

Public–Private Partnership Healthcare Projects in Turkey

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Abstract

Project finance is a financing mechanism to fund long-term investments considering the expected cash flow from the project at which asset and liabilities are generally booked in financial statements of special purpose vehicle (SPV). For recent years, healthcare services in Turkey are somewhat delegated to private sector through Public Private Partnership (PPP) model that project finance plays a critical role. In this model, investment is realized by private sector and risks are shared among related parties. The fund needed for investment can be raised through syndicated loans with the contribution of domestic banking system. Nevertheless, banking sector in Turkey has limited capacity to raise long term capital considering the funds utilized for these projects. This study aims to examine the finance structure of long-term PPP Healthcare Projects in Turkey by conducting interviews with the bankers who have been involved in this process.

Key words: Project finance, public private partnership, health

Türkiye’de Kamu Özel Ortaklığı Sağlık Projeleri

Özet

Proje finansmanı, beklenen nakit akışına bağlı olarak uzun dönemli yatırımları finanse eden bir mekanizma olup projeye ilişkin varlık ve yükümlülükler genellikle, kurulan özel amaçlı şirketin (ÖAŞ) mali tablolarında yer almaktadır. Son yıllarda, Türkiye’deki sağlık hizmetlerinin bir bölümü, proje finansmanının önemli bir rol oynadığı, Kamu Özel Ortaklığı (KÖÖ) modeli kapsamında özel sektöre delege edilmiştir. Bu modelde yatırım özel sektör tarafından gerçekleştirilmekte, olası riskler ise taraflar arasında paylaşılmaktadır. Söz konusu yatırımların finansmanında ise genel olarak sendikasyon kredisi kapsamında yerel bankacılık sistemi devreye girmektedir. Ancak, projelere uzun vadeli kaynak sağlayan Türkiye’deki bankacılık sektörü, uzun dönemli kaynak elde etme konusunda sınırlı kapasiteye sahiptir. Bu çalışma, Türkiye’de gerçekleştirilmekte olan KÖÖ Sağlık Hizmetleri Projeleri’nin finansal

yapısını süreçte yer alan bankacılar ile görüşmeler gerçekleştirerek incelemeyi amaçlamaktadır.

Anahtar Kelimeler: Proje finansmanı, kamu özel işbirliği, sağlık

I. INTRODUCTION

Project finance can be defined as, financing of long term projects based upon a non-recourse or limited recourse financial structure at which the viability of the project is based on the expected cash flows generated by the project. Governance, political risk, economical strength in that country can be the main determinants at deciding the degree of recourse and these long term projects can be decisive for other indicators, namely sustainable growth, employment, financial stability of the country where these projects have taken place (Scannella, 2012).

In project finance, generally a new firm, sometimes called as Special Purpose Vehicle (SPV), whose assets and cash flows are separated from the founder is established. This separate legal firm is provided equity and raises debt to carry out a specific business operation for a finite period of time (Alam, 2010). The main performance indicator for that firm is the cash flow and there is a strict link between financing and flow of money to the project. The consistency between cash flow dynamics and allocated funds' conditions is vital in respect of continuity of the project. For instance, maturity mismatch, in other words early repayment schedule of financial debt considering cash generation capability of the project can cause significant liquidity risk.

As indicated above, one of the distinctive feature of the project finance is long-term tenor which is rarely sustained due to some constraints, namely macroeconomic conditions. If the saving in a country is not satisfactory or is not directed to the financial / capital markets or has very short maturity, a foreign country's resources can be needed to implement the predetermined project. Such resources can be; foreign direct investment (FDI), foreign funds originated from a foreign country's bank or foreign funds deployed by domestic financial institutions.

For the recent years, Turkey paved the way for high amount of investments such as third airport, third bridge, city hospitals and so on. These investments totally account for significant portion of Turkey's GDP which brings the crucial question in minds; as an emerging economy how Turkey can finance these huge amount of investments?

In this paper, it was sought to shed light on the financing mechanism of one of the important projects, labelled as city hospitals. By focusing the biggest two hospitals out of 20 whose tender process have

been finalized as of the date of this study's conclusion, it is aimed to make clear pros and cons of the financing structure through conducting interviews with the bankers who have been somewhat involved in these projects.

II. FRAMEWORK

2.1. Health Sector

According to the World Bank (2016) data, considering the GDP (Gross domestic product) indicator, Turkey ranks as 18th economy in the World, respectively. This ranking is consistent with the size of the health sector and related expenditures.

The population of Turkey is almost 79 million people pursuant to Turkish Statistical Institute and most of the population is under age 35 showing a favorable effect within the respect of funding the health sector. Nevertheless, the average age of the population increases gradually which probably leads to raise at healthcare expenditures. As of 2015, the median age is 31 whereas this figure was 28 in 2007.

There are some indicators such as baby mortality rate and life expectancy age that can be used for assessing the quality of the health sector in a country. According to OECD data, baby mortality rate in Turkey is 11.1 per 1,000 baby whereas this ratio is 0.4% in OECD and the average life expectancy age in latter is 6 years greater, equaling to 80. It is worth noting that there is a positive correlation between health expenditures and increase at life expectancy indicator.

In accordance with the report, Turkey's healthcare expenditure ratio per GDP is in line with other developing countries, almost %5, 5 of GDP. For the developed countries such as USA, Germany or France this ratio exceeds 10%. In addition to that, the average number of doctor per 1000 patient is only 1.8 in Turkey, significantly below the average of OECD which is 3.3. In Turkey, hospital occupancy rate is almost 69% with 2 days average length of stay in private hospital and 4.4 days in state hospitals. In the overall, the SWOT (Strengths, weaknesses, opportunities, threats) analysis stated in the report illustrates that the dominance of state and lack of sufficient preventive health policies can be categorized as the some weak points of the health sector. Furthermore, increasing input costs and competition can put pressure on the service quality. On the other hand, enhanced access to healthcare and existence of highly experienced research hospitals are strength of the sector in which growing market share of

private insurance and interest of international investors harbor significant opportunities.

2.2. PPP Projects

There is a tendency at healthcare costs to scale up owing to developments at technology, demographical reasons such as ageing population, resistance of diseases to the current treatment and drugs whilst at the same time governments need to manage budget deficits. Public Private Partnerships (PPPs) is the commonly used method to deal with these problems which gets the private sector in the financing, construction and delivery of public services (Acerete, Stafford & Stapleton, 2011).

In Turkey, within the concept of “Transition in Health Sector”, PPP Department was established in 2007 in order to encourage private investors to invest in health sector. In PPP model, the risk is shared between state and private investor and the service directly rendered to the patients is given by state. Other operations such as supply of equipment, materials etc. are under the responsibility of private investor. It may be noted that, healthcare PPPs can be seen as a mechanism which switch public attention to the social welfare projects.

According to the PPP Department’s disclosure as of September 2015, the hospitals whose tender have been finalized as listed below.

Table 1 Projects That the Tender Has Been Finalized

Project	Bed Capacity
Ankara Bilkent Integrated Health Campus	3660
Ankara Etlik Integrated Health Campus	3566
Kayseri Integrated Health Campus	1584
İstanbul Basaksehir İkitelli Integrated Health Campus	2682
Yozgat Training and Research Hospital	475
Public Health Institution of Turkey	-
Adana City Hospital	1550
Elazığ Health Campus	1040
Gaziantep Health Campus	1875
Manisa Health Campus	560
Mersin Health Campus	1250
İzmir Bayrakli City Hospital	2060
Isparta Health Campus	755
Kocaeli Health Campus	1180
Konya Health Campus	838
PTR and HSFP Package	2400
Bursa City Hospital	1355
Eskisehir City Hospital	1081
Tekirdag City Hospital	480

Sanliurfa City Hospital	1700
TOTAL	29010

Apart from above list, there are 10 projects that the process is still ongoing with having 11,000 bed capacity. As per Turkish Statistical Institute statistics, the number of inpatient medical institutions in Turkey is 1,528 as of 2014 with having 206,836 hospital beds capacity. As it is seen, the total bed capacity of the projects exceed 40,000 which is almost 20% of the existing bed capacity in Turkey.

These projects are significantly important for Turkey not only for bed capacity but also for the economy that is generated. As stated by PPP Department, total investment amount of Ankara Bilkent Integrated Health Campus project is almost 1.2 billion Euro and 890 million Euro has been raised through project finance with the contribution of Garanti Bank, Deniz Bank, Is Bank, Finansbank, Siemens Financial Services, Garanti Bank S.A, Yapi Kredi Bank and UniCredit Bank Austria AG.

For Ankara Etlik Integrated Health Campus, the external fund allocated for the project is almost 880 million Euro out of 1.1 billion Euro total investment amount. The tenor of the credit is 18 years and the financial institutions involved in that projects are EBRD (European Bank for Reconstruction and Development), Is Bank, IFC (International Finance Corporation), BSTD (Black Sea Trade Development Bank), DEG (German Investment and Development Corporation), SACE (Italian Export Credit Agency), Crédit Agricole, Banca IMI / Intesa San Paolo, Unicredit, Deutsche Bank, TSKB and Akbank.

2.3. Capital Markets and Banking System

The saving rate in a country is crucial in terms of covering the need of funds that are allocated for the investments. As reported by the World Bank, the gross savings of Turkey is almost 15% of GDP, which is considerably below in comparison with other developing countries such as India (31%), China (49%), Indonesia (33%) or developed ones such as Germany (27%) or France (20%). Furthermore, Turkey's stock market capitalization to GDP ratio is not satisfactory which exhibits that the firms in Turkey have limited capability to raise funds from capital markets. As per the World Bank, stock market capitalization to GDP ratio is 25.7% in Turkey as of 2014 which is significantly lower than other emerging economies such as India (76.1%), China (58%), Indonesia (47.5%) or developed countries, namely Germany (44.9%) or France (73.7%).

Banking sector is the main driver for financing long term investments but the resources of the banks in Turkey are importantly short

term based. BRSA (Banking Regulation and Supervision Agency) reported that, deposits constitute approximately 53% of bank resources as of February 2016 and as per CBRT (Central Bank of Republic of Turkey) statistics only 12% of the deposits, equaling to 151 billion TL, has the maturity more than 3 months. Despite very short maturity of resources on average, according to the project finance statistics in 2015, collected from 21 banks out of 47, published by The Banks Association of Turkey, total amount of credits utilized as project finance is almost 208 billion TL, where 14% is non-cash risk.

Besides being a creditor of a project, the impact of the bank over a project can go further, namely affect the viability of the project. If the government perceives that apart from the investment project under consideration, a bank is important to the country, it might be more reluctant to engage in actions against the project. And also with the contribution of other foreign financial institutions, the power of creditors can reach very convincing levels. Among all lenders, multilateral development banks such as the International Financial Corporation (IFC), or the European Bank for Reconstruction and Development (EBRD) have high bargaining power due to financing many projects and providing financial aid. Thus, there is repeated interaction between the development bank and the host government. In contrast to commercial banks that might also be frequent lenders, the development banks (DBs) have a special status (Hainz & Kleimeier, 2006). Considering the two projects; Ankara Bilkent Integrated Health Campus and Ankara Etlik Integrated Health Campus, IFC and EBRD have taken place in the finance structure of latter one. Hainz and Kleimeier (2006) showed that development banks can act as political umbrellas which enable commercial lenders and sponsors to use the participation of development banks to mitigate political risks.

Although banking system plays critical role in financing projects, projects bonds as a financing instrument has begun to take the stage which enable the broader investor base to contribute to the financing pool of the project (Scannella, 2012). The bond-based financing model supports not only the sponsor who seeks for financing but also non-banking market such as pension funds and mutual funds which explores long-term revenue stream to invest. These bonds can also be listed to a stock market which enhances liquidity and demand for such a security.

2.4. Project Finance

Structure

In project finance, a separate company is established in order to conduct the project and legal independence, high financial leverage are

some characteristics of this project finance company. Projects are heavily debt financed and syndicated bank debt is the main type of financing. Bank debt can be either limited-recourse or non-recourse which shows whether the creditor is able to use recourse mechanism to the sponsors.

Project finance provides very flexible structures that can be adapted to the needs of an individual project, particularly to the economic and political environment in which the project operates. As stated in Hainz and Kleimeier (2006) study, the higher the political risk of the host country the more likely is project finance. For borrowers in countries with weak creditor rights and poor legal enforcement, syndicates must be particularly large and diffuse in order to deter strategic default. In contrast, in countries with strong and enforceable legal rights, syndicates are structured to ensure monitoring and low-cost recontracting. Thus, the syndicate structure is a direct response to risk.

In project finance, the construction of the annual cash flow and the estimation of the annual returns to the equity are particularly important and there are often guarantees and other government actions which affect the annual cash flows (Tham, 2000).

Project Finance vs Traditional Borrowing

Unlike traditional corporate lending, where creditors check the creditworthiness of the total firm before they offer the loan, the lenders in project finance assess the cash flow generation capability and the assets of the project (Alam, 2010). Hence, the financing cost can be higher than traditional borrowing owing to lack of possible supporter that can step in when there is a problem at debt repayments.

Among all syndicated loans made to borrowers in a country, the fraction of project finance loans is larger, the weaker the corporate governance system, the weaker the economic health, the higher the political risk of the borrower's country and the higher the influence of the lending bank over the host government. (Hainz & Kleimeier, 2006).

While assessing the availability of project finance, cash flow volatility and correlation of cash flows can be taken into consideration. As Alam (2010) stated, the probability of project finance increases in correlation between the firm and project cash flows when the cash flow volatility of the project is low and similar to that of the firm. Furthermore, the likelihood of project finance is the highest when the correlation between sponsor and project cash flows is high and the risk of the project is different from the risk of the sponsor. When the cash flow volatility of the project is low and similar to that of the firm and there is a low correlation between the firm and project cash flows, corporate finance is the preferred choice.

III. IMPORTANCE AND PURPOSE OF THE STUDY

As mentioned above, the banking system in Turkey has limited resource capacity to finance long term projects that can cause financial distress over banking sector. Allocating averaged short term resources to the long term projects exceeding 10 years tenor can exacerbate the fragility of banks in the course of possible fluctuations in financial markets. Hence, capital adequacy ratio of banks can't meet certain levels determined by regulators or international markets which can lead to deterioration at roll-overing the previously used credits from foreign markets and financial institutions. Without adequate resource, banks can encounter problems while covering due liabilities which can result in calling the credits back which are not due in order to collect enough fund to compensate liquidity crunch. Such an action taken by banks can engender significant financial problems in overall economy owing to contagion effect.

Project finance, on the other hand, has received considerably less attention in Turkey; in particular there are only a few studies that examine issues related to project finance.

IV. DATA COLLECTION AND ANALYSIS

For the time this study has been conducted, there were 20 PPP health projects whose tender have been finalized. Out of this portfolio, the biggest two in respect of bed capacity have been chosen in assuming that bed capacity can be a good indicator whilst showing the complexity and amount of the project which are crucial variables for the banking side of view while assessing a project.

The number of financial institutions as a contributor for Ankara Bilkent Integrated Health Campus project is 8 and this number is 12 for Ankara Etlik Integrated Health Campus project.

In order to clarify; the main motivation for financing the project and the plan, if exists, to manage possible risks during the project, interviews had been taken place with the managers of financial institutions, namely Finansbank, Denizbank and Is Bank. And also an interview had been conducted with Credit Suisse, Switzerland-based multinational financial services which has not contributed a PPP Health Project after consuming significant time with the project. The managers of TEB, a middle sized bank in Turkey, were the last interviewees who declared their opinions about not participating any of PPPs. In total, 15 bank managers from 5 different banks mentioned their opinions about these projects.

The data were collected through qualitative interviews at which there was a general plan between the interviewer and interviewee without determining the order and the phrases of the questions beforehand. The

output of interviews had been converted to the transcripts and then coded in order to define certain themes. After coding, within the respect of determined themes, categories have been structured to conclude the data obtained through interviews.

V. FINDINGS

In this section, considering the findings of this study, categories and comments are stated together. After the analyses of data collected through interviews, the categories are determined as following; Non-Financial Motivation, Stable Cash Flow, Profitability, Risk Mitigation and Resource Structure.

Non-Financial Motivation

Even though, a bank's core activity purely depends on certain risk assessments, additional factors can surface which sometimes enhance the credibility of borrower or worsen the current the conditions. A bank which desires to be a pioneer in a certain field can eagerly move forward whereas that bank can be more reluctant to finance predetermined sectors even if the borrower firm can meet certain risk assessment criteria.

A bank manager defined this appetite as stated below.

"We are one of the banks which established sole project finance department in Turkey and we are very delighted to be a creditor of these PPP Healthcare projects and be one of the pioneers. This also enhance our knowledge."

As mentioned hereinafter another manager from a different bank evaluated these projects in respect of social welfare.

"These PPP healthcare projects will contribute the welfare of the community so as a one of the leading banks in Turkey we need to involve these projects. Otherwise, the society will react this in a different manner. We don't want to be a bank which is not involved such a project that can enhance the social welfare of the community."

Another bank manager commented this issue within sectoral point of view.

There are certain sectors such as education and healthcare that we don't want to be a part of it. The main motivation behind this decision is, when the borrower does not fulfill its liabilities for instance default occurs, what will the bank as a creditor will do? Even if it is possible to take a school desk from a school in response of overdue credit installments or seize the hospital beds as a collateral, probable social reaction will avoid such a move. So we are not eager to take position in PPP healthcare projects.

Stable Cash Flow

It can be suggested that cash flows of the PPP Healthcare Projects are almost stable under the coverage of Ministry of Health which decrease the level of ambiguity whether the project can generate enough cash to service the debt. Such a guarantee is a valuable input for the assessment of project finance. On the other hand, these guarantees can increase the commitment burden on the government and hence cause the credit rating which is nowadays at investment level to deteriorate.

The cash flow stability was defined by a bank manager as follows.

“Almost 50% of the revenue and 80% of earnings before interest tax depreciation and amortization (Ebitda) is composed from guaranteed rent payments which are not linked to whether to service has been rendered or not.”

Another bank manager explained cash flow status hereafter.

“There are two streams of the cash flow, pro operation and post construction. In the first stage, if the constructor has not able to finalize the construction, the creditor is eligible to recourse the state. After the construction, when the operation begins, the constructor begins to receive sustained rent payment whether the related operational services have been executed properly.”

A bank manager stated their conservative stance by saying:

“Even if there is a sort of continual cash flow guarantee, we awaited the financial closure of the first project. After the closure, we step in and be part of the other project.”

Profitability

From banking point of view, apart from net interest margin which is the positive difference between the rate charged to the loan and rate paid for the resources, the projects exhibit opportunities for additional revenue streams for the banks. By bundling the products, a bank can offer several products to the customer which let the bank make significant profits. For instance, due to the competition, there is limited flexibility to charge additional interest rate for the mortgage credit that a customer wants to use. Nevertheless, through bundling the mortgage credit with other instruments such as insurance and offer quick responses to the customer expectation, the bank can compensate the margins.

A bank manager clarified this opportunity hereinafter.

“Even though we were not able to generate cross sale opportunity to salary payments which had been delegated to the state owned banks, there is a room for improvement within respect of cross and up sale opportunities. The salary stream generates sight deposit opportunity with very low cost. We are planning to open branches in hospitals which will enable us to give banking service to huge population. And also we will place Point of Sales (POS) and Automated Teller Machines (ATM) in the project fields.”

On the other hand, the bank manager of another bank commented in different perspective.

“The profit margin is feasible, however for the time being, we do not take into consideration cross and up sale opportunities so significantly. The resource allocated to this project had been used for other businesses that ensure broader interest margin than this project. However, the credibility of other customers began to deteriorate which let us to be more sensitive and conservative. In this manner this project was a good candidate to park the money”

Risk Appetite

The projects are long-term and stability is the main concern for the banks. As it stated previously, loan contracts play critical role for the banks to mitigate possible risks by using contractual commitments. For these healthcare projects, Ministry of Health plays a role as one of the parties of loan agreements and contractual commitments in these agreements enable banks to mitigate possible risks. Syndicated loan is a mechanism to share risk across different financial institutions and Turkey is experiencing the same tool for these healthcare projects. In addition, development banks such IFC and EBRD take their places in syndications, acting as political umbrellas.

Management of risks is addressed by one of the bank managers as follows.

“An agreement has been signed with Ministry of Health which includes commitments such as change in status of the ministry, difference at ministry budget and so on. If any dispute surfaces there is an opportunity to use arbitration.”

As a member of syndicated loan, a bank manager defined the process hereinafter.

“We seldom communicate with other banks in order to understand their appetite and opinion. However, in this project there was a meeting organized by leading bank of syndication. On the hand, we have not discussed this project with the banks which have not been involved these

PPP projects. By the way, it is worth to note that there was a bank manager who was completely oppose to these projects initially but however, the bank that he works, became one of the creditors later on.”

Another manager from the different bank clarified risk management issue like the following.

“If the adverse events occur that hinder the project viability, we can think to restructure the existing loan or ask the state to discuss possible solutions. However, if we believe the project we continue to support. The leading bank of the syndicated loan which collaborated with the Ministry of Health determined the conditions with the state and set a meeting to discuss the conditions.”

Resource Structure

The resource structure of banks is short term on average and it can be suggested that there is a maturity mismatch between source and use. Considering the long tenor of project finance, the bank can eliminate maturity mismatch through roll over mechanism. However, this hugely depends on several conditions, mainly related to macroeconomics. For instance, ample funds in international markets encourage the lenders be more generous and eager to lend. To put it differently, a trend like monetary tightening, can lead to liquidity squeeze and hinder the roll over success.

The bank manager clarified the resource structure of funds directed to PPP Healthcare Project as follows.

“The credit allocated for the project is a mixture of syndicated loan, deposits and other resources. We assume that it is possible to roll over syndicated loans utilized from foreign financial institutions.”

Another bank manager stated like this.

“We structured the related resource through deposits, syndicated loan provided from abroad and the bank’s other internal resources.”

The comments of another bank manager are mentioned below.

“Our bank has used long term credit from international markets and we will continue to issue long term bonds in order to finance such projects.”

VI. CONCLUSION

The project finance is a long-term financing mechanism at which project profoundness plays crucial role rather than the sponsor’s balance sheet. The cash flow generated by the project is the main variable that taken into consideration whilst evaluating the credit worthiness of the project.

Even though Turkey suffers with lack of enough saving rates to cover long term investments, there are huge ongoing investments which have been financed through project finance mechanism with the contribution of banks mainly active in Turkey. Nevertheless, considering the short term resource structure of the banks, the maturity mismatch between the resource and long-term allocation can generate serious problems at banks' balance sheets especially when a turmoil occurs at the markets.

According to the data collected from the interviews, it is possible to conclude that the main motivation for the banks to finance these projects is the profitability and also contribution to social welfare. Apart from positive interest margin, cross and up sales opportunities can generate additional revenues for the creditors.

The main variable for the assessment of the project is cash flow and as it is argued the cash flow is very stable and does not bear any significant risk even if there is a problem surfaced during the construction stage of the project. The Ministry of Health acts as a somewhat guarantor and this attitude enhances the credibility of the project.

Furthermore, as per the information received from the banks' managers, most of the relevant risks such as change in guarantor's status have been mitigated through contractual commitments embedded in the agreements.

The maturity mismatch can be a major problem during the project life since the funds allocated to the projects by the banks are not long term originated. The roll-over mechanism is the remedy that fixes the maturity mismatch between short term resources and long term allocations. In addition to that as per the CBRT financial stability report, November 2015, even if the roll over ratio of external debt falls to 30%, the banks have enough liquidity cushion for short term period. However, it is worth to note that the banks began to roll over their external debt with declining ratio since July, 2014 and since April, 2015 the roll over ratio has moved under 100% meaning that the difference between amount received as new debt and amount paid as debt service has turned negative. So this maybe a signal to think about other type of financing such as project bonds.

REFERENCES

Accredited Hospital Association. (2012). *Turkey health sector report*. Retrieved April 2016 from http://www.ahd.org.tr/Upload/Document/document_YASED_Saglik_Sektoru_Raporu_2013_02_18_15_02_07.pdf

- Acerete, B. Stafford, A. Stapleton, P. (2011). Spanish healthcare public private partnerships: the "Alzira model".
- Alam, Zinat S. (2010). An empirical analysis of the determinants of project finance: cash flow volatility and correlation. Dissertation. Georgia State University
- Banking Regulation and Supervision Agency. (2016). *Turkish banking sector monthly bulletin*. Retrieved April 2016 from <http://ebulten.bddk.org.tr/ABMVC/#>
- Central Bank of the Republic of Turkey. (2015). *Financial stability report*. Retrieved April 2016 from <http://www.tcmb.gov.tr/wps/wcm/connect/TCMB+TR/TCMB+TR/Main+Menu/Yayinlar/Raporlar/Finansal+Istikrar+Raporu/2015/Sayi+21/>
- Central Bank of the Republic of Turkey. (2016). *Deposit statistics*. Retrieved April 2016 from <http://www.tcmb.gov.tr/wps/wcm/connect/TCMB+TR/TCMB+TR/Main+Menu/Istatistikler/Bankacilik+Verileri/Turk+Lirasi+Mevduat+ve+Doviz+Tevdiat+Hesaplari>
- Directorate General for Health Investments. (2015). *PPP department's projects*. Retrieved April 2016 from <http://www.saglikyatirimlari.gov.tr/Default.aspx?tabid=347&ArtMID=1034&ArticleID=25>
- Hainz, Christa. Kleimeier, Stefanie. (2006). Project finance as a risk-management tool in international syndicated lending. Discussion Paper No. 183. Governance and the Efficiency of Economic Systems
- Scannella, Enzo. (2012). Project finance in the energy industry: new debt-based financing models. University of Palermo
- Tham, Joseph. (2000). Return to equity in project finance for infrastructure. Development Discussion Paper No. 7576. Harvard University
- The Banks Association of Turkey. (2016). *Project finance statistics*. Retrieved April 2016 from <http://www.tbb.org.tr/tr/bankacilik/banka-ve-sektor-bilgileri/istatistiki-raporlar/59>
- The World Bank. (2016). Retrieved April 2016 from <http://data.worldbank.org/indicator>

Turkish Statistical Institute. (2016). *Main statistics*. Retrieved April 2016 from <http://www.turkstat.gov.tr/UstMenu.do?metod=temelist>

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