# THE REPUBLIC OF TURKEY BAHÇEŞEHİR UNIVERSITY

# THE ROLE OF SUKUK IN ISLAMIC FINANCE MARKET: EXPERINCE IN TURKEY

**Master's Thesis** 

**MUHAMMET KAŞ** 



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# GRADUATE SCHOOL OF SOCIAL SCIENCES CAPITAL MARKETS & FINANCE

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Supervisor: Assis. Prof. Dr. Kaan İrfan ÖĞÜT

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# **CAPITAL MARKETS & FINANCE**

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## **ABSTRACT**

## THE ROLE OF SUKUK IN ISLAMIC MARKET: EXPERIENCE IN TURKEY

# Muhammet Kaş

# CAPITAL MARKETS AND FINANCE

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Throughout decades Islamic finance means have been considerably developing. With this development, these means can be seen both primarily in Islamic finance markets and global markets. Without a doubt, the most significant of all these means is called Sukuk which is defined as interest-free bonds. Sukuk, which is a popular instrument all around the world particularly in Gulf Countries, Malaysia and Turkey, is issued by governments and entrepreneurs in private sectors as a finance providing tool to capital markets. Especially, this instrument called lease certificate in Turkey, is issued to the markets by Asset Lease Companies found by participation banks and under-secretariat of treasury, as a result, it facilitates interest sensitive investors' funds to flow in the financial system. In this study, a detailed search about the explanation, origins, and development process of Sukuk and its types and structure, role in enhancing markets is conducted. Additionally, it is concluded that by using Sukuk in open market operations, participation banks could compete with the scarcity of liquidity. Thus, it is found out that by solidifying the connections with all kinds of banking systems Central Bank of Republic of Turkey can be able to control the liquidity in a strong and reliable way. Finally, it is stated that there are main differences between Sukuk and Bonds, and an analysis showing the difference between returns of Sukuk and Bonds is displayed. In this analysis, it is realized that Sukuk returns differ due to the reasons the low volume and that the market see Sukuk as an illiquid asset.

Key Words: Islamic Finance, Sukuk, Yield to Maturity, Bond, Participation Banks

# ÖZET

# İSLAMİ PİYASALARDA SUKUKUN ROLÜ: TURKİYE'DEKİ DENEYİMİ

# Muhammet Kaş

# SERMAYE PİYASALARI VE FİNANS

Tez Danışmanı: Yrd. Doç. Dr. Kaan İrfan Öğüt

Mayıs 2016, 48 sayfa

İslami finans araçları son yıllarda hızlı bir sekilde gelişmektedir. Bu gelişim ile birlikte bu araçlara, başta İslami finans piyasaları olmak üzere, küresel piyasalarda da karsılasılmaktadır. Süphesiz, bunların günümüzdeki en önemli olanı Sukuk olarak ifade edilen faizsiz borçlanma senetleridir. Dünya genelinde Körfez ülkeleri basta olmak üzere Malezya ve Türkiye'de popüler bir enstrüman olan Sukuk, devlet ve özel şirketler tarafından sermaye piyasalarında finansman sağlama aracı olarak kullanılmaktadır. Özellikle Türkiye'de kira sertifikası olarak adlandırılan bu enstrüman, Katılım Bankaları ve Hazine Müsteşarlığı tarafından kurulan varlık kiralama şirketleri aracılığıyla piyasaya ihraç edilerek, faiz hassasiyetine sahip olan yatırımcıların fonlarının finansal sisteme kazandırılmasına yardımcı olmaktadır. Bu çalışmada kira sertifikası detaylı bir sekilde ele alınarak, kira sertifikasının orijini ve gelişim süreci, çeşitleri ve yapısı, gelişen sermaye piyasalarındaki rolü hakkında detaylı araştırma yapılmıştır. Buna ek olarak, kira sertifikası enstrümanının açık piyasa işlemlerinde Katılım Bankaları tarafından kullanılarak, piyasadaki geçici likidite açığına karşı mücadele edebildikleri görülmüştür. Bu sayede Türkiye Cumhuriyet Merkez Bankası, bankacılık sisteminde yer alan oyuncuların tamamıyla iletisim halinde kalarak, piyasadaki likiditeyi sağlam ve güvenilir bir şekilde kontrol edebilir durumda olduğu gözlemlenmiştir. Son olarak, sukuk ve bono arasında bazı temel farklılıkların olduğu gösterilmiştir. Ayrıca Sukuklara ait getirilerin bonoların getirilerinden farklı olması ile ilgili bir analiz yapılmıştır. Bu analizde ise, sukukların getirilerinin düşük hacimli olmaları ve piyasada henüz likit varlık olarak görülmemelerinden dolayı farklı olduğu anlasılmıstır.

**Anahtar Kelimeler:** İslami Finans, Sukuk, Vadeye Kalan Getiri, Bono, Katılım Bankaları

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# **ABBREVIATIONS**

AAOIFI : Accounting and Auditing Organization for Islamic Financial Institutions

ALC : Asset Lease Companies

BIST : Borsa Istanbul

CBRT : Central Bank of Republic of Turkey

CMB : Capital Markets Board

GDS : Government Debt Securities

IDB : Islamic Development Bank

IIFS : Islamic Investment Financial Services

IILM : The International Islamic Liquidity Management Corporation

ISIN : International Securities Identification Number

MYR : Malaysian Ringit

OMO : Open Market Operations

OMR : Omani Rial

OTC : Over the Counter

PBTA : Participation Banks Turkey Association

REPO : Repurchase Agreement

SAR : Saudi Arabian Riyal

SPV : Special Purpose Vehicle

TL : Turkish Lira

UTALC : Undersecreteriat of Treasury Asset Lease Company

USD : American Dollar

#### 1. INTRODUCTION

Capital markets enable the borrowers to find fund and provide broad investor base for corporate, entities and the government. They are generally composed of the equity market and the debt market. Neverthless, in emerging economies they are open to improvement. For example, Islamic capital markets are made up of the equity market and the debt market. Yet, debt markets are still very early stage of their development since Islamic law forbid to pay or charge the interest rate. Therefore, there is a need for developing an Islamic structured financial instruments that can be agreeable to Islamic Law. More recently, it is launched such an instrument known as Sukuk.

In this day and age, Sukuk come into prominence in capital markets both of Muslim and non-Muslim countries. That is to say, Sukuk are the most active instrument and have a significant role to increase finance not only in Islamic markets but also in global markets. In short, Sukuk are seen as a remedy for the investors and the issuers demand in all capital markets.

In addition, investors face interest based instrument in capital markets in our day. Thus, Muslim-based investors do not show interest in interest based capital market instruments. As a result, their money remains inactive. With the help of Sukuk instrument, the Muslim Countries' economies enliven and become popular in finance industry.

Also, Sukuk markets have been growing swiftly in recent years. The reason behind that growth process is that Sukuk are expanding at the different markets such as Morocco, South Africa, Oman and Turkey. The countries' regulations and laws allow the issuers to be issued Sukuk in capital market. The Figure 1 shows that in 2015 there are approximately USD 60 Billion issued Sukuk. And for that year, there are 461 deals in total. Overall, there is a clear increase on the issue size and deals and it is predicted that Sukuk will be preferred market by investors in record time.

Market Volume (MM USD) 70,000 60.000 50,000 40,000 30,000 20,000 10,000 2004 2005 2006 2007 2008 2009 2010 2011 2012 2015 2013 2014

Figure 1.1: The issuance Sukuk Volume

Source: Bloomberg League Table [accessed 13 March 2016]

With the abovementioned reasons, the main objective is to describe Sukuk intelligibly in this paper. Therefore, the paper analyzes Sukuk types and their structures. In addition, the paper looks over the Sukuk market in the world. In this part, there is depth analysis about the markets particularly Malaysia and Turkey. Since Sukuk are alternative instruments to conventional bonds, the paper makes comparison Sukuk with bonds. While there are some simililarities such as fixed term maturity and coupon rate/profit, there are key differences in terms of their structure and risks.

Also, the paper defines the liquidity management and its importance for the banking system in Turkey. In fact, the liquidity management part is related to Open Market Operations (OMO) being in the first place Repurchase Agreement (REPO) because Central Bank of Repulic of Turkey (CBRT) adjusts the banking system liquidity with the help of OMO tools.

Finally, the paper describes the data and methodology. The main question is that there is difference between the yield to maturity of Government Sukuk and Bonds of the similar maturities.

## 2. SUKUK

#### 2.1 SUKUK DEFINITION

The word Sukuk stems from the plural of the Arabic word Sakk and it can be also called as Islamic investment certificate in Islamic financial market. They are Islamic bonds that structure securitized leases and Islamic financing contracts. In recent times, many developed countries have shown interest in Sukuk to raise finance and they thus make amendment to their regulations and law to permit Sukuk to be issued in their financial market. Briefly, Sukuk have become important to get finance effectively in terms of stimulation of resources in the capital markets.

In addition, Sukuk can be considered as Sharia compliant bonds. It means that they have Sharia compliant investment structure arranged by both Islamic and conventional capital markets. Therefore, they can be seen as a reasonable alternative for Muslim and non-Muslim investors and issuers in financial markets.

The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) announced standard Sukuk definition to the public as "Certificates of equal value representing undivided shares in the ownership of tangible assets, usufructs and services or (in the ownership of) the assets of particular projects or special investment activity" (AAOIFI, 2008).

There is an other describing comes from Islamic Development Bank (IDB) and they have identified that "an asset-backed bond which is designed or structured in accordance with the Sharia and which may be traded in the market" (IDB,2004).

In conclusion, with respect to Bloomberg, Sukuk is an Islamic financial certificate, similar to a bond in western finance that complies with Sharia. (Bloomberg Terminal: Accessed 13.03.2016)

## 3. SUKUK TYPES AND STRUCTURE

#### 3.1 SUKUK STRUCTURE

AAOIFI that publishes the standards on accounting, auditing, governance, ethical and standards of Sharia has stipulated 14 Sukuk types. Yet, 7 types play an active role in the market. In other words, Sukuk contracts are typical with reference to their financial responsibilities and ownerships benefits are allied to various Sharia compliant such as Ijara (leasing), Murabaha (cost-plus financing), Istisna (forward sale used in construction finance), Mudaraba (trust financing), Musharaka (equity participation), and Salam (forward sale for commodities) and Hybrid (various Sukuk). Mostly, these financial contracts are securitized asset and changed into the longtime tradable instruments under the Sukuk concept. But, there are some exceptions about trading issue. That is to say, Sukuk that are tradable reflects tangible assets or in proportion ownership of a business. Thus, these Sukuk types can be marketable. For instance; Ijara Sukuk, Istisna, Mudaraba or Musharaka can be tradable. In addition, there are nontradable Sukuk. If Sukuk reflect cash receivables or goods, namely debt to the holder, these Sukuk are not tradable on the secondary market and instead the investors must hold them until the maturity. These are Salam and Murabaha Sukuk.

Furthermore, Sukuk are financial papers and they make contribution to economy and the community since they show the investors real value of the tangible assets subjected to Sukuk contract. In other words, Sukuk are asset-backed nature and with the help of securitization process, the ownership of the assets is alienable to the investors through certificates. Therefore, the investors find the related asset's value.

In Conclusion, Sukuk instrument are based on underlying assets and they have generally fixed income. Also, they have both sides in terms of trading, tradable or non-tradable. Lastly, they are issued by the monetary authority, government, corporate, banking or financial institutions and get cosmic acceptance as a practicable alternative to conventional bonds.

There are three basic principles for Sukuk Structure. These are as follows:

- i. Based on underlying assets
- ii. Clear responsibilities for the beneficiary (Do not involve uncertainty)
- iii. The return derive from the issuance purpose

# 3.2 SUKUK TYPES

There are different processes for issuing and developing sukuk technically. Therefore, there are different type of sukuk in the market and they are classified according to Agreement based structure: Purchase Agreement, Lease Agreement and Partnership Agreement.

Table 3.1: Agreement based structure types

Purchase Agreement	Lease Agreement	Partnership Agreement
Murabaha Sukuk	Ijara Sukuk	Mudaraba Sukuk
Salam Sukuk		Musharaka Sukuk
Istisna Sukuk		

# 3.2.1 Ijara Sukuk

Ijarah Sukuk are connected to leased assets and properties. They are issued by the owner of the leased property or his proxy and they are also put up the value of equal. The transaction aim is to sell the leased assets or properties in the end by the way of issuing Sukuk. Hence, the holders of Ijara Sukuk, the certificates, have income from the rental payments. In other words, Ijara sukuk is a leasing structure with regard to a right available to buy the asset in the end of the lease period.

In addition, return from the rental rates can be fixed or floating allied to the agreement. During the rental period, the certificate holders take rental payments and at the end of the lease period they take the principle payments.

With respect to the characteristics of Ijara Sukuk, they are bound up with risks linked to the ability and desirability of the lessee to pay the rental installments. They are also based on to real market risks stemming from possible changes in asset pricing. Besides, Ijara Sukuk are exactly negotiable and can be tradable in the secondary market. And the holders of Ijara Sukuk should put up with full liability for what happens to their asset or property.

In brief, Ijara Sukuk are securities in behalf of well defined ownership and well recognized asset or property which get in contact with a lease contract. Also, Ijara Sukuk are the most widespread sukuk issuance type for raising finance in domestic capital markets.

holders (8) Obligator make (2) Leased the assets to periodic lease obligator payment to SPV (9) SPV pays coupon to investors. (4) Trust Certificate issued to investors (1) Sell certain titles (3) Issued Trust of land to SPV Certificate Trust Obligator as SPV Certificate seller ssue (7) Payments made (6) Payments by SPV to Obligator received from (5) Investors made investors by SPV payments

Figure 3.1: Ijara Sukuk structure

Source: www.islamicbanker.com/education/sukuk-al-ijara

## **Phase 1: Cash Sale Contract**

Special Purpose Vehicle (SPV) buys property or asset from the Obligator. (I)

The asset or property bought by the SPV raised fund by sukuk issuance. (III)

The Obligator received cash proceeds. (VII)

# **Phase 2: Leasing Contract (Ijara)**

SPV rents the asset or property to the Obligator. (II)

SPV collects rentals from investors. (VI)

# **Phase 3: Lease Duration**

SPV passed the rental payments to the investors. (IX)

# **Phase 4: At Maturity**

SPV sells the asset or propert to the Obligator at an agreed price.

The Obligator pays cash to SPV

SPV contemporaneously pays investors cash for Sukuk redemption.

# 3.2.2 Murabaha Sukuk

In islamic finance, murabaha is essentially defined as a a contractual arrangement between the seller and the buyer by way of that the seller would sell commodities or specified assets to the buyer for spot delivery in expectation that the buyer would be able to meet its deferred payment obligations under the murabaha agreement. The deferred price would typically include the cost price at which the seller had purchased the assets/commodities, plus a pre-agreed mark- up representing the profit generated from its involvement in the transaction. The payments of the deferred price from the customer may be structured as periodical payments on dates specified at the outset, therefore creating an income stream for the seller for the term of the transaction.

To sum up, Murabaha is an Islamic financing structure and it is known as sale on profit. Technically, sale contract in which the seller announces his cost and profit.

The same characteristics of the Murabaha Sukuk structure can also be adapted for use as the underlying structure in a Sukuk issuance. Sukuk proceed from investors may be applied by issuer SPV to acquire commodities and on- sell such commodities to the Originator to generate revenue from the Murabaha deferred price which would be distributed to the investors throughout the term of the Murabaha Sukuk.

Due to the fact that Sukuk certificates in a Murabaha Sukuk fundamentally reflect entitlements to shares in receivables from the buyer of the underlying Murabaha, they are not negotiable instruments. Also, they are not traded in the secondary market because Sharia does not allow trading in debt except at par value. This gives way to reduce the popularity of Murabaha Sukuk for potential investors and is represented by the limited number of Murabaha Sukuk issuances in the Sukuk market. However, in Malaysian market Murabaha Sukuk are very popular since the Malaysian jurists permit to make trade at a negotiated price (Permitting sale of debt).

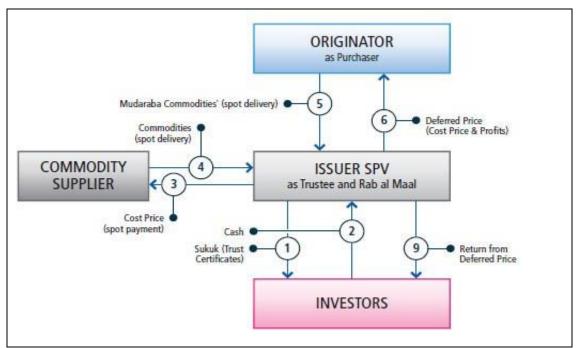


Figure 3.2: Murabaha Sukuk structure

Source: www.islamicbanker.com/education/sukuk-al-murabaha

## Phases of Murabaha Sukuk Sructure

- i. SPV issues Murabaha sukuk that reflect an undivided ownership interest in an underlying asset or transaction. Also, they reflect a right against Issuer SPV to payment of the Deferred Price.
- ii. The Investors pay for Murabaha Sukuk certificate.
- iii. The Originator (as the Buyer) enters into a Murabaha agreement with the Seller and the Originator agrees to purchase, certain commodities from SPV on spot delivery and deferred payment terms. The period for the payment of the deferred price will reflect the maturity of the Murabaha sukuk. SPV buys commodities from a third party Commodity Supplier for a Cost Price representing the Principal Amount for spot payment.
- iv. Commodity Supplier makes spot delivery of the Commodities to SPV in consideration for the Cost Price.
- v. SPV (as Seller) on-sells to Originator the commodities upon delivery from Commodity Supplier in accordance with the terms of the Murabaha agreement.
- vi. Originator (as Purchaser) makes payments of deferred price at regular intervals to SPV (as Seller). The amount of each deferred price installment is equal to the returns payable under the sukuk at that time.
- vii. Issuer SPV pays each deferred price installment to the Investors using the proceeds it has received from Originator.

#### 3.2.3 Istisna Sukuk

Istisna Sukuk type is generally used for project financing. In other words, it is a contractual agreement and useful for the advancement of funding to pay for the supplies and the costs of labor. Thus, Istisna Sukuk can be seen as an appropriate way of financing construction and manufacturing since the builders are faced with the costs before they produce and sell the goods or products. In short, they are quite useful fo financing large infrastructure projects.

In a nutshell, the Islamic financial institution provides fund to the contractor or manufacturer during the asset construction, gets title to that asset and till completion either urgently passes title to the developer on agreed deferred payment term, namely, leases to the asset to the developer under Sukuk Istisna.

holders (8) Obligator make (2) Leased the assets to periodic lease obligator payment to SPV (9) SPV pays coupon (4) Trust Certificate to investors. issued to investors (1) Sell certain titles (3) Issued Trust of land to SPV Certificate Trust Obligator as Certificate SPV seller Issue (7) Payments made (6) Payments by SPV to Obligator received from (5) Investors made investors by SPV payments

Figure 3.3: Istisna Sukuk structure

Source: Malaysia World Islamic Finance Website: http://www.mifc.com

It is noted that Istisna Sukuk do not have a secondary market and should be held at the maturity since they are debt securities and forbidden by Sharia.

## Phases of Istisna Sukuk Sructure

- i. SPV issues Sukuk certificates to raise funds for the project.
- ii. Sukuk issue proceeds are used to pay the contractor/builder under the istisna' contract to build and deliver the future project.
- iii. Title to assets is transferred to the SPV.
- iv. Completed property/project is leased or sold to the end buyer. The end buyer pays monthly installments to the SPV.
- v. The returns are distributed among the Sukuk holders.

## 3.2.4 Mudaraba Sukuk

Mudaraba is a kind of partnership agreement made between parties. While one party provides the capital, the other, an entrepreneur, provides managerial skills. It is stated in other words, there is a form based on equity-based partnership in Mudaraba Sukuk. They carry equal values. The sukuk holders shall be the owners of the capital of the project and the project shall remain a partnership between them. Briefly, this is an agreement done among capital provider and entrepreneur. The capital provider enables the entrepreneur to fulfill the business project that will be based on profit sharing according to agreed portion of the profits on earlier. In the case of losses, they are compensated by the provider.

Furthermore, Mudaraba Sukuk have no yield interest or any fixed income. This indicates that Murabaha Sukuk resemble shares related to varying returns that are arising from the profits made by the project. Additionally, within the specified period of the subscription, the Mudaraba Sukuk holders confer on the right to transfer the ownership by sale or trade in secondary market.

MUDARABA ENTERPRISE 6 Mudaraba profits (if any) Cash + Enterprise and Management Performance fees (if any) according to the Mudaraba Agreement ORIGINATOR MUDARABA AGREEMENT 4 as Mudarib Enterprise and Management Share in Mudaraba profits (if any) according to the Mudaraba Agreement ISSUER SPV as Trustee and Rab al Maal Sukuk (Trust 9 Periodic return from Mudaraba profits **INVESTORS** 

Figure 3.4: Mudaraba Sukuk structure

Source: www.islamicbanker.com/education/sukuk-al-mudaraba

## Phase of Mudaraba Sukuk Structure

- Issuer SPV issues sukuk, which shows a complete interest of the owner in an underlying asset, transaction or project. They also embody a right against Issuer SPV to payment of expected intermittent return from Mudaraba profits.
- ii. The Investors subscribe for sukuk and return the proceeds to Issuer SPV (the "Principal Amount"). Issuer SPV reveals a trust over the proceeds (and any assets or Mudaraba interests gained through employing the proceeds) and through acting as Trustee on behalf of the Investors.
- iii. Issuer SPV and Originator participate in a Mudaraba Agreement with Originator as Mudarib and Issuer SPV as Rab al- Maal, under which Issuer SPV agrees to supply the Principal Amount in order for a Shari'a compliant Mudaraba enterprise.
- iv. Originator, as Mudarib under the Mudaraba Agreement, comes to an agreement to contribute its expertise and administrative capabilities to the Shari'a compliant Mudaraba enterprise, with the idea of managing the Rab al-Maal's cash contribution and definite investment parameters.
- v. Issuer SPV and Originator take part in the Mudaraba enterprise with the purpose of producing profit on the Principal Amount.
- vi. Profits saved by the Mudaraba enterprise are splitted between Issuer SPV (as Rab al-Maal) and Originator (as Mudarib) in accordance with the profit sharing ratios decided in the Mudaraba Agreement but accrued for the duration of the Mudaraba enterprise
- vii. Issuer SPV issues sukuk, which posseses an undivided ownership interest in an underlying asset, transaction or project. They also represent a right against Issuer SPV to payment of expected periodic return from Mudaraba profits.
- viii. The Investors subscribe for sukuk and pay the proceeds to Issuer SPV (the "Principal Amount"). Issuer SPV acknowledges a trust over the proceeds (and

- any assets or Mudaraba interests acquired using the proceeds) and thereby plays a role as Trustee on behalf of the Investors.
- ix. Issuer SPV and Originator enter into a Mudaraba Agreement with Originator as Mudarib and Issuer SPV as Rab al- Maal, under which Issuer SPV is willing to contribute the Principal Amount for the goal of a Shari'a compliant Mudaraba enterprise.
- x. Originator, as Mudarib under the Mudaraba Agreement, comes to agree to contribute its expertise and administrative skills to the Shari'a compliant Mudaraba enterprise, with responsibility for managing the Rab al-Maal's cash contribution by means of defined investment parameters.

# **Main Features of the Underlying Structure**

- i. Issuer SPV and Originator enter into the Mudaraba enterprise with the purpose of generating profit on the Principal Amount.
- ii. Profits generated by the Mudaraba enterprise are divided between Issuer SPV (as Rab al-Maal) and Originator (as Mudarib) in accordance with the profit sharing ratios set out in the Mudaraba Agreement but accrued for the duration of the Mudaraba enterprise
- iii. In addition to its profit share, Originator (as Mudarib) may be entitled to a performance fee for providing its expertise and management skills if the profit generated by the Mudaraba enterprise exceeds a benchmarked return. This performance fee (if any) would be calculated at the end of the Mudaraba term and upon liquidation of the Mudaraba.
- iv. Issuer SPV receives the Mudaraba profits and holds them as Trustee on behalf of the Investors.
- v. Issuer SPV (as Trustee) pays each periodic return to Investors using the Mudaraba profits it has received under the Mudaraba Agreement

## 3.2.5 Musharaka Sukuk

Musharaka Sukuk are also a partnership arrangement between two or more parties and these parties contribute capital to the partnership. These contributions can be cash or other contributions. Fundamentally, these are investment Sukuk and the parties provide financing to the projects. Moreover, profit ratio sharing must be compromised at the start. Differently from losses, are not the same proportional to each partner's capital contribution. Yet, it is not permissible to come to agree a fixed profit amount for either Originator or Trustee.

Also, partners must share Musharaka losses proportionally according to their capital contributions. And any profit distributed just before musharaka termination or maturity is counted to be in advance and is processed as an "on account" payment which shall be regulated to the actual profit Originator and Trustee are entitled to at that time. In addition to this, Musharaka Sukuk should get tangibility degree and this asset-backing ratio can get changed between 33% and 50%, depending on the Sharia scholars involved.

In conclusion, Musharaka Sukuk certificate can be treated negotiable instruments and can be tradable in the secondary market.

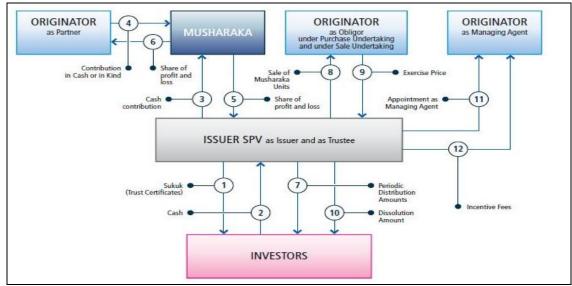


Figure 3.5: Musharaka Sukuk structure

Source: www.islamicbanker.com/education/sukuk-al-musharaka

## 3.2.6 Salam Sukuk

Salam Sukuk contracts are similar with the forward sale contracts. Traditionally, forward sale contracts are prohibited until the uncertainity criteria exterminated. Accordingly, Salam Sukuk contracts should be met with the Sharia Compliant. Although the use of Salam has utilized by some institutions for short-term liquidity purposes, its use as the platform for issuing sukuk, as an alternative to conventional bonds, is rare in comparison to some of the more prevalent structures like Ijara Sukuk. The limited use of this structure can be attributed to a number of factors, namely the non-tradability of the sukuk and the requirement that the Originator must be able to deliver certain 'standardized' assets to the issuer at certain future dates which may be difficult where the Originator's business model does not provide for this.

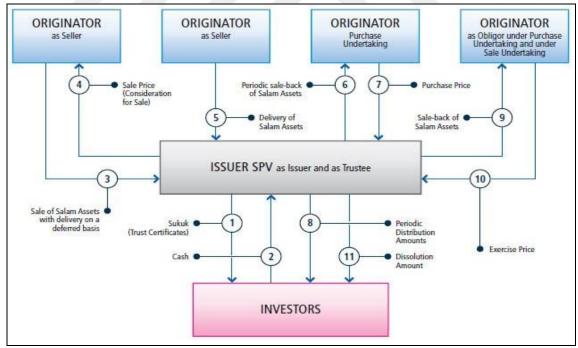


Figure 3.6: Salam Sukuk structure

Source: www.islamicbanker.com/education/sukuk-al-salam

In conclusion, Salam Sukuk means a specific commodity sale, well defined in its quality and quantity that will be delievered to the purchaser on a fixed date in the future against an advanced full paymet of price at spot. They are also not tradable.

## 4. SUKUK DEVELOPMENT AND MARKET OUTLOOK

# 4.1 DEVELOPMENT OF SUKUK MARKET

Sukuk issuance have been expanding over the past decade since Sukuk has been adopted by Islamic banking and finance sector in the debt market. They are made by government and corporates. In terms of sovereign issuance, Malaysia is the prize possession country when compared to others. From 2004 to 2014, Malaysia made completely 1388 Sukuk deals and these deals equals to \$351.5 Billion. According to Zawya, these deal number is more than the half of total number deals and %80 of total issued amount in Sovereign Sukuk issuance.

Table 4.1: Sovereign issuance of Sukuk 2004-2014

Countries	Number Of Issuance	Amount (USD Million)
Malaysia	1388	351,494
Gambia	401	194
Bahrain	226	12,545
Brunei	113	6,093
Indonesia	65	21,890
Sudan	26	2,868
Pakistan	17	7,669
Qatar	17	19,655
UAE	11	6,855
Turkey	7	6,900
Singapore	5	193
Yemen	2	250
Germany	1	123
Hong Kong	1	1,000
Luxembourg	1	272
Nigeria	1	71
Senegal	1	200
Soutth Africa	1	500
United Kingdom	1	340
Total	2285	439,112

Source: Zawya, IFIS (2014)

According to Bloomberg data, the global Sukuk market has developed at an annual rate of 40% since 2000 and the total outstanding amount for Sukuk is very close to \$322 Billion. 47% of that ratio are belong to government Sukuk. This means that in some countries, government manages the market in terms of Sukuk issuance. For example, in Turkey and Qatar the government dominates the market. To look at the other perspective, the corporate sector is bigger in some countries such as Malaysia and United Kingdom of Arab Emirates (UAE.) As it is seen in the Figure 4.1, Malaysia is the greatest Sukuk market and the second big market is Saudi Arabia.

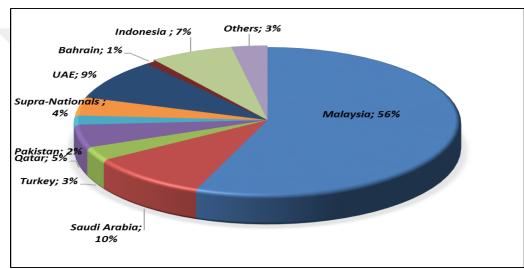


Figure 4.1: Outstanding Sukuk by Country (2015)

Source: Bloomberg Terminal ISLM Function [accessed 12 March 2016]

In addition, Islamic banking and finance market is one of the quickest growing global market and it is estimated to reach the outstanding amount USD 500-700 billion. The Sukuk market, especially in the secondary market, are enlarging since the first Sukuk released several years ago. The market growth was driven by both Malaysian and Saudi Arabia, as well as emerging frontier Turkey and other issuers such as Luxembourg and United Kingdom (UK).

Finally, the popularity of Sukuk is on the increase in different markets due to thefact that Sukuk are an alternative instruments for issuers in order to raise fund and permit investors to be varied their portfolios, Hence, this part of the paper explains the largest Sukuk markets respectively – Malaysia, Saudi Arabia, other countries and Turkey.

#### 4.2 MALAYSIA

Malaysian government issues both Sukuk and Conventional bonds. They are mostly issued Malaysian Ringgit (MYR) denominated. In Malaysia, government found the first Islamic bank which is named as Bank Islam Malaysia Berhad. Traditionally and this bank provides Sharia compliant financial service.

To begin with, the first government Sukuk was issued in 1983. That was called as 'The Government Investment Certificate'. Then, in 2011 the government renames the certificate as 'the Government Investment Issue'. Furthermore, the government investment issues are structured by asset-based, lease-based or manufacturing contract-based with the help of the innovation of the Sukuk market in Malaysia.

In addition, Malaysia is the greatest Sukuk market and the total market capitalization is fifty-six percentages. As can be seen in the figure 4.2, domestic issuers have the control of the market. There are approximately six percentages international issuances in Malaysia Market.

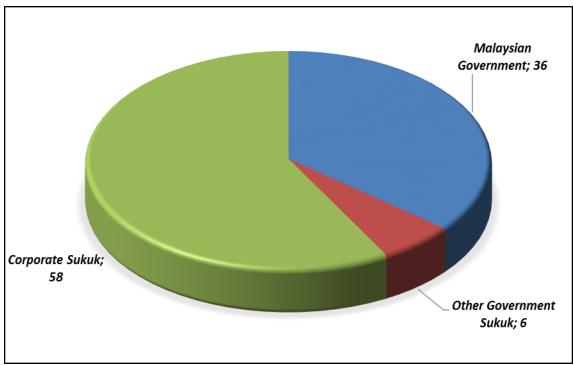


Figure 4.2: Analysis of Government and Corporate Sukuk (%)

Source: Bloomberg Terminal ISLM Function [accessed 12 March 2016]

## 4.3 SAUDI ARABIA

The second greatest country is Saudi Arabia in Sukuk market. They constitute ten percantages of the Sukuk market in the world. That percentage equals approximately \$34 billion. The distributions of the issuances under currency based are orderly seventy-six percentages in Saudi Arabian Riyal (SAR) denominated and the remaining is USD denominated. It is also understood from the Figure 4.3 that there is only one MYR denominated Sukuk issue in Saudi Arabia.

MYR; 0.2

USD; 23.8

SAR; 76.0

Figure 4.3: Outstanding Sukuk by Currency in Saudi Arabia (%)

Source: Bloomberg Terminal ISLM Function [accessed 12 March 2016]

Besides, the first SAR denominated Sukuk was issued in 2006 by Saudi Basic Industries Corporation. This issuance clearly shows that almost all Sukuk issued in Saudi Arabia are corporate, but these are all governmental institution. Additionally, the biggest governmental institution is Saudi Electricity Corporation (SECO) and the second one is Dar Al-Arkan Real Estate Development Company. Both are generally issued USD denominated Sukuk. Finally, most of the issuer select to register their Sukuk Special Purpose Vehicles in the Cayman Island or Jersey.

## 4.4 OTHER ISSUERS

Sovereign Sukuk are also issued by non-Islamic countries such as United Kingdom (UK), Luxembourg, South Africa and Hong Kong. Especially, 2014 was an interesting year since non-Muslim and the highest rated countries such as UK and Luxembourg made Sovereign Sukuk issuances. One of the substantial features of these issuances is made by local currency. For example, The UK issued in GBP currency denominated and Luxembourg issued in EUR currency denominated. According to Miller et al. (2007), London looks for keeping its role in condition of Islamic financial services at the international level.

Furthermore, Singapore's issue was really important because of the fact that they were the first country to make issue by the highest credit rating. According to Reuters, developing countries are planning to make Sukuk issuance in the immediate future. In addition, all these Sukuk issuance are based on Ijara structure. In fact, these countries first make some regulations on their laws. In other words, they established clear legal steps for Sukuk instruments. In 2014, Sukuk Law approved by the Luxembourg Parliament and according to law, Sukuk are issued as an Ijara Sukuk to establish a Special Vehicle Purpose (SPV). Thus, the market for Sukuk developed in other countries as well as Muslim countries. For example, Oman has already made an issuance as sovereign Sukuk at the end of October in 2015. The issuance was Omani Rial (OMR) currency denominated and the issued amount was 250 Million OMR.

Also, there is an international institution and it is established by the central banks of approximately nine countries: Turkey, Kuwait, Malaysia, Qatar, Nigeria, Mautiris, Luxembourg, United Kingdom of Arab Emirates and Indonesia which is called The International Islamic Liquidity Management Corporation (IILM). They have headquarter in Kuala Lumpur. They began to make issue USD denominated Sukuk in Luxembourg in 2013. These Sukuk have 3 Months or 6 Months maturity to enlarge cross-border Islamic Liquidity.

Additionaly, IILM Sukuk have several important features that aim to help establishment of a liquid, cross border market for Islamic Investment Financial Services (IIFS). The IILM Sukuk:

- i. are tradable Sharia compliant USD denominated short-term financial instruments issued at maturities of up to one year
- ii. are money market instruments backed by sovereign assets
- iii. are distributed and traded globally via a multi-jurisdictional primary dealer network (Abu Dhabi Islamic Bank, Barwa Bank, Maybank Islamic Berhad, Kuwait Finance House, Qatar Islamic Bank, Standard Chartered Bank)
- iv. have a multilateral development organisation with the aim of enhancing the financial stability and the efficient functioning of Islamic financial markets and strong global support as they represent a unique collaboration between several central banks and

For example; IILM will be conducting an auction on Wednesday 18th May, 2016. Details of the auction are as follows:

**Table 4.2: IILM auction (USD denominated - 3 month tenor)** 

Auction Date:	Wednesday, 18 <sup>th</sup> May, 2016
Amount (USD):	1.34 Billion
Tenor of Issuance:	89 days
Auction Settlement Date:	Tuesday, 24 <sup>th</sup> May, 2016
Maturity Date of Certificate:	Tuesday, 23 <sup>rd</sup> August, 2016
Agreed Price for Bid	3 Month LIBOR + 42bps
3 Month LIBOR Fixing Date	Monday, 16 <sup>th</sup> May, 2016
Auction Opening Time:	10:00 Kuwait time
Bids Submission Closing Time:	13:00 Kuwait time
Auction Result Announcement:	14:00 Kuwait time

Source: Bloomberg Terminal ISLM Function [accessed 18 May 2016]

## 4.5 THE MILESTONES OF SUKUK

- Sukuk are discovered by Turks on the dates in 1775. Indeed, The Ottomans made an issuance to make fund for the budget deficit those day. They expressed the shares as esham.
- ii. The first government sukuk were issued by Malaysia in 1983.
- iii. Thus, Malaysia is currently the largest market in the world and by all accounts the Malaysian outstanding sukuk generates 56% of all outstanding sukuk.
- iv. In these premises, this is also equal to the three sukuk markets in the Middle East. These markets are respectively Saudi Arabia, the United Arab Emirates and Qatar.
- v. Malaysian ringgit (MYR) is the most often used currency because of the fact that the global sukuk funding is issued in local currency.
- vi. Gulf Cooperation Council (GCC) countries are in tendency to make issue more USD-denominated sukuk and the world's outstanding USD sukuk are issued in the United Arab Emirates (UAE).
- vii. The government sector dominates the sukuk market in some countries, such as Indonesia, Qatar and Turkey
- viii. On the contrary, the corporate sector is greater in Malaysia, Saudi Arabia and the UAE.
  - ix. In 2009, Singapore became the first country with an AAA credit rating to issue sovereign sukuk.
  - x. The total outstanding sukuk are around according to Bloomberg data USD 322 Billion. They consist of Government 47 percentages and corporate 53 percentages.

## 5. SUKUK DEVELOPMENT IN TURKEY

## 5.1 BANKING SECTOR OF TURKEY

Turkey is one of the major economies in the financial world. Therefore, it is well known financial center from investors. In terms of capital markets, Turkish supervisors have really successful to bring to investors' attention to the market and whet their appetite with the developing instruments, for instance, Sukuk. They are also called lease certificate in Turkey. Since the government has the idea that making Istanbul a foremost Islamic Finance Center, they support the issuers, especially Participation Banks encouragingly. In addition to this, there is an expectation from corporate side, such as Participation Banks Turkey Association (PBTA). They hope that the participation banks' share in banking sector will be on the increase up to fifteen percentages from five percentages in 2023. To some extent, they may be right because the government has established two new participation banks, Ziraat Participation Bank in 2015 and Vakif Participation Bank in 2016. As a result, the government gets over to reach their aim and the Participation Banks' shares are growing in the sector impressively.

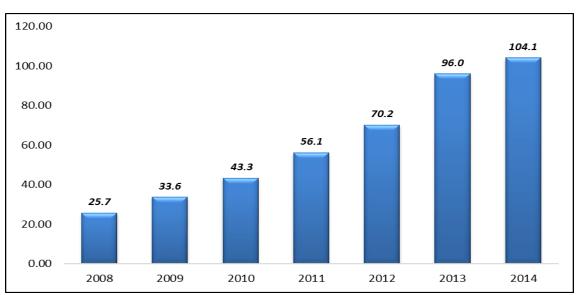


Figure 5.1: Participation Banks' Asset Size (Billion TL)

Source: BDDK: Main Banking Data [accessed 13 March 2016]

It is seen that in the Figure 5.1, the Participation Banks' Asset size is on the increase. From 2008 to 2014, the assets were fourfold. This growing process has affected the participation Banks' profitability in a positive way. Thus, Sukuk are a really crucial instrument for them to develop balance-sheet and raise fund to increase their market share in banking sector.

It is clearly understood from the below Figure 5.2 that banking sector become different in terms of operation and working style. Therefore, it is quite difficult to make interest free banking in Turkey. In other words, it is really hard to compete with deposit banks and get share from the market. Yet, the participation banks have achieved to increase their shares from three percentages to six percentages of late years. Finally, they aim to get at least fifteen percentages in the coming years.

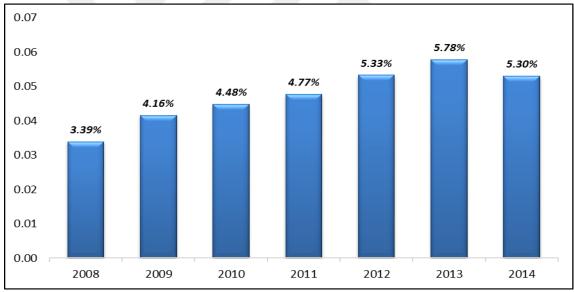


Figure 5.2: Participation Banks' Asset Size / Banking Sector Asset Size

Source: BDDK: Main Banking Data [accessed 13 March 2016]

# **5.2 ASSET LEASE COMPANY**

Sukuk issuance was primarily regulated by the Capital Market Board (CMB) Communiqué Series III on Lease Certificates and Asset Lease Companies ("Communiqué Series III, No. 43") in 2010. It was the first legislation about lease certificate (sukuk) and it had broad authority. That is to say there are no specific issuances under the regulation.

In addition, the First Legislation permitted asset lease companies (ALC) formation which are special purpose vehicles regulated by the CMB. In other words, ALCs are joint stock corporations and they are incorporated by banks and originators and brokerage houses in order to make issuance of lease certificate bought by investors (Certificate Holder) with the aim of purchasing assets and leasing them back to the originator. Virtually, they make finance the income by using the assets to raise fund and the rental payments from the originator goes to the profit distributions to the certificate holders.

Furthermore, the terminologies used by the CMB are some kind of different when compared to the other regulators such as Malaysia and Middle East countries. For example, Asset Lease Companies are called as Sukuk Trustees and Asset based structure is considered as asset backed structure. Also, there is only sukuk structure in the regulation of Ijara Structure. In 2013, the first regulation was abolished and the Communiqué on Lease Certificates (III-61), called as the second regulation, were introduced by the CMB. And the Communiqué carry into effect five different types of Sukuk and permit to ALC'S to issue lease certificates based on management (mudaraba), purchase and sale (murabaha), partnership (musharaka) and contractor agreement (istisna) structures.

Separately, the second regulation regulates the ALC's establishment process and management and capacity. In addition, ALCs may be found by banks, listed real estate investment trusts and intermediary institutions. Moreover, ALC's board of directors is responsible for inefficacy to gather the proceeds obtained from the rights and assets. To summarize, the second regulation regulates the issuance of lease certificates in a broad manner and it gives place to make interpretation and practice. As per the Communiqué, real persons or legal entities execute a written agreement, indicating their intention to pool their properties to establish the originating institution. The originating institution transfers assets and rights to the ALC for the issuance of ownership-based lease certificates, or to the companies incorporating the ALC that manage the assets or rights on behalf of the ALC in the issuance of management agreement-based lease certificates. The ALC serves as the special purpose vehicle to which the assets or rights are transferred or leased.

### 5.3 SUKUK MARKET IN TURKEY

Lease certificate issuances began in 2010. The first issuer was Kuveyt Turk Participation Bank Inc. After that issuance, Undersecreteriat of Treasury Asset Lease Company Inc. (UTALC) as the government made their issuances at the end of 2012 and in 2013. The total amount was for that three issuances TL 3 billion and USD 1.5 Billion. For example, USD issuance had 5 Year term, Coupon rate fixed at 2.803%, USD-denominated, were quotated in Irish Stock Exchange Market.

In addition to this, Turkey has the advantage of the first sovereign sukuk issuer as European country. And UTALC still continues to make new issuance to vary financing fund. Also, in Turkey a June 2013 regulation allowed to make different Sukuk issuances such as Istisna Sukuk (project-based), Murabaha Sukuk (Asset-Based), Musharakah Sukuk (Joint Venture) and Wakalah Sukuk (Based on an asset package).

Table 5.1: Turkey USD denominated Sukuk issuance details

Issue Date	ISIN	Currency	Coupon (%)	Maturity	Amount Issued (Million)
09/26/2012	XS0831353361	USD	2,803	03/26/2018	1.500
10/10/2013	XS0975124180	USD	4,557	10.10.2018	1.250
11/25/2014	XS1141043296	USD	4,489	11/25/2024	1.000

Source: Bloomberg Terminal [accessed 13 March 2016]

Furthermore, the amounts of outstanding Sukuk issuance by government in Turkey were USD 3.75 Billion and TL 7.1 Billion. As can be seen in the Table 5.1 shows that there are three outstanding USD Denominated Sukuk issuances and two of them had five years term and the other is ten years term. They are all sovereign Sukuk and have fixed coupon payments.

Besides, it is understood from the below Figure 5.3, USD Turkey sovereign Sukuk yields lie closely to USD sovereign Sukuk according to yield to maturity. This means that Turkey USD denominated sukuk have liquidity in the secondary market and they are preferred by investor.

6
5.5
5
4.5
4
3.5
2
1.5
1
15
20
25
30
35
40
45

USD Sovereign Sukuk
USD Turkey Sovereign Curve

Figure 5.3: Yield to maturity for USD Turkey sovereign Sukuk

Source: Bloomberg (As of 20/06/2015) [accessed 13 March 2016]

In terms of corporate USD denominated Sukuk, the total outstanding amounts are USD 2.9 Billion. Therefore, the outstanding Sovereign Sukuk amounts are greater than the corporate Sukuk. These corporates are respectively Kuveyt Türk Participation Bank, Turkiye Finans Participation Bank, Albaraka Turk Participation Bank and Bank Asya Participation Bank. Proportionally, Turkiye Finans is the greatest participation bank by issuing USD 1 Billion Sukuk. The second one is Kuveyt Turk and the total outstanding size of USD denominated issuances are USD 850 Million. In addition to this, they have already made one issuance as TIER II (The amount was USD 350 Million for 10Y tenor, but 5Y callable and the coupon rate at 7.90%). In addition, Albaraka is the third largest corporate for issuing USD denominated Sukuk. It is seen in the Figure 5.4 that the total outstanding size of USD denominated issuances of Albaraka are USD 800 Million. And they also made TIER II (The amount was 250 for 10Y tenor, but 5Y callable and the coupon rate was at 10.50%) in the previous days.

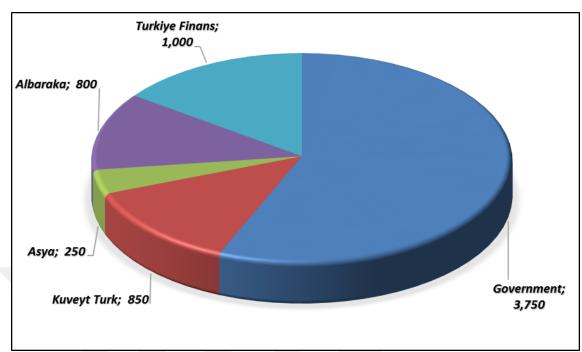


Figure 5.4: USD Denominated Sukuk Issuance Sovereign and Corporate (Million)

Source: Bloomberg Terminal [accessed 13 March 2016]

In order to increase domestic savings and enlarge the investor base, UTALC in Turkey diversifies the capital market instruments. Thus, they make issue TL denominated Sukuk. According to Bloomberg HT news, Ex – Borsa Istanbul (BIST) President said that they are ready to take whatever steps for the development of Islamic Financial Instruments. Starting point of this view, the government keeps corporate in countenance to issue Sukuk.

In addition, issuances in TL are the most commonly used instrument to raise fund in Turkey by corporate, especially by Participation Banks. They have all Asset Lease Company and also get permission from Capital Market Board (CMB). For example, Kuveyt Turk Asset Lease Company had the right to issue TL 1 Billion Sukuk in TL denominated in 2015. According to their right, they made issues. And the largest issued amount in TL for outstanding sale for public offering was made by Kuveyt Turk Participation Bank in 2015. The amount for the issue was TL 200 Million (The tenor was 189 days and the coupon rate percentages of 10.97). Finally, Kuveyt Turk break a new record last week by issuing TL 300 Million Sukuk (Public offering) and the coupon rate was percentages of 10.23 (13<sup>th</sup> May, 2016).

Moreover, TL denominated outstanding sovereign Sukuk amount are currently TL 7.1 Billion. The new issuance was made by UTALC in February, 2015. The amount was TL 1.9 Billion. In the below Table 5.2 demonstrates that there are currently four outstanding TL sukuk in the market. They are all traded in secondary market on Borsa Istanbul. However, there is no transaction depth in the secondary market. The reason behind that almost all TL denominated Sukuk issued by UTALC are bought by participation banks to their balance-sheet in order to exploit in Open Market Operations (OMO) or underlying assets for ther TL sukuk issuances. Therefore, TL Sukuk in the secondary market are not as effective as TL Government Bonds.

Table 5.2: TL issued Sukuk by Undersec. of Treasury Asset Lease Company Inc.

Issue Date	ISIN	Currency	Coupon (%)	Maturity	Amount Issued (Million)
10/01/14	TRD280916T17	TRY	9,68	09/28/2016	1.840
08/19/15	TRD160817T11	TRY	9,96	08/16/2017	1.589
02/18/2015	TRD150217T18	TRY	7,80	02/15/2017	1.802
02/17/2016	TRD140218T18	TRY	10,64	02/14/2018	1.900

Source: Bloomberg Terminal [accessed 13 March 2016]

In addition, as can be seen in the Table 5.2 TL Sukuk are generally issued for two years tenor and when one of them comes to the maturity date, the UTALC generally makes a new issue instead of that Sukuk. It means that UTALC continues to borrow from the investor. Yet, the Participation Banks Turkey Association has the demand from UTALC to make the TL Sukuk issuance more with the different tenors.

In conclusion, Participation Banks have almost all these TL sovereign Sukuk and they keep this instrument under their balance sheet to use different purposes, but the main aim is to use them to find fund from the market in any emergency case.

The final short information is that UTALC is planning to make new Sukuk issuance that is based on TUFE Index. It will be new Islamic debt instruments if they succeed to make issuance. Yet, it is not the first issuance TUFE Index-based Sukuk because Kuveyt Türk made the first TUFE Index-based Sukuk issuance at the end of April, 2016. The amount for the issue was TL 10 Million and the tenor was 729 days. The gross yearly return purged TUFE Index (Real Return) is percentages of 3.39.

As a side note, it is noted that the holders of Sukuk can face with Tax. The rate for tax from onshore certificates is at 10% for individual and 0% for corporations. It should also be noted that income from offshore treasury Sukuk has no tax cost. For other offshore Sukuk, the holders should pay taxes according to the maturity of Sukuk:

- i. If the maturity is below 1 year; payment of Tax at 10%
- ii. If the maturity is between 1 and 3 years; payment of Tax at 7%
- iii. If the maturity is between 3 and 5 years; payment of Tax at 3%
- iv. If the maturity is above 5 years; payment of Tax at 0%

### 6. SUKUK VERSUS BOND

Islamic bonds, Sukuk, has become progressively well liked in capital markets with the latest developments. In other words, there is a remarkable increase in the demand for Sukuk. Therefore, they are accepted not only in Islamic markets but also in international financial markets. On the other hand, some investors believe that Sukuk are rival to Conventional bonds. To some extent, they are right. There are some key differences between Sukuk and conventional bonds. The first of these differences is return. While Sukuk certificate holders split the profit/loss of revenues of an enterprise, conventional bonds reflect debt obligations. In the simpliest term, bonds are contractual debt obligation by way of the issuer are obliged to pay certain interests and principal. The other way round is that Sukuk holders have undivided beneficial ownership in the underlying assets. Miller, Challoner, and Atta (2007) claim that the Sukuk structure is similar to conventional bonds. The main difference is in the returns which in Sukuk are generated from an underlying asset and in bonds from the obligation to pay interest.

Furthemore, prices of Sukuk are based on the underlying asset market value. However, bonds' pricing is associated with the credibility of the issuer. Therefore, Sukuk holders can be influenced by asset linked costs, but bonds are not influenced by asset linked costs.

The final difference is that Sukuk are asset-backed securities. It means that the investor has a chance to retrieve the greater part of their investment whilst the investors can lose all their wealth in case of default. Godlewski et al. (2011) assert that Sukuk are financial securities that comply with Sharia law and backed by tangible assets. In other words, Visser (2009) states that one of the significant distinction between Sukuk and Bond is the absence of interest within the world of Islamic finance and its focus on justice in terms of wealth distribution.

Table 6.1: Basic differences between Sukuk and Conventional Bonds

	<b>Conventional Bonds</b>	Sukuk	
Asset Ownership	A debt obligation from the issuer to the bond holder	A partial ownership in the asset.	
Investment Criteria	Any asset, project, business that get on well with local regulation and law	Based on sharia-compliant	
Unit of Issue	A share of debt	An underlying asset	
Face Value	The issuer's credit worthiness (including its rating)	The market value of the underlying asset	
Investment rewards and risks	Bond holders get regularly fixed coupon rate until the maturity and they can collect their principal at the bond's maturity date	Sukuk holders get profit share from the underlying asset (and the state of loss they approve that)	

On the other hand, Sukuk are similar to conventional bonds in some respects. They have fixed coupon rate (profit) and the maturity. Also, they can be traded in secondary market by checking the sharia-compliant and the structure of Sukuk. Additionally, they have ratings which are rated by international rating agencies that investors use as a

guideline to evaluate risk/return Sukuk issue parameters and are principally kept under Euroclear. Cakir and Raei (2007) see Sukuk as parallel to conventional bonds when it comes to aspects such as rating, issuance and redemption procedures and coupon payments.

Also, Wilson (2008) clarifies that investors are more cautious to provide Sukuk duplicate to other conventional securities, because of the fact that they seek to facilitate investors' risk assessment of these new asset class. As a result, Sukuk reflect conventional securities in terms of pricing risk characteristics.

In conclusion, Sukuk are an Islamic investment certificate and they are liquid instruments. It means that they are tradable in secondary market. They have regular periodic income streams and sharia compliant capital market instrument.

<sup>&</sup>lt;sup>1</sup> Euroclear is a Belgium based financial services company that become master in securities settlement.

### 7. LIQUDITY MANAGEMENT

### 7.1 LIQUDITY

Liquidity is one of the most commonly encountered concepts in the banking sector. Also, liquidity is considered as the ability to transfer the items such as currency, precious metals, realty, stocks and bonds, sukuk etc. in the active part of the financial statement into capital or use as soon as possible and without any problem by the sector side. In other words, it means the transfer of assets into capital. In addition, liquidity means the total reserve of the banking system according to the Central Bank of Republic of Turkey (CBRT).

The CBRT's main goal is to ensure price stability. To do this, CBRT uses monetary policy tools. With the monetary policy tools, liquidity management can be maintained. Namely, the CBRT can manage the functioning of the banking system using these tools. For example; the agents in the banking system have responsibilities to the CBRT. The CBRT can drain the banking system reserves by redounding these responsibilities or redound the banking system reserves by applying vice versa. Starting from this point of view, it can be said that the liquidity in the market will change depending on the money market transactions actualized between the agents in the banking system and the CBRT. To sum up, the CBRT plays a vital role in determining the liquidity deficit or excess on a daily basis.

### 7.2 LIQUDITY MANAGEMENT

As a result of the money policies implemented by the CBRT, liquidity management has become prominent. A part of the short-run responsibilities of the banks known as the required reserves (Required Reserve rates may change depending on the maturities) must be kept in the CBRT accounts for 14 days. The CBRT actually aims to restrict the liquidity in the banking sector with this policy. Or it can reduce the liquidity need in the

market by making improvements in the required reserve rates and providing liquidity to the banking sector.

In addition, the CBRT can control the liquidity deficit or excess in market through Open Market Operations (OMO). To take advantage of this, however, the agents in the banking system need to possess enough collateral in their financial statements. The CBRT may accept different assets as collateral. These different assets are listed below respectively:

- i. Exchange Stores
- ii. Effective Stores
- iii. Local and foreign bond and stocks that the CBRT stated that they will be accepted
- iv. The CBRT liquidity securities
- v. Lease certificate/Sukuk exported by the Government Debt Securities (GDS) and Undersecreteriat of Treasury Asset Lease Company (UTALC).
- vi. Eurobonds exported by UTALC
- vii. IILM assets exported in USD or EUR type accepted by the CBRT

## 7.3 CENTRAL BANK OF REPUBLIC OF TURKEY: OPEN MARKET OPERATIONS

The CBRT conducts open market operations to regulate the money supply and liquidity of the economy. It is responsible for ensuring the active distribution of the Turkish lira liquidity in the banking system and providing liquidity for the banking system within the frame of ultimate loan resort function. In other words, it is responsible for maintaining the control of the liquidity deficit or excess in the banking system. The CBRT fulfills this responsibility via conducting the operations stated within the scope of Central Bank Law article 52. These operations are briefly defined as open market operations (OMO).

Banks in the banking system have to sign an Open Market Operations framework contract with the CBRT in order to actualize these operations, namely to become a party. This contract includes the general principal for banks that are the parties of the contract must conform to while conduction Open Market Operations. In summary, clauses of this contract will be in force in case of any dispute that may arise after the OMOs the banks conduct. Also there are two different contracts as Open Market Operations framework contract the Banks and Open Market Operations framework contract Optional. Optional contracts are the agreements signed by the participation banks to gain right to be a party of the CBRT.

Details of the Open market operations are published by the CBRT with a document called the Turkish Lira Operation Instructions. Banks or authorized persons can find these instructions on the CBRT website. Also these are incorporated into a booklet and delivered to the banks that are the parties of Open Market Operations. Finally, if there has been any change in the regarding instructions, banks will first be informed via e-mail and then there will be a written notice for the banks on the change.

### 7.3.1 Repo (Repurchase Agreement)

Repo operations are often used in order to increase the banking system liquidity temporarily in cases when the liquidity squeeze in the market is temporary. The CBRT purchases assets from the institutions authorized to perform open market operations at the rate of the price determined during the operation with the commitment to sell the assets back on a future date by making contract on the operation date. Sale back price is determined on the date when the purchase operation is performed. The institution party of the operation commits to purchase the asset at operation maturity which is subject to the repo operation. The subject asset here is defined to be the TL type GDS or the lease certificates/Sukuk exported by UTALC. As it is understood from this explanation, banks need to possess bonds or lease certificates in their financial statements which are exported by GDS or UTALC in order to take advantage of OMO. Briefly, the banks can get Turkish Lira funding from the CBRT as much as the assets they have in their financial statements.

The reason why the assets are divided into two as lease certificates/Sukuk exported by GDS and UTALC is that the types and functioning of the banks in the banking system are different. For example; Participation banks' financial statements cannot include GDS. That's why UTALC conducts TL type lease certificate export in addition to the TL type GDS. Total of the currently exported outstanding TL type lease certificates by the UTALC is 7.1 Billion TL. While these lease certificates exported on different dates have different yield rates, they also are coupon paid at once every 6 months and they are two-year maturity.

TRD140218T18; 1840

TRD150217T18; 1802

TRD160817T11; 1589

Figure 7.1: Turkey TL Oustanding Sukuk (Million)

Source: Bloomberg Terminal, ISLM Page [accessed 13 March 2016]

As a result, the deposit and participation banks can meet the liquidity deficits even if it is partially by making use of the funding opportunities provided by the CBRT in the event of a temporary liquidity squeeze. Therefore, the CBRT can also interfere with the short term interest rate in the market with this method.

### 7.3.2. Purchase with the Assurance of Selling Back

This is the purchase of the bonds and Sukuk subject to the operation by Central Bank of Turkish Republic at the value date with the commitment of selling them back at their contract term. The institution which is the party of the operation makes commitment to buy the bonds and Sukuk subject to the operation at the contract term as well. Purchase and sale values are determined on the operation date.

There are certain rules the banks have to conform to while conducting this operation. These are clearly stated in the Turkish Lira Operation Instructions. In case of non-compliance to these rules, the CBRT takes criminal action against the parties. Operations should be conducted respectively as below.

- I. Tender Notice
- II. Bidding
- III. Tender Result
- IV. Other Processes
- **i- Tender Notice:** Tender information is announced by the Central Bank to the market. Tender information is declared by Bloomberg Terminal (Auction Page) or data distribution firms on the Reuters service CBTF page. Tender announcement will include the information below no matter how the tender bid is announced:
  - a. Tender Number
  - b. Operation Type Tender Conducted for
  - c. Tender Amount
  - d. Tender date and time
  - e. Operation value
  - f. Security definition
  - g. Bidding form
  - h. Tender form

**ii- Bidding:** Authorized institutions must deliver their offers to the Directorate of Turkish Lira Markets until the end of the last bidding time. The auction starts at 10:00 a.m. It is required that the tender is as it is stated in the announcement and, whether through Central Bank Payment Systems - TS (Tender System) or on the phone, it should be sent in including the information below until 11.00 a.m.

- a. Tender number,
- b. Bidder authorized institution,
- c. The proposed amount (1 million Turkish Lira and multiples)
- d. Price (Interest/Yield rate)n
- e. Definition of the securities subject to operation (ISIN) in purchase operations with selling back commitment.

It is noted that the maximum bid amount is inserted as it will be the twofold of the Required Reserves (RR) reported by the Central Bank to the authorized officials. In case it is entered more than the amount mentioned above, the tender system will evaluate the offer in a way that this amount will be the twofold of the RR rate.

**iii- Tender Offer Result:** It is announced from the general purpose news list in the TS - tender system or CBTG page in Reuters service including the information below between 11.15 a.m. - 11.20 a.m.

- a. Total bid amount,
- b. The amount of the winning bid,
- c. Average interest rate/rate of return
- d. The highest and lowest interest /return rates winning the tender

### 7.3.3 Asset Payment Request by Central Bank Tender System

In calculating the asset allocated for the Purchase with the assurance of selling back, the official newspaper price by the CBRT is taken into account. In purchase with assurance operations, after the Official Gazette price of the assets subject to operation is set as the sellback price of the price of purchase with the assurance of selling back, the price of purchase with the assurance of sale back is determined including the operation interest/yield rate excluded from the price in question.

Finally, the agents in banking system are responsible for fulfilling the necessities of the operations where purchase (repo) operation is conducted with sale back commitment with one-week maturity until 16.45 a.m.

### 8. DATA AND METHOD

In this study, an analysis on the trading size and yield to maturity (YTM) of the government Sukuk, known as the capital market tool preferred by the investors, and the government bonds was conducted. Data in this study were based on the last two years as the secondary sukuk market started to gain depth in terms of the trading size from 2015 on.

### 8.1 DETERMINING PRACTICE TERM

As the government sukuk market is active in recent years, government Sukuk and government bonds under the similar terms issued in the last two years were included in the analysis. It was observed that the secondary Sukuk trading size among the markets increased significantly especially in 2015. The reasons for this increase can be based on the advances listed below:

I. The increase in the number of the participation-based retirement and investment funds (Can be seen easily in the Figure 8.1)

Figure 8.1: Number of mutual funds

Source: www.tspb.org.tr

- II. That the number of the participation banks raised from four to six with the new participation banks that came into action (Ziraat Participation Bank and Vakıf Participation Bank)
- III. That the investors/funds gravitated towards more solid sukuk due to the problems arose in the private sector bonds especially in the last two years

# 8.2 DETERMINING THE GOVERNMENT SUKUK AND BONDS THAT WILL TAKE PLACE IN THE PRACTICE

All public lease certificates issued in the practice term and not yet amortized are used as government Sukuk in an attempt to conduct comparison.

**Table 8.1: TL Government Sukuk information** 

Issue Date	ISIN	Currency	Coupon %	Maturity
10.01.2014	TRD280916T17	TL	9.68	09/28/2016
08.19.2015	TRD160817T11	TL	9.96	08.16.2017
02.18.2015	TRD150217T18	TL	7.80	02.15.2017
02.17.2016	TRD140218T18	TL	10.64	02.14.2018

Source: Bloomberg Terminal [accessed 13 March 2016]

The following government bonds are considered as Benchmark to these.

**Table 8.2: TL Government Bonds information** 

Issue Date	ISIN	Currency	Coupon %	Maturity
03.31.2015	TRT140617T17	TL	9.60	06.14.2017
11.18.2016	TRT141118T19	TL	8.80	11.14.2018

Source: Bloomberg Terminal [accessed 13 March 2016]

### 8.3 DETERMINING THE COMPARISON CRITERIA

Internal rate of return in the cash flows when the stocks and bonds, especially bonds, with fixed yield kept in reserve until they fall due shows the bonds' yield to maturity. Therefore, choosing the yield to maturity method while comparing the yield of Sukuk and the government bonds is considered to help in calculating the values of these two financial instruments. In summary, the yield to maturity difference was tried to be observed by comparing the data achieved once we find the yield to maturity value with the government bonds of the similar maturities.

# 8.4 COMPARING THE YIELD TO MATURITY SPREADS OF GOVERNMENT SUKUK AND BONDS

Figure 8.2 clearly shows that the yield to maturity of the government bonds of a similar maturity is much higher than that of the Sukuk.

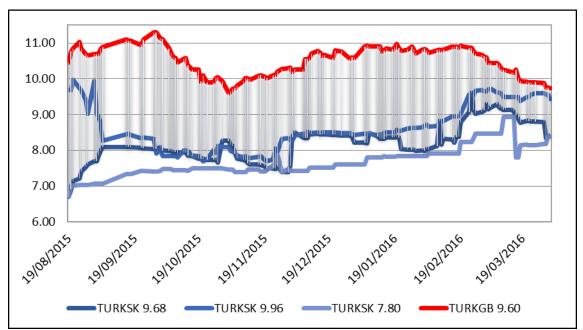


Figure 8.2: Sukuk yield to maturity versus benchmark Bond

*Source*: Bloomberg Terminal Yield and Spread Analysis Function [accessed 25 March 2016]

In Figure 8.3, however, it was observed that all the spreads of the government Sukuk issued in the practice term and not yet matured with government bonds of a similar maturity are negative.

0.00
-0.5601
-9.00
-0.5601
-9.00
-1.50
-2.00
-2.50
-3.00
-3.50
-4.00
-4.50

Figure 8.3: YTM differences between Sukuk and benchmark Bond

Source: Bloomberg Terminal Yield and Spread Analysis Function [accessed 25 March 2016]

Moreover, it was observed that there are some serious difference up to 4% between the yield to maturity rates of the government Sukuk and that of the government bonds of a similar maturity and that these differences gradually decreases towards the end of 2015. The main reason for this is that the size in the secondary Sukuk market increased significantly.

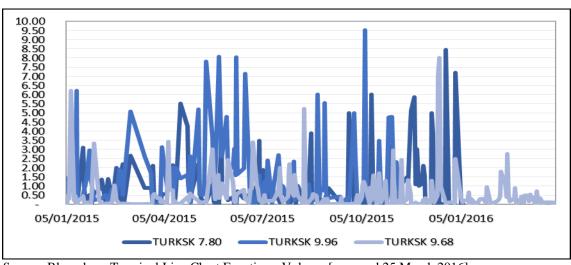


Figure 8.4: Sukuk Volume in 2015

Source: Bloomberg Terminal Line Chart Function - Volume [accessed 25 March 2016]

As it is seen in the Figure 8.4, there have been some increases in the trading size of the government Sukuk at certain times. There, however, is a fluctuating size when compared to the government bonds in the secondary market as there isn't enough depth. The average trading size of government Sukuk above is calculated as a million Nominal. A portion of increase can be observed in this trading size on some days. Thanks to the growth trend in the funds managed by the Portfolio Companies and the demand generated by the individual clients, some mobility was achieved leastwise in the secondary Sukuk market especially in 2015.

In addition, as the government Sukuk are used as cover in the Central Bank Open Market Operations by the participation banks, they are not often processed in the secondary market. In other words, the Participation Banks use government Sukuk they keep in their financial statements to conduct transactions in order to provide short-term funds at the maximum level.

#### 8.5 COMPARING THE YTM VOLATILITIES

Another analysis topic is the comparison of the yield to maturity volatilities of the government Sukuks with that of the government bonds. Standard deviation of the differences of the daily yield to maturities are considered to be the criterion in measuring the volatility.

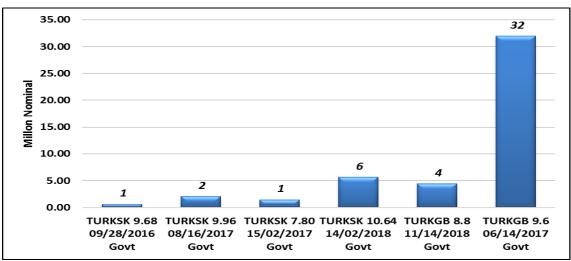


Figure 8.5: The average volume of Sukuk and Benchmark Bonds

Source: Bloomberg Terminal Line Chart Function - Volume [accessed 25 March 2016]

As it can be seen in the Figure 8.5, daily trading size of the government bonds are significantly high. While government Sukuk TURKSK 9.96 is treated daily on average two million nominal size, benchmark government bond TURKGB 9.60 is treated with daily thirty-two million trading size.

0.42 0.25 0.22 0.10 0.10 0.05 TURKSK 9.68 TURKSK 9.96 TURKSK 7.80 TURKSK 10.64 TURKGB 8.8 TURKGB 9.6 09/28/2016 08/16/2017 15/02/2017 14/02/2018 11/14/2018 06/14/2017 Govt Govt Govt Govt Govt Govt Stdev.P 0.42 0.25 0.22 0.05 0.10 0.10

Figure 8.6: Standard Deviation of YTM for Government Sukuk and benchmark Bonds

As it is understood from the Figure 8.6, the volatility in the yield to maturities of government Sukuk and benchmark government bonds which have the least standard deviation size is also low. In other words, there is a significant difference between the yield to maturities of the government sukuks that don't have the depth and lower trading size.

To examine elaborately, it is observed that the trading sizes of the government Sukuk TURKSK 10.64 and government bond TURKGB 8.80 are moving almost closely in the Figure 8.7 below. At the same time, the difference between government Sukuk and bonds of the similar maturity's yield to maturities is significantly small. Even its movement in the last month can be seen below in the Figure 8.8. While TURKGB 8.80 was treated 8.95% ultimately in the market, government Sukuk, TURKSK 10.64, was treated with the rate of 8.80%. This is also an indicator of the fact that how tightened the yield to maturity spread with the increase in the sizes.

40.00
35.00
30.00
25.00
20.00
10.00
5.00
0.00

7.810 Trans o and a rate or a rate of a

Figure 8.7: Sukuk vs Bond Volume (Maturity Date 2018)

Source: Bloomberg Terminal Line Chart Function - Volume [accessed 25 March 2016]



Figure 8.8: Mid YTM of Sukuk vs benchmark Bond Volume (Maturity Date 2018)

Source: Bloomberg Terminal Line Chart Function – Mid YTM [accessed 25 March 2016]

### 9. CONCLUSION

In the yield to maturity analysis, the government Sukuk are compared to the government bonds with similar terms. Consequently, the yield to maturity of the government Sukuk is less than that of government bonds interest rates. The main reasons for this are;

- i. That the trading size of government Sukuk are lower with regard to government bonds.
- ii. That participation banks don't actively take part in the secondary sukuk market and they use the government Sukuk in their financial statements just for the Open Market Operations (OMOs) they conduct with the Central Bank. Therefore, players in the market see government Sukuk as an illiquid asset.
- iii. That the Portfolio Management Companies in the market are not grown enough (Pension funds, investment funds, individual investors etc.).
- iv. That the clientele of the Participation Banks are accustomed to achieve less yield than the similar products of the deposit banks: Similar cases are encountered not only among the Sukuk but in the profit share as well.
- v. That the Government Sukuk are not acknowledged enough in terms of a product as a capital market instruments.

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