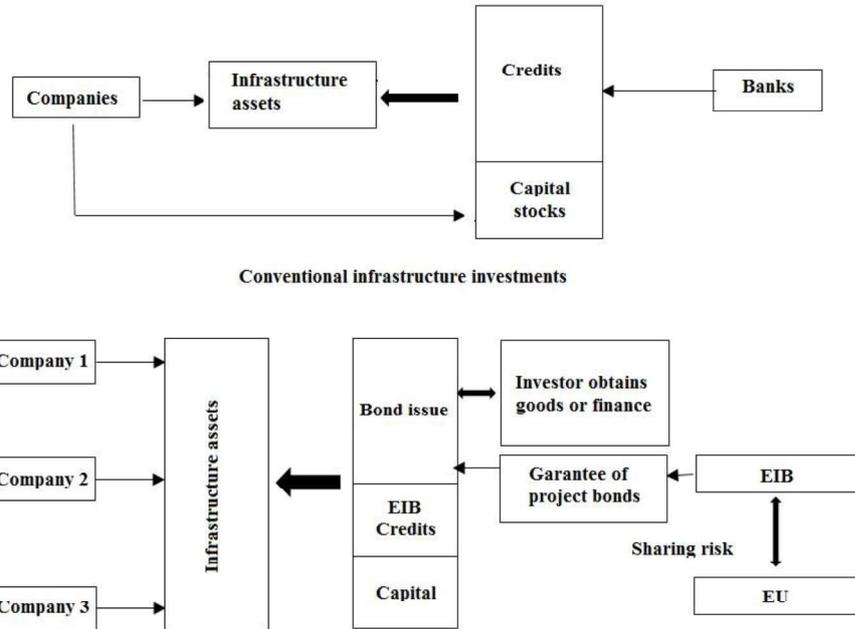


Figure 1.2. Bond issue with infrastructure finance

As the above mentioned **Figure 1.2**, companies use capital stocks, European investment banks (EIB) credits and bond issue to constitute of infrastructure assets. Companies capital stocks should not be less than 20% of total project amount. To obtain an income from bond issue, companies supply credits to pay EIB guarantee and bond principal capital and income return [5].

2.1.2. Fons

Retired Fons

Most of the EU countries, such as Holland, England, Denmark and Finland prefer using one of the evaluations of infrastructure investments supported by retired

fons. Most of the countries prefers to this evaluations, fons can be used efficient areas. For instance, fon market at England is accepted as mature and developed market in this area. However, small-scale retired fons constitute a barrier for infrastructure investments [6].

Local financing fons

The most responsibility of infrastructure investment at EU countries belong to local management.

Except for this alternatives, infrastructure investments were also supported by local management fons. In addition, fons are transferred to financing experience countries via their own corporations. This fon coordinates the company's agency and it is self-governed organization [1].

Infrastructure investment fons

Infrastructure investment fons divide quote fons and non-quote fons. Non-quote fons supply investment at building steps of infrastructure projects, which is called as "fence stroller" approach, such as new system establishment. At some countries, this situation are done regulations, they include infrastructure bonds and borrowing vehicle bases on the infrastructure bonds [4].

3. Technical Infrastructure System Financing And Evaluation Of Turkey

3.1. City Infrastructure Financing And Evaluation Of Politics

Turkey has greatly improvement of increasing infrastructure needs due to the development of cities. Turkey has greatly improvement of increasing infrastructure needs due to the development of cities. However, the increasing of servis quality, and also continue sustainability. The infrastructure construction is rather important on the bases of target of city transportation, entegration between systems, infrastructure shifted from city center to out of city, environmental friendly, efficiently and increasing of vehicles and responds to these dense traffic etc [7].

In the 10th developing plan, there are many targets, such as fundamental politics, strong and weak sides, sources and problem analysis. In addition, drink and usage water needs at cities, prevention of water smuggled, improvement of Networks, development of infrastructures and canalization systems.

The life standards should be increased to reach the services easily at Metropolitans. In addition, there are many targets, such as decreasing of infrastructure service cost, supported to local managements, decrease of emission waste at cities, energy, water and sources efficiency, recycle, prevention of voice pollution evaluations [8].

As a result of only these targets, decreasing of water smuggling supply the sources of 5-6 milion Turkish Lira.

3.2. City Infrastructure Financing And Evaluations With Legal Laws And Regulations

3.2.1. Public Services Were Done By Privite Sector With Laws And Regulations

There are old and new laws and substances in Turkey, which supplied directly or indirectly by privite sector. At now, there is no legal changes and the alternatives of privite sector can be applied.

When the laws can be examined at this time;

- 1580 number manucipality law 19th substance 4A and 5th articles.
- 2560 number İSKİ law 2nd substance a, d and e bents
- 1580 number manucipality laws 19th substance 4A and 5. articles.
- 3996 build-operate-transfer law,
- 4046 privatization law,
- 7th Developing plan and date of 30.06.96 Prime ministry notice
- 5216 number “Metropole manucipality law” 7th substance r bent
- 5272 number law 15th substance e bent and I bent agreement
- 5272 number law 68th substance a,c,d,e,f bent agreement
- 5272 number law 70th substance
- 5272 number law 71th substance

Privite sector can easily do public work and services. So, the public loss can be prevented by this way [9].

3.2.2. Developing Plans

VIIth Developing Plans:

The main target of this plan is to supply privite sector financial participation in all infrastructure investments and increasing of public company efficiency. Privatization was defined a date and build-operate-transfer works were performed and resulted.

Xth Developing Plans (2014-2018 Terms)

25 new programme was designed by the target of 2023 and 10th developing plan in priority areas, which helps the solvation of basic structural problems and supply the fast transformation term, have responsibility and coordination between corporations. With the parallel of global integration period, local economies, work and life environment, competitive, investment and labor force potential are examined carefully in the Xth developing plan (2014-2018 terms).

3.3. The targets of privite sector participation

Any defined service should be indicated a low cost in previous sections. Some important points must be known to give objective decisions and comments on cost

level. In Turkey, there is no criteria or discussion about the efficiency of municipality and given the service in low cost. It is not considered big structural changes in small time period due to opening a new private sector, efficiency control. However, private sector participation and direct evaluations and competitive subjects are very important. From these changes, there will be obtained important useful works and accepted to be obtained successful targets [10]

- To earn efficiency to supply services,
- To decrease the rates in the same service standards,
- To increase the service quality for cities,
- To tendency of regulations and management service differentiation,
- The expansion of financial commercial markets, and regulations of alternative investments,
- To increase professional development,
- To earn technological experience and development,
- To develop strong management structure,

Although there is no possibility of an agreement of bidding of some services, this situation must be countenanced by the management. Between the equilibrium of the aim, quality, and cost supply in a right way. It must be competence between supplied by municipality services and other services. Agreement should be defined clearly for both sides and all duty and responsibilities should be defined in this contract. Regulation system can be termed as strong and stable for all investments.

If the municipality managements continue their services from outside company, the competitive system must be learned and evaluated in a well-arranged way. For example, while supplying the service to the municipality, real cost must be used and evaluated the regulations of the similar services. There is no detailed cost data for services to compare the doing works and cost at municipalities in Turkey. So, it is not possible to explain the real comparison[11].

Conclusion

New sectors can be developed at a high cost due to supplying of the economic efficiency at cities, increasing of service quality, and investment and regulations to decrease the environmental cost.

In other words, high capital stocks and real-estate sectors with the parallel increasing speculative increment and increasing artificial cost increase have the fundamental reasons of financial crisis and risk factors.

The pressure increases on the environment and natural sources due to the increasing of population, developing of cities, economic agencies, and habit of consumption. With stating of global scale of new development model and “green improvement” are important concept to reach the predictable and continue of development targets.

At 9th developing plan period, big cities tend to the densely migration centers with the parallel of fast development of cities. The rate of city population to total

population increases from 67,5% to 72,3%. From the year of 2012, the population is over the 1 milion reach to 10 cities in Turkey [12-14].

The new politics and evaluations must be done for city competitiveness and increase of life standards, qualified life areas, social and physical infrastructures, quality and safety transportation systems etc.

The fundamental aim of the 10th developing plan is stated that social-economical convenient in all country and total development of country, decrease of the regional differences, city potentials, competitiveness, reach easily in public services are highlighted.

The increasing infrastructure needs in Turkey should be supplied by public sources and also participation of private sector alternative financing models. For this circumstances, recently, public-private cooperation (PPC) model has been developed and evaluated to occur of infrastructure investments.

The reasons of partnerships of private and public sector and participation of private sector and supplied the advantages of public sector were examined and the following substances were observed [13-15].

- To earn new markets and new client potential,
- To supply getting to water and waste of water services,
- To obtain increment of the company and development in long-term period by carefully observation,
- To increase the commercial power of the company in markets and new markets,
- To obtain the advantages of public service companies and develop long-term strategies,
- To supply capital for infrastructure and new technology investments,
- Better method: Reconstruction of the companies and increase of the efficiency to use the facilities more better,
- The relaxation of public budget for entrance of capital,
- To constitute professional expert persons, new technologies, information, management and the awareness of the subject of company management,
- To occur the optimum time period of projects and company management,

The investment of increasing of water quality (with chain effect) supplies the possibility in new investments in other sectors.

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