T.C.

TURKISH-GERMAN UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

INTERNATIONAL FINANCE DEPARTMENT

INSTRUMENTS OF ISLAMIC FINANCE – ARE ISLAMIC FINANCE INSTRUMENTS DIFFERENT THAN CONVENTIONAL FINANCE INSTRUMENTS?

MASTER'S THESIS

Sena YILMAZ ARSLAN

ADVISOR

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Thesis Submission Date to Institute : 08.06.2021

Thesis Defense Date : 03.07.2021

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ISTANBUL, June 2021

TABLE OF CONTENTS

PAGE NO

ÖZET vii

ABSTRACT viii

LIST OF ABBREVIATIONS ix

LIST OF FIGURES x

LIST OF TABLES xi

CHAPTER 1: INTRODUCTION 1

CHAPTER 2: ISLAMIC FINANCE 4

2.1. DEFINITION 4
2.2. HISTORY 5
2.3. ISLAMIC FINANCE IN TURKEY 6

CHAPTER 3: ISLAMIC FINANCE INSTRUMENTS 9

3.1. MUDARABAH 9
3.2. MUSHARAKAH 12
3.3. MURABAHAH 12
3.4. TAWARRUQ 15
3.5. IJARAH 17
3.6. SALAM AND ISTISNA' 18
3.7. SUKUK 20
3.8. PARTICIPATION BANKS' INSTRUMENTS AND THEIR CONVENTIONAL EQUIVALENT 23

CHAPTER 4: LITERATURE REVIEW 26

4.1. ISLAMIC FINANCE CONCEPT 26
4.2. ISLAMIC FINANCE INSTRUMENTS COMPARED TO CONVENTIONAL FINANCE INSTRUMENTS 28

CHAPTER 5: EMPIRICAL STUDY 33

5.1. PURPOSE 33

5.2. DATA 33
5.3. METHODOLOGY 36
5.4. RESULTS 37
CHAPTER 6: CONCLUSION 40
BIBLIOGRAPHY 42
APPENDIX 47
Appendix A: NORMALITY TESTS 47
CURRICULUM VITAE 48

ÖZET

İSLAMİ FİNANS ENSTRÜMANLARI – İSLAMİ FİNANS ENSTRÜMANLARI GELENEKSEL FİNANS ENSTRÜMANLARINDAN FARKLI MI?

Bu tez, İslami finans enstrümanlarının Türkiye örneği üzerinden geleneksel finans araçlarından farklı olup olmadığı sorusunu cevaplamayı amaçlamaktadır. Bu nedenle İslami finansın geleneksel finans ve araçlarından kavramsal ve uygulamadaki farklılıklarını belirlemek için, bir dizi İslami finans enstrümanı için kapsamlı bir analiz yapılmıştır. En önemli İslami finans enstrümanları, teorilerine ve uygulamada kullanımlarına göre derinlemesine açıklanır ve İslami finans enstrümanlarının hangi geleneksel finans enstrümanlarının yerini almaya çalıştıklarını gösterilir. Analiz, Türk İslami bankalarının geleneksel finans araçlarını yerine geçebilmek adına İslami Finans ürünlerini oluştururken İslami Finans teorisini uygulama yollarını bulduğunu göstermiştir. Ayrıca, Türk İslami bankalarının bir aylık katilim hesabi getirileri ile Türk geleneksel bankalarının bir aylık vadeli mevduat faiz oranları karşılaştırılmıştır. Test sonuçları, Türk İslami bankalarının bir aylık katilim hesabi getirileri ile Türk konvansiyonel bankalarının bir aylık vadeli faiz oranları arasında anlamlı bir fark olduğunu göstermektedir. Sonuç olarak, İslami finans araçlar ile geleneksel finans araçları arasında bir benzerlik söz konusu, özellikle İslami finans kuruluşlarının geleneksel finans kuruluşlarının rekabet içinde olması ve İslami finans araçlarının geleneksel finans araçlarına alternatif olmaya çalışmaları bu duruma yol açmaktadır. Fakat, bu tez aynı zamanda İslami finansın güvenilirliği ve özellikle İslami finansın geleneksel finansı taklit ettiğine yönelik eleştiriler açısından önemli olan İslami finans araçları ile konvansiyonel finans enstrümanları arasındaki anlamlı farklılıkları ortaya koymaktadır.

Anahtar Kelimeler: İslami finans, İslami finans araçları, Katılım bankacılığı, Mudarabah

Tarih: 08.06.2021

ABSTRACT

INSTRUMENTS OF ISLAMIC FINANCE – ARE ISLAMIC FINANCE INSTRUMENTS DIFFERENT THAN CONVENTIONAL FINANCE INSTRUMENTS?

This thesis aims to answer the question of whether Islamic finance instruments are different from conventional finance instruments for Turkey's case. Therefore, a comprehensive analysis for a range of different instruments is done to determine the conceptual and practical differences of Islamic finance and its' instruments to conventional finance and its' instruments. The most relevant Islamic finance instruments are explained in depth according to their theory, their use in practice, showing which conventional finance instruments they are trying to replace. The analysis shows that Turkish Islamic banks find ways to implement Islamic Finance theory to create modern Islamic Finance products that mimic conventional finance instruments. Furthermore, Turkish Islamic banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates are compared. The test results show that there is a significant difference between Turkish Islamic banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates. In conclusion, Islamic finance instruments are similar to conventional finance instruments as they try to be an alternative and as Islamic finance institutions are in competition with conventional finance institutions. However, this thesis also shows the differences between Islamic finance instruments and conventional finance instruments, which are essential for Islamic finance's integrity and trustworthiness, especially regarding the criticism towards Islamic finance mimicking conventional finance.

Keywords: Islamic finance, Islamic finance instruments, Participation banking, Mudarabah

Date: 08.06.2021

LIST OF ABBREVIATIONS

AAOIFI **:** Accounting and Auditing Organization for Islamic Financial Institutions

BDDK **:** Banking Regulation and Supervision Agency of Turkey

CBAVR1M **:** Turkish conventional banks' one-month term deposit interest

CMB **:** Capital Markets Board of Turkey

IBAVR1M **:** Turkish participation banks' one-month participation account returns

IDB **:** Islamic Development Bank

IFSB : Islamic Financial Services Board

IME **:** Islamic Moral Economy

PLS **:** Profit-Loss Sharing

SFH **:** Special Finance House

SPV **:** Special Purpose Vehicle

TKKB **:** Participation Banks Association of Turkey

TL **:** Turkish Lira

LIST OF FIGURES

PAGE NO

Figure 5.1.: Average Monthly Interest Rates/ Returns (excluding February 2001).....34

Figure 5.2.: Average Monthly Interest Rates/ Returns (including February 2001) 35

Figure 5.3.: Difference between CBAVR1M and IBAVR1M.....36

LIST OF TABLES

PAGE NO

Table 2.1. Asset Development of Participation Banks and Sectoral Share……..7

Table 3.1. Participation Banks Credit Type Distribution February 2020……...25

Table 3.2. Islamic Finance Instruments and Conventional Equivalents…… 25

Table 5.1. Data Description……... 34

Table 5.2. Wilcoxon Signed-Rank Test Results…… 38

Table 5.3. Two-Sample Kolmogorov-Smirnov Test Results…….38

Table 5.4. Inflation Data……39

CHAPTER 1: INTRODUCTION

Financial intermediation is the mechanism by which money is moved from parties with a surplus to parties with deficits who would like to use these funds. Financial institutions like banks, brokerage firms, insurance companies, and other similar institutions play a pivotal role in the financial intermediation process by bringing the parties with a surplus together with the parties with deficits (Pilbeam, 2005). In the intermediation process financial institutions' tools are financial instruments. Financial instruments are contracts reflecting the monetary transfer between lenders and borrowers like currency, bonds, loans, or shares. National and international regulators set the framework for this intermediation process. This is the basic structure of the finance system. Islamic finance is an intermediary system like the standard form of finance, which is called conventional finance. These two forms of finance are in many ways similar, but there are also differences. It can be said that Islamic finance is an emerging form in the ecosystem of conventional finance.

In today's form, Islamic finance first emerged in the 1970s with the need for an interest-free finance approach in Muslim countries and is, until today a growing sector worldwide (IFSB, 2020). The need for an alternative arose among others because the Islamic laws (Sharia) prohibit interest. So, Islamic finance institutions obey apart from the local secular laws, the divine Sharia laws resulting in the prohibition of interest, uncertainty, and the involvement in any goods and services that are illegitimate according to Islamic values (Asutay, 2012). In theory, Islamic finance does not just aim profit-maximization for the involving parties but should also promote social justice and wealth distribution. The keystone for this is the profit and loss sharing (PLS) approach used by some Islamic finance instruments. Here, the borrower-lender relationship is replaced through a partnership. Nevertheless, there are also Islamic finance instruments, which do not follow the PLS approach but are still Sharia-compliant (Chong& Lui, 2008).

In practice, the PLS-approach is used mainly for Islamic finance instruments on the liabilities side of Islamic finance institutions like Mudarabah. Islamic banks use the Mudarabah instrument for investment accounts. Here, the investment account holder acts as an investor and the Islamic banks act as an entrepreneur using these funds. The profit earned from this fund is at the end of the investment period distributed between account

holder and bank (Ayub, 2007, pp.320-32). Though Islamic finance theory intends the PLS-model as an overall approach, the PLS-approach is not preferred due to the rising risks on the asset side. The Islamic finance instruments on the asset side are often referred to as debt-like instruments. The most outstanding example of debt-like instruments is Murabahah. Islamic banks use Murabahah for the financing of goods. Murabahah works like a trade transaction where the bank purchases the good to be financed and sells it to the client with a certain profit. The payback can be done in installments. As this seems to be similar to a conventional asset-based credit arrangement, Murabahah and similar instruments are regarded as debt-like (Ayub, 2007, pp.222-229). These and other Islamic finance instruments are explained in detail in Chapter 3.

Due to the above-explained constellation, in the literature, Islamic finance institutions are highly criticized. Some researchers like El-Gamal (2007), Khan (2010), and Asutay (2012) claim that Islamic finance institutions mimic conventional finance, especially on the asset side, and therefore do not serve the primary purposes of Islamic finance. These researches analyze the Islamic finance sector from a theoretical and conceptual view and offer conceptual solutions for "this problem". El-Gamal (2006, p.1) illustrates this problem like following:

> "A cobbler was said to have asked Luther how he could serve God within his trade of shoe making. Luther's answer was not that the cobbler should sell a "Christian shoe," but rather that he should make a good shoe and sell it at a fair price."

Arising from the above-underlined finding, other researchers compare Islamic finance to conventional finance empirically to prove the claimed imitation. For example, Cevik and Charap (2011) and Chong and Lui (200) compare Islamic banks' investment account returns to the conventional banks' term deposit interest rates. Their results show that Islamic banks' returns are linked to the conventional banks' interest rates.

With Islamic finance being a trending topic, the literature is growing. However, the topic concerning the conceptual and practical differences of Islamic finance and its' instruments compared to conventional finance and its instruments is limited in the literature. There is only a little research on this subtopic concerning Turkey. This thesis aims to contribute to this topic for Turkey's case by trying to find an answer to whether Islamic finance instruments are different from conventional finance instruments, especially for

Turkey's case. Furthermore, this thesis contains a comprehensive analysis of Islamic finance instruments from different perspectives and for a range of different instruments.

Therefore, firstly, a theoretical analysis is made, where Islamic finance products are explained in depth regarding their theory and their implementation with the focus on Turkey, and the conventional finance instruments they are trying to replace are framed. The analysis shows that Islamic financial institutions try to mimic conventional finance instruments, but nevertheless there are differences between them. Secondly, Turkish Islamic banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates are compared. The test results prove that despite having a similar trend, participation banks' participation accounts' returns are significantly different from interest rates of conventional banks' term deposit accounts.

The outline is as follows; Chapter 2 introduces general information about Islamic finance. In Chapter 3, Islamic finance instruments are analyzed. In Chapter 4, a literature review is given. In Chapter 5, the empirical comparison of Turkish Islamic banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates is presented. Lastly, in Chapter 6, the results are concluded.

CHAPTER 2: ISLAMIC FINANCE

2.1.DEFINITION

Islamic finance is an intermediary system like conventional finance. It consists of different financial institutions like Islamic banks, which are the central building stones of Islamic finance. The main distinctive feature of Islamic finance is that it obeys not just the local laws and regulations but also the Islamic law, which is called Shariah. Therefore, Islamic finance is called shariah-compliant. The Shariah compliance of Islamic finance institutions is ensured by the Shariah-board. Shariah boards are advisory boards that consist of Islamic scholars. As these boards monitor and certify the shariah-compliance of Islamic finance institutions products', they are essential for Islamic institutions' credibility. Shariah boards are often part of the institution. However, there are also central Shariah boards in some countries.

The three main prohibitions described in the following are the further distinctive features of Islamic finance (Asutay, 2012);

1. Prohibition of interest is called "riba" in Islamic literature. This feature is the most outstanding characteristic, so Islamic finance institutions are often described as interest-free.
2. Prohibition of high uncertainty and risk is called "gharar" in Islamic literature. This prohibition aims to prevent exploitation. In this regard, conventional products like derivatives are not allowed.
3. Prohibition of involvement of goods, services, and industries, which are contradicting Islamic values and are considered to be illegitimate (haram) like alcohol, pork, or gambling.

Apart from the prohibitions, another essential feature of Islamic finance is that in theory, the aim is to reach wealth distribution, social justice, and sustainability. To reach these more meaningful goals, the widely accepted principle of Islamic finance is the profit and loss sharing (PLS) paradigm. It is regarded as the keystone of Islamic finance. The primary Islamic finance instruments used to provide PLS are Mudarabah and Musharakah. In these contracts, the Islamic finance institution acts as a partner rather than a creditor (Chong& Lui, 2008).

Even though the PLS-Paradigm is regarded as the key feature of Islamic finance, in practice other instruments are preferred, which do not have a PLS-nature but are regarded as shariah-compliant because they are asset-backed. Like Murabahah, Ijarah, or Salam, these instruments can be described as more debt-like as they are similar to conventional products like loans, leasing, or forwards. Islamic finance instruments will be discussed in detail in the next chapter. The preference for these debt-like instruments is due to competition with conventional finance institutions and the easy application in the conventional finance regulation framework. Nevertheless, the use of such instruments is highly criticized by scholars as the higher goals of Islamic finance like social justice and wealth distribution are disregarded. Islamic finance institutions are therefore accused of mimicking conventional finance and are even defined as "Shariah-Arbitrageurs" (Asutay, 2012; El-Gamal, 2007).

2.2.HISTORY

As stated before, the main reason for the establishment of Islamic banking is the prohibition of interest according to Islamic laws. The main view among scholars and society is that banking is necessary, but riba in the form of interest must be avoided. Still, conventional banking is being part of the Muslim countries' economies since the weakening of Islamic empires in the early 20th century. Nevertheless, conventional banking was seen as highly controversial in the Muslim society, but no alternatives were discussed because of the lack of awareness in historical Islamic finance activities. However, after the mid of the 20th century with the gain of independence of Islamic colonies, the discussions started (Alharbi, 2015).

The first known Islamic bank is the Mit Ghamr Savings Bank founded in 1963 in Egypt. This bank did not define itself as Islamic, but the practices are claimed to be the basement for modern Islamic finance and banking. However, Mit Ghamr was closed in 1967 (Orhan, 2018). A few years later, modern Islamic Finance started emerging with the foundation of the Islamic Development Bank (IDB) in 1974 with several Muslim countries' convention. The IDB exists until today and aims to support the economic development of Muslim countries. Afterward, with the capital allocation with the further rise in oil prices modern Islamic banks started spreading mainly in the Gulf region under the leadership of Dallah Baraka Group, the establishment of Dubai Islamic Bank in 1975, and

the establishment of Kuveyt Finance House in 1977 (Abdul-Rahman, 2014, p.249; Eken, n.d.).

In recent years, the Islamic finance sector is fast developing. The hub of Islamic finance moved from the Gulf region to the Asia-Pacific region, with countries like Malaysia being the sector leaders. In the aftermath of the financial crisis with a shift towards sustainability and the rising Muslim population, Islamic finance also emerged in Western countries (Hassan &Aliyu, 2017). Apart from that, the attraction of capital from rich Muslim countries has been an essential factor for the Investment banking sector. So, the first Islamic finance products in the West were offered by Islamic windows of international banks like Citigroup and HSBC since 1980. (Özdemis &Aslan, 2018). The distribution worldwide can be seen from the fact that banks in 69 countries offer interest-free services (TKBB, 2018). Still, Islamic finance products are mostly (94,8%) used in the Muslim world (IFSB, 2020).

Until the financial crisis in 2008, the sector had a growth rate of 15-20%, but with the financial crisis, the growth slowed down (Asutay, 2012). In 2019 the sector had an asset growth rate of 11.4%. Assets of the Islamic finance sector worldwide consist mainly of Islamic banking products with 72.4%, following by Sukuk with 22.3% in 2019. In the following years, steady growth in the sector is expected (TKBB, 2021).

Authorities aim to increase the shares of Islamic banking products and Sukuk with global standardization to be able to compete with conventional finance products (IFSB, 2020; TKBB, 2018).

2.3.ISLAMIC FINANCE IN TURKEY

In Turkey, Islamic Finance was firstly established in 1985 with the foundation of the Islamic Banks Albaraka Türk and Faisal Finans. In these years, those banks were legally named "Special Finance House (SFH)". However, this term led to confusion in the international market. Further, these SFHs faced legal and political problems in Turkey. Turkey's Islamic finance sector's positive development started with the AK party government period starting in 2002, as the government-supported Islamic finance activities. In 2005 the name of the SFHs was changed to "Participation Bank", which is still used today, and these banks started being regulated under the Banking law (Terzi, n.d.;

Özdemis &Aslan, 2018). (For this reason, in this thesis Islamic banks in Turkey are named participation banks.) Also, in 2005 the Participation Banks Association of Turkey (TKBB) was established. All participation banks have to be a member of this association. The association aims to protect the participation banks' rights and build a basement for standardization in the sector. Until 2005 the Islamic banking sector was relatively disadvantaged. After 2005 with the new regulations, participation banks entered into a development phase. In 2013 Islamic finance was defined as a strategically important area by the government, especially combined with the strategic aim to build a global financial hub in Istanbul. Therefore, also the development of the Islamic finance sector is an integral part of this aim. Even two public participation banks, Ziraat Participation in 2013 and Vakıf Participation 2016, were launched. Nevertheless, as of 2019, participation banks have just a 6% share in the banking sector. However, with the recent change in the Banking Law, which permits investment and development banks to offer Islamic finance products, growth in the market share of Islamic finance in Turkey is expected (IFSB, 2020; TKBB, 2018; Özdemir &Aslan, 2018).

Today 53 banks are operating in Turkey with 32 deposit banks, 13 development and investment banks, two banks under the management of the Savings Deposit Insurance Fund, and six participation banks – Albaraka Türk, Kuveyt Türk, Türkiye Finans, Ziraat Participation, Vakıf Participation, and Emlak Participation Bank. In 2018 the assets in the Turkish banking sector increased by 19%. Participation banks outperformed the sector with an increase in asset size of 29,1% to 206,8 billion Turkish Lira (TL). The following table 2.1. shows the asset development in detail for the years 2014 to 2019 (TKBB, 2018, 2021). This growth continues with an asset growth rate of 21.0% and a sector share of 6,3% in 2019 (IFSB, 2020). According to the TKBB Participation Banking Strategy Update Report 2021-2025 the objective is to reach a market share of 15% in 2025.

Table 2.1. Asset Development of Participation Banks and Sectoral Share (in TL Million, 2014-2018)

	Total Assets	**Change %**	**Sector Share %**
2014	104.073	8,4	5,2
2015	120.252	15,27	5,1
2016	132.874	10,5	4,9
2017	160.136	20,5	4,9
2018	206.806	29,1	5,3
2019	284.500	21,0	6,3

(Source: TKBB, 2018, 2021)

Participation banks aim to build a supplementary finance form in the Turkish banking system. As seen in the sector share and the slow growth since 1985, there is growth potential. Furthermore, the financial inclusion of the conservative part of the Turkish population is an important issue. In Turkey, many people hold their savings in the form of gold because they do not prefer interest-bearing investment alternatives. In 2017 it was estimated that there are 3.500 tons of gold in private possession, so-called "under the pillow". On the other side, it is known that the main reason for the use of Islamic Finance in Turkey is religious belief. Accordingly, Islamic finance could be a financial inclusion way (Çekin, 2019; TKBB, 2018).

As stated before, the diversification of Islamic finance in Turkey started with the AK-party government. So, in the last years, concrete steps for the Islamic finance sector's development were taken; for example, the rise in public and private Sukuk issues and the foundation of non-bank interest-free financial institutions and public participation banks. Another critical step was the establishment of a Central Advisory Board in 2018. This board is a national shariah board. Before the advisory board's foundation, every bank had its own shariah board leading to differences in practices. With the Central Advisory Board, the integrity of the participation banking and the setting of standards is aimed (TKBB, 2018). The New Economy Program for the period 2021 to 2023 launched in March 2021 underlines that Turkey aims to be a leading country in the global Islamic finance ecosystem (TKBB, 2021).

CHAPTER 3: ISLAMIC FINANCE INSTRUMENTS

In this section, the Islamic finance instruments which are most relevant in the Islamic finance sector are explained in depth according to their theory, their use in the practice, and which conventional finance instruments they are trying to replace, showing the similarities and differences especially concerning the arising problems.

3.1.MUDARABAH

Mudarabah is one of the preferred PLS-financing modes in Islamic finance. It is regarded as one of the industry's keystones (El-Gamal, 2006, p.120). It works like a silent partnership. In this partnership, the investors provide capital, and the mudarib (entrepreneur) trades with it; the investor is not involved in the management. The capital given must be debt-free so that a usurious loan cannot be camouflaged as a Mudarabah. Afterward, the earned profit is shared according to a pre-agreed rate. In the case of loss, the financial loss is only born by the investor. On the other side, the mudarib loses his labor and effort. The parties are free to choose the ratio of profit sharing. But it is prohibited to settle the sum of profit in advance. They can bind the profit-sharing on conditions, like different ratios for different types of business. Profits are shared after the closing of accounts and after all expenses are paid. The number of investors and mudaribs is not limited. The mudarib can also invest in the business, which leads to a form of combination of Mudarabah and Musharakah. He becomes a partner to the extent of his capital portion, for the remaining the mudarib (Ayub, 2007, pp.320-32; El-Gamal, 2006, pp.120-121).

In the current Islamic banking industry, Mudarabah is mostly used on the deposit side to authenticate investment accounts. Here, the bank acts as the mudarib. The deposits of the investment accounts are merged, and afterward, the bank makes investments with these funds. At the end of the term, direct costs are taken from the merged deposits, while the bank bears overhead expenses, the net proceeds are distributed among depositors and the bank according to the stipulated ratios. There are different ratios for different tenure, sizes, and subjects. Often banks also invest a part of their equity into the funds. According to Islamic finance theory, the loss should be borne by the depositor, and the bank should not earn any charge or any service fees (Ayub, 2007, p.331). Nevertheless, in practice, Islamic banks rarely realize losses.

As mentioned above, Mudarabah as a PLS mode is preferred by scholars, but it is rarely used on the asset side of Islamic banks. On the asset side Islamic banks prefer the Murabahah principle, which will be explained in the following sections. The reasons for that are the additional risks arising from asymmetric information and credit risk (Aström, 2012). Asymmetric information leads to adverse selection and moral hazard. Adverse selection occurs before entering a contract when one party has less information, and therefore unwanted results can occur. Moral hazard occurs during a contract where one party takes more risk or misuses funds because they are protected. In Mudarabah, adverse selection can occur when accepting borrowers, and moral hazard can occur as borrowers could use funds differently as initially agreed with the bank. Credit risk can be defined as the risk of default, which is not specific to Mudarabah, but as the bank cannot participate in the management and lacks control, the risk is higher. In general, these risks also concern customers acting as creditors in investment account contracts based on Mudarabah (Aström, 2012).

In Turkey, participation banks have two primary forms of fund-raising; the current accounts (özel cari hesap) and the investment accounts called participation account (katılma hesabı). The Turkish Banking Law Nr. 5411 Article 3 gives the definition for the current and participation accounts. Current accounts are defined as funds that consist of accounts that can be partially or fully withdrawn at any time and where no return is paid to the account holder. Whereas participation accounts are defined as accounts where the account holder participates in the profit and loss generated by the participation account funds managed by the participation bank. Participation accounts do not guarantee any fixed return or the payback of the principal amount. Furthermore, the rate of participation in the profit can be freely determined by the contract between the participation banks and the account holder; the account holder bears the loss that could occur. Participation banks are not obliged to participate in the loss except the loss occurs because of their own intentions, defects, or negligence (TCMB Mevduat ve Kredi Faiz Oranları ve Katılma Hesapları Kâr ve Zarara Katılma Oranları Hakkında Tebliğ Sayı: 2020/3, 2020). Though it is not stipulated directly in the legal texts, it can be seen from the definitions that Turkey's participation accounts base on the Mudarabah principle.

In 2018 in Turkey, a different form of participation account was introduced with the name "investment attorney account". Investment attorney accounts work similar to

participation accounts but a new term "estimated profit" is introduced. Before the opening of the account, both sides agree on an estimated profit rate, and it is the amount that the account holder can maximum claim at the end of the term as long as it does not exceed the realized profit. Here, private persons are not allowed to be account holders. Just public institutions and organizations, funds, and legal entities are permitted to be holders of investment attorney accounts. The TKBB central advisory board justifies this restriction because participation accounts based on Mudarabah are the backbone of Islamic banking. Therefore, it should be prevented that investment attorney accounts replace them. This new form has caused discussion in the Islamic finance sector. Some experts argue that the investment attorney accounts as a shift towards an interest-bearing system as any predetermined rate is not acceptable under the Sharia rules. Others argue that it is needed to raise the competitive capacity of Islamic banks. (Bayındır, 2018; BDDK Mevduat ve Katilim Fonunun Kabulüne, Çekilmesine ve Zamanaşımına Uğrayan Mevduat, Katilim Fonu, Emanet ve Alacaklara İlişkin Usul ve Esaslar Hakkında Yönetmelikte Değişiklik Yapılmasına Dair Yönetmelik, 2018; Hazıroğlu, 2018; TKBB Danışman Kurulu Kararı No:2, 2018)

As seen from the analysis above, investment accounts/participation accounts in Islamic banking serve mainly the purpose of fund-raising like term deposit accounts in conventional banking. The new form of investment attorney accounts in Turkey proof this. Apart from that, the two products seem to have different structures. In conventional banking, the account holders act as creditors, while investment account holders act like shareholders, and the investment accounts claiming to be interest-free. Nevertheless, some researchers (Cevik& Charap, 2011; Chong& Lui, 2009; Kaleem& Isa, 2003) analyzed and compared conventional term deposit rates with Islamic banks' investment account profit rates. Initially, the authors argue that the discrepancy between the banks' asset and deposit side leads to the conversion of investment accounts to conventional term deposit accounts as on the asset side the bank uses debt-like instruments like Murabahah. In line with this hypothesis, they found a correlation between conventional term deposit rates and Islamic banking investment account returns despite the structural differences. In Chapter 5, this topic is analyzed further by comparing the Turkish participation banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates.

3.2.MUSHARAKAH

Musharakah is one of the PLS financing modes of Islamic finance. As explained before, Islamic scholars prefer PLS modes because of their risk-sharing nature. In general, all partnerships working like joint ventures are called Musharakah. To be more specific, in Musharakah, the involved partners act as entrepreneurs and investors simultaneously. The partners have a share in the business according to the monetary value they contributed. Unlike Mudarabah, all partners are eligible to be on the board, but there can also be selected one mudarib with mutual consent. The profit and loss sharing ratio must be agreed upon and does not have to be equal to the investment ratio (Ayub, 2007, pp.312-317).

Basically, it can be seen that Musharakah is similar to Mudarabah as both are PLS-modes. Nevertheless, there are some differences. The differences between Musharakah and Mudarabah are like following; the invested capital comes from all partners, all partners have the right to be part of the management, the profit can be distributed at any time, all assets are jointly owned by the partners and not just the profit is shared, the loss is also shared (Ayub, 2007, p.327).

In the Islamic banking sector, Musharakah is used just on the asset side, unlike Mudarabah, because being similar to a joint venture partnership is not suitable on the deposit side. Musharakah is used in the finance of more significant investment projects. In Turkey, according to the Banking Law Nr. 5411, participation banks can use the Musharakah funding method under the name "profit-loss partnership". Participation banks in Turkey use this partnership mainly in the real-estate sector (Ersoy et al., 2017). Nevertheless, this instrument faces similar problems like Mudarabah because of the profit-loss sharing nature and is therefore not very much preferred. As said before, this preference is mainly due to the additional risks arising (Aström, 2012).

3.3.MURABAHAH

Murabahah is originally a form of trade. It is a "cost-plus sale", where both parties know the cost of the product, and the profit margin is agreed on together. The prerequisite is that the seller has to report all costs related to the product. Scholars claim that Murabahah is for the protection of consumers lacking expertise as it bases upon trustworthiness.

For a Murabahah contract to be valid certain conditions must be met; the price, date, and place of delivery must be known. The subject of sale must be saleable, and it must be available at the time of delivery. To prevent the misuse of the Murabahah contract debt documents, deferred payments on gold, silver, or currencies cannot be subject to the contract (Ayub, 2007, pp.213-215).

In practice Murabahah is used as a form of financing goods. All over the world, Islamic Banks use Murabahah to replace conventional asset-backed loans like mortgages. This form is called "Murabahah to Purchase Orderer". Here, upon the customer's request, the bank buys the good from a third party and sells it to the customer with a particular mark-up. The payback is done on a deferred basis. Depending on local jurisdiction and the bank's business model, it can be the case that they are not allowed to maintain an inventory of goods. In such cases, the banks are allowed to buy the product only upon the customer's request. As long as the supplier is a third party, the parties are free to choose the supplier. The possession and ownership of the good is an essential requirement for the Islamic bank according to the Sharia principles.

It should be noted that in Islamic history, Murabahah was the name for a form of trade and not a financial instrument. So Murabahah does not necessarily involve credit sales. However, the legality of postponement of payments is one of the general features of lawful sales, which constitutes the basis for the permissibility of Murabahah contracts in Islamic banking (Ayub, 2007, pp.222-229).

In general, Murabahah is the most used finance mode worldwide in the Islamic banking sector (Yousef, 2004; Asutay, 2012). The possible reason for this is that the structure is very similar to the conventional asset-based credit arrangement. This is also the reason why it is often claimed that Murabahah is mimicking a conventional credit just by changing the term "interest" with "mark-up" (Kuran, 1996). In most cases, the mark-up rate is benchmarked with conventional interest rates like LIBOR (El-Gamal, 2006, p.68). Among others, the Murabahah mode is considered in the literature as a debt-like instrument. Islamic finance experts discourage extensive use of Murabahah and advise using PLS modes, as Çizakça (2011) defines Murabahah as Shariah-compliant but not purely Shariah-based instruments. Yousef (2004) names the widespread use of Murabahah despite all suspicions as "The Murabahah Syndrome". Further, the extensive use of

Murabahah is scathed in the literature; Asutay (2012), El-Gamal (2007), and Khan (2010) argue that Islamic banking using asset-backed instruments are not serving the primary purposes of Islamic finance like wealth-distribution and social justice. On the contrary, replicating conventional credit leads to inefficiency in higher mark-up rates (El-Gamal, 2007). Nevertheless, the reasons for the preference towards Murabahah should also be regarded. Murabahah is a short-term instrument and therefore matches the short-term Mudarabah deposit accounts, which would not be the case with PLS financing. Murabahah avoids uncertainty and has a fixed return. The lack of a legal framework for PLS financing establishes a basis for Murabaha. Murabahah satisfies the needs, especially of retail customers who wish to finance the purchase of goods, which is not possible with PLS financing. Finally, through Murabahah, Islamic banks ensure their competitiveness since Islamic banks act in the same economic environment as conventional banks (Taner, 2011).

Another important aspect regarding Murabahah is its only distinguishable feature; the bank's involvement in the sales process in contrast to conventional banks' credit business involving just in the finance of the trading. This feature brings up the problem of double-taxation because of the additional transactions. Double-taxation is differently handled in each country. As some countries make tax reliefs in other countries like Turkey, the banks have to make structural extemporizations. Often banks do not fully take over the possession, which violates the Sharia conformity (El-Gamal, 2006, pp.64-65). A further aspect to remark is the customer's treatment in case of defaults or late payments as no interest can be charged. This issue is examined in the next section.

In Turkey, Murabahah is also widely used as a mode of financing goods by participation banks. Turkish jurisdiction treats the Murabahah contract precisely like a conventional credit with just adding one clause to the mortgage contract regulation: "The provisions of this regulation are applied by taking into account the mark-up rate for participation banks." (Gümrük ve Ticaret Bakanlığı Konut Finansmani Sözleşmeleri Yönetmeliği, 2015) Also, the banks' contract forms define the Murabahah agreement as loans (Türkiye Finans, 2018). So, there is no legal attempt to differentiate between Murabahah contracts and conventional loan contracts. Nevertheless, the general structure of the participation banks asset financings is as the described Murabahah modes above, the detailed implementation for the case of Turkey is described in the following steps (Kapici, 2018):

1. The customer contacts the bank inquiring about the financing of a good
2. The bank evaluates the request
3. If terms suitable, a binding contract for both sides is signed
4. An agent (often the customer himself) buys the product for the bank
5. Bank sells the product to the customer with a Murabahah contract
6. The customer pays the debt in installments

Regarding the fourth step, in most cases, the bank appoints the customer as an agent for the sales process. Legal papers like invoices, licenses, and deeds are issued on behalf of the customer's name. So, the bank practically does not possess the product. With this structure, double taxation and operational difficulties are avoided. Still, as the bank does not obtain the product before selling it to the customer makes the Murabahah seem superficial and leads to doubts about the Shariah-compliance. Nevertheless, some scholars claim that de jure possession is enough for Shariah compliance; otherwise, the upcoming costs would be unnecessarily high (Kapici, 2018; Taner, 2011).

In conclusion, Murabahah is as popular as it is controversial. Still, it can be said that Islamic banks try to replace conventional asset-backed credit agreements using the Murabahah mode of Islamic finance. But more than that, the claim in the literature that Islamic banks Murabahah agreements are debt-like and are just replicating conventional banking seems to be justifiable, especially for Turkey's case looking at the way of implementation. The problem regarding Shariah compliance is still an undecided deep topic and more an issue of belief and not part of this thesis. Nevertheless, the discussion is vital for answering whether practically Murabahah contracts are different from conventional loans. In the literature, both loan types' credit risk is compared, but the results are oppositional (Baele et al., 2014; Lassoued, 2018).

3.4.TAWARRUQ

The Tawarruq instrument is a method for gaining liquidity. It can be described as 'buy on credit, sell on spot,' which generates cash. In practice, Islamic banks use Tawarruq for liquidity management for personal financing and credit cards. In some cases, Tawarruq is carried out through international commodity exchange markets wherein only brokers are doing the buy and sell act, whereas the goods remain where they always were.

This form violates the rules of sale, according to Shariah. Others argue that it is only Shariah-compliant when the bought product is sold to a third party. The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) has taken the view that Tawarruq is permitted as long as the product is sold to a third person. Generally, this mode is controversial. Nevertheless, this form is widely used (Ayub, 2007, p. 349; El-Gamal, 2006, p.69).

In Turkey, participation banks also use Tawarruq for debt restructuring and their own liquidity management. The actual trade for the Tawarruq contract is made through brokers who trade for them on the London Metal Exchange. The debt restructuring process is like following:

1. The client cannot pay back the debt to the bank.
2. The bank buys through a broker a commodity on the London commodity exchange.
3. This commodity is sold to the client on credit with a mark-up.
4. The client sells the commodity again on the London commodity exchange through a different broker on spot.
5. The client pays back the new debt.

The Tawarruq contract for liquidity management is also called commodity Murabahah. In this method, a participation bank with excess liquidity invests in a participation bank with a liquidity deficit. The structure is like following:

1. Bank with excess liquidity buys a commodity from a broker
2. Bank sells the commodity with a mark-up to the bank with liquidity deficit on credit
3. The bank with a liquidity deficit gives an attorney to the bank with excess liquidity. This bank then sells the commodity to another broker and pays it to the bank with liquidity deficit.
4. The bank with deficit pays back the debt.

Often these described operations like buy and resell of the commodity are done by the bank with the deficit. In this case, the process is called "reverse Tawarruq" (Kazanci, 2018).

It can be seen that Tawarruq is used in Islamic finance for the justification of processes that, in their origin, do not have an underlying asset. So the banks extemporize to the disadvantage of efficiency. The problems with Tawarruq are similar to Murabahah. Obviously, Islamic finance institutions try with Tawarruq to replicate conventional debt methods for liquidity needs. Again, the ownership of the underlying asset is a problem with Shariah compliance, especially looking at the implementation process in Turkey, it can be seen that the interest is covered as "mark-up".

3.5.IJARAH

Originally Ijarah describes the simple contract, which contains any asset's renting to benefit from its usufruct. It can be described as transferring the known usufruct of a particular asset for a specified time period against an agreed rental. Ijarah can also refer to the hiring of workers. The difference to a sale is that in the Ijarah contract, the usufruct is transferred, whereas in the sale, the property is transferred. As the ownership remains with the lessor, all related risks and expenses also remain with him. The contract is only valid for goods that cannot be consumed (Ayub, 2007, p.279).

In practice, Ijarah is substitutable with leasing as used in conventional businesses. In general, leasing is used as a mode of finance. Here, the financial institution leases the good to be financed to the customer, and at the end of the lease period, the ownership of the good is transferred to the customer. A conventional financial lease is structured like following; the bank pays the asset's price directly to the supplier or through the lessee. The rent contains the total cost incurred for the asset's purchase plus the stipulated interest. After the lease period, the lessee can buy the asset. The advantage to a regular asset-backed loan is that the ownership remains with the bank. Another advantage is that it also helps mitigate the tax burden of the lessor. In accounting financial lease is treated like a purchase. Therefore, in the Islamic finance context its securitization is not allowed. For operational leases, this is not the case; in this type the ownership remains with the lessor (Ayub, 2007, pp.287-288).

Leasings are very suitable for Islamic financial institutions' business because of their "asset-based nature". Furthermore, it overcomes the problems of Murabahah and Tawarruq as it allows deferment, and the contract can be sold to third parties on both sides

as long as the lessee's rights are not violated. But according to the Sharia, there should be no precondition for the acquisition of the asset at the end of the period for the customer. However, the bank could make a unilateral commitment to sell the asset to the customer. In the Islamic finance sector, financial and operational leases are synthesized. The handling of these aspects can be described like following (Ayub, 2007, p.281; El-Gamal, 2006, pp.97-101);

- In an Islamic lease, the rental starts when the acquired good is available for use. In the finance lease, the payments start with the acquisition of the good.
- In the finance lease, the lessor can pay the asset's price directly to the supplier or to the lessee. In the Islamic lease, the price has to be paid to the supplier. If the price is paid to the lessee, an agency contract must be signed. So, in the Islamic lease, the risk is always born by the bank.
- In an Islamic lease the transfer of ownership should be independent of the leasing contract. Rather than a binding sale at the end of the lease, the lessor could make a unilaterally binding promise to sell the asset.

In Turkey, participation banks also use Ijarah in the form of financial leasing. According to the regulations, participation banks can lease directly, whereas conventional banks are not allowed to lease and therefore have to establish financial leasing companies. After Murabahah, financial leasing is the most used finance mode. Legally the transfer of ownership at the end of the lease period is up to the parties' decision (Mücahitoğlu, 2015). To overcome Shariah problems, most participation banks transfer the ownership of the asset at symbolic value.

The Ijarah contract, as said before, can be used synonymously for leasing. In general, it is used as a mode of finance in conventional as well as Islamic financial institutions, mainly because of its asset-backed nature. The adaptation of Ijarah to leasing according to the Shariah principles is more suitable for operational lease, but in practice Islamic banks try different ways to adopt financial leasing.

3.6.SALAM AND ISTISNA'

According to the shariah principles, for a valid sale the asset sold must exist and the seller must have acquired that asset's ownership. The reason for this is the avoidance

of uncertainty. The two exceptions for this are Salam and Istisna' contracts. In both contracts, the sales delivery is deferred to the future.

Salam works like a forward contract. Here, the payment is made prior to the consignment of the goods. The parties stipulate a specific time for delivery of the goods. The quantity and quality of the goods also have to be specified. The contract must be free from interest and uncertainty. The aim of Salam is to satisfy the needs of buyers and sellers as the seller can cover its liquidity need, and the buyer will get the needed product at the decided time and can benefit from a lower price. So, through Salam uncertainty for both parties is eliminated, and the parties are secured against fluctuations. Products that can be standardized into equivalent units can be part of a Salam contract. Although Salams are similar to forward contracts, there are some restrictions. According to the majority of scholars, commodities like precious metals or currencies cannot be subject to the contract. Nevertheless, a few Islamic banks have been using Salam in currencies as an alternative to bill discounting. Salam is generally not used as a finance mode because of the risks like delivery risk, quality risk, price risk, and storage risk. Islamic banks can dispose of the goods purchased after the delivery on the spot market or through a Parallel Salam contract with a third party, where they enter into a second Salam contract as the seller. Further, the contracts can be securitized. The structure of such certificates will be explained in the next section (Ayub, 2007, pp.241-243).

The Istisna' contract is an order to manufacture. The upon agreed price is paid at the end of the manufacturing project. The contract starts with the purchasers' requests for the manufacturing of any good. Istisna' can be used for providing financing of the manufacture or construction of houses, plants, and projects. The price must be fixed advanced with the consent of the parties involved. Only goods that have to be manufactured or constructed can be subject to this contract. The payment can be charged in installments during the contract period, and it can be related to the completion process. Istisna' in practice is used mainly for BOT (build, operate, transfer) financing of infrastructure projects. They are basically the same as their conventional counterparts (El- Gamal, 2006, p.90).

In Turkey, participation banks do not use Salam or Istisna' contracts. However, Salam could be a finance instrument especially suitable for the agricultural sector. Also,

other Islamic banks in the world rarely use these instruments in practice. Salam and Istisna' face similar problems to Mudarabah and Musharakah because of their direct involvement in trade. Therefore, they are even less popular than Mudarabah and Musharakah in the modern Islamic finance sector (Ülev& Selçuk, 2018). If applied, they are mostly used for the financial construction of Sukuk. In the context of this thesis they are explained for integrity.

3.7.SUKUK

Sukuk contracts are asset-backed leasing bonds (El-Gamal, 2006, p.107). They are a form of funding mainly used by sovereigns and corporations. The term Sukuk comes from the Arabic word "Sak," meaning certificate; Sukuk is the plural form and means certificates. Technically, Sukuks are securitized assets (Yardımcıoğlu et al., 2015). Sukuk provides an alternative to conventional fixed-income securities like bonds. Sukuks are created through the securitization of specific assets for a given period of time. The securitization can base on several Islamic finance products like Ijarah, Mudarabah, Salam, or Istisna'. The issued Sukuk represents the ownership of the underlying assets. Sukuk can be sold in secondary markets. However, debt cannot be sold in the form of Sukuk. Securitized assets are transferred to a special purpose vehicle (SPV), which serves as an agent. The difference between a Sukuk and a bond is that they represent the cash flow of the underlying asset. Generally, issues carry a fixed return rate against theoretical impermissibility (Ayub, 2007, pp. 389-394).

The parties involved in the Sukuk process are explained in the following:

- The originator is the Sukuk issuer, who sells its assets to the SPV and uses the realized funds. All Islamic financial institutions can be originators, but they are usually governments or multinational companies.
- The SPV is exclusively founded for the issue process of the Sukuk. The SPV buys the asset from the issuer. The price is financed through the issuance.
- Investment banks are the issue agents for the underwriting process. They take over the administrative roles in return for a fee. These services are provided by syndicates of Islamic banks or big multinational banks operating Islamic windows.

- In most cases, the Sukuk subscribers are central banks or Islamic financial institutions but also individuals (Ayub, 2007, p.393).

In practice, Sukuk issues are mostly based on Ijarah, but there are also Sukuk based on Salam or PLS-instruments like Mudarabah or Musharakah. The types of Sukuk are introduced briefly in the following:

1. Mudarabah Sukuk: The Sukuk represents a project managed with the Mudarabah principle. Here, the mudarib is the issuer, whereas subscribers are the owners of capital. In this case, the subscribers are the owners of the Mudarabah financed good, and they share the agreed profit and loss. The subscribers are allowed to sell their right of ownership.
2. Musharakah Sukuk: In this form, the subscriber is also given a certificate representing the proportion of their ownership. The main difference to Mudarabah Sukuk is that the intermediary party is also a partner, and it shares not just the profit but also the loss.
3. Murabahah Sukuk: In this form, a Murabahah contract is securitized. The SPV buys the good on the spot market with the proceeds from the Sukuk issue and sells it with a mark-up to the originator. The paybacks of the originator are distributed to the Sukuk holders.
4. Salam Sukuk: In this form, based on the Salam contract, the certificates are issued for mobilizing capital that is paid in advance as the price of the good to be delivered. The Salam commodity seller issues the certificates, while the subscribers are the buyers, and at the end of the period, the owner of that good. Trading of this kind of Sukuk is impermissible.
5. Istisna' Sukuk: Like Salam Sukuk, this type aims to mobilize the capital paid for manufacturing a good. The manufacturer is the issuer, and the certificate holders are the buyers of the good.
6. Ijarah Sukuk: In this form, the leased asset under the Ijarah contract is securitized. So, a lessor can finance the price of the leased asset through securitization. Lessor can sell the leased asset as long as it does not hinder the lessee from benefiting from the asset. Here the sale is made through certificates. The process is like following;
    a. SPV is formed for the acquisition of the asset

b. SPV raises fund through the issuance of Sukuk
c. Asset is leased to the government/ corporation
d. Rentals received are distributed to subscribers.

Ijarah Sukuk represents the proportion of ownership, so the right to get the proportion of the rent and in case of a loss the proportion of the loss. However, the Sukuk does not necessarily represent ownership in the leased asset itself; it can also represent ownership of the asset's usufruct. Ijarah Sukuk is mostly used as the expected return is quasi-fixed.

7. Mixed Portfolio Sukuk: In this type of Sukuk, the SPV pools different assets and contracts of the Islamic Finance Institution and securitizes these. The certificate holders gain a fixed return (Ayub, 2007, pp.396-406).

In Turkey, Sukuks are used in the form of lease certificates (Kira sertifikası). They are available since 2010. However, from 2010 to 2013, lease certificates could only base on the Ijarah Sukuk, later with the change of regulation, different types of Sukuk were included in the regulation (Yardımcıoğlu et al., 2015). On the website of the Istanbul stock exchange (n.d.), this instrument is described as following:

> "A lease certificate is a security issued by an asset leasing company in order to finance the assets that are acquired or leased, and which entitles its holders to the revenues attained from such assets in proportion to their shares."

As Sukuks are called lease certificates, the SPV is named asset leasing company. Asset leasing companies are established by the originators to issue the lease certificates. The revenue generated from the leased asset is distributed to the certificate holders. The revenue generated from the asset's sale to the originator is again distributed proportionately to the certificate holders at the end of the lease. The stock exchange calls the lease certificates a "conservative" tool because they are asset-backed. (Borsa Istanbul, n.d.). All transaction between the originator and the asset leasing company is tax-exempt (Yardımcıoğlu et al., 2015). In the regulation nr. 28670 of the Capital Markets Board of Turkey (CMB) from 2013, there are five types of lease certificates available, which can also be combined:

1. Ownership-based Lease Certificates work like Mudarabah Sukuk.
2. Management-based Lease Certificates work like Ijarah Sukuk.

3. Purchase-based Lease Certificates work like Murabahah Sukuk.
4. Partnership-based Certificates work like Musharakah Sukuk.
5. Work contract-based Lease Certificates work like Istisna' Sukuk.

To sum up, compared to classic debt instruments, the Sukuk contracts seem very similar, which is why they are often called Islamic bonds. Nevertheless, the main difference is like the other Islamic finance instruments; they are de jure interest-free as they are asset-based and not debt-based as the return is generated from the underlying asset or investment rather than from interest on the principal. Sukuks are also considered less risky because the underlying asset acts as collateral. For Turkey's case, the CMB (2014) also supports this view as they say that lease certificates have basically the same structure as bonds but are expected to be less risky being bound to an underlying asset. Sukuks are worldwide a trendy capital market instrument (Yardımcıoğlu et al., 2015) and have therefore also caught attention in the literature. Cakir and Raei (2007), Godlewski et al. (2013), and Alam et al. (2013) compared the price behavior, market reactions, and perceptions of Sukuk and bonds from different perspectives with the main idea that both instruments are very similar and therefore should not be treated differently. But their results show that Sukuk and bonds have different price behavior and cause different market reactions. Nevertheless, Sukuk are not always perceived as less risky as assumed by the authorities.

3.8. PARTICIPATION BANKS' INSTRUMENTS AND THEIR CONVENTIONAL EQUIVALENT

In Turkey, participation banks collect their funds apart from using current accounts, with products that adhere to the Mudarabah instrument like investment accounts and investment agency accounts. These serve mainly the same purpose like term deposit accounts. Being structurally different from conventional term deposit accounts, there is also a significant difference between conventional term deposit rates and participation banks' investment account returns. Another fund-raising method used by participation banks and sovereigns are lease certificates, which internationally are called Sukuk. Lease certificates have basically the same structure as bonds but are bound to an underlying asset. With lease certificates, Turkey managed to attract a significant amount of Gulf capital into the country. Between 2010 and 2018, lease certificates in total 65,311 Million Turkish Lira domestic and 10,276 Million USD aboard were issued (TKBB, 2018).

Participation banks provide the collected funds in the form of credits leaning mainly on the Murabahah instrument, but also with the instruments Musharakah, Salam, Istisna', Tawarruq and Ijarah. Apart from Musharakah, Salam, and Istisna', which are rarely used, participation banks credits' work like conventional asset-backed credit agreements. Table 3.1. shows the credit types distribution of participation banks in February 2020, showing that debt-like instruments are preferred on the asset side.

Table 3.2. sums up the analysis of Chapter 3 showing the Islamic finance instruments' implementation in Turkey and the conventional equivalents which they are trying to replace. We can conclude that Islamic banks and, in the case of Turkey, participation banks find ways to implement Islamic Finance theory by creating modern Islamic Finance products to mimic conventional finance instruments. Nevertheless, there are also differences between Islamic finance and conventional finance instruments, which can be listed as following leaning on the classification of Saidu et al. (2018).

1. Existence of Sharia rules: Conventional finance institutions have to obey local laws when forming their products. But Islamic finance have to obey additional to the local laws also to Islamic Sharia law. This difference is the basis for the following differences.
2. Asset backing of instruments: In Islamic finance, money cannot be regarded as an asset. Resulting in Islamic finance instruments like Murabahah, Tawarruq, or Sukuk involving the trade of real assets in contrast to their conventional counterparts of loans or bonds.
3. Relationship of parties: In conventional finance, there is a creditor-borrower relationship. In Islamic finance, the parties act as partners, even if only on paper. Especially for the instruments Mudarabah and Musharakah this is the case. In the cases of Murabahah and Tawarruq the parties act as buyer and seller.
4. Risk involvement: The characteristics of Islamic finance in points 2 and 3 lead Islamic finance instruments to a risk-sharing nature. In conventional finance instruments, the borrower is mainly bearing the risk.

Table 3.1. Participation Banks Credit Type Distribution February 2020

	Value (Million TL)	Percentage
Murabahah	127,571.34	84.68%
Musharakah	2,473.45	1.64%
Tawarruq (Consumer loan)	18,511.10	12.29%
Credit Cards	2,035.79	1.35%
Ijarah (Financial leasing)	57.86	0.04%
Salam/Istisna'	0.00	0.00%
Total	**150,649.54**	**100.00%**

(Source: BDDK, 2020)

Table 3.2. Islamic Finance Instruments and Conventional Equivalents

Islamic Finance Instrument	Implementation in Turkey	Conventional Finance Instrument
Mudarabah	Participation Accounts	Term Deposit
Musharakah	Partnership finance	Joint Venture
Tawarruq	Liquidity management	Consumer Loans/ Debt restructuring
Murabahah	Financing goods	Asset-based Loan
Ijarah	Leasing	Leasing
Salam/ Istisna'	Financing commodities/ projects	Forward
Sukuk	Lease Certificate	Bond

(Source: Own Tabulation)

CHAPTER 4: LITERATURE REVIEW

Although Islamic finance has emerged in the last few centuries, there is rising interest in this topic. Therefore, there is a relatively broad literature on several Islamic finance topics. Nevertheless, topics concerning the conceptual and practical differences of Islamic finance and its products compared to conventional finance and its products are limited in the literature, and there are only few researchers on this subtopic concerning Turkey. In the following, the Islamic finance literature concerning this thesis is summed up under the two topics; Islamic finance concept and Islamic finance instruments compared to conventional finance instruments.

4.1.ISLAMIC FINANCE CONCEPT

El-Gamal (2007) criticizes in his work the Islamic finance industry as "rent-seeking Shariah arbitrageurs" and advocates the concept of mutuality as a solution. El-Gamal concludes that Islamic finance institutions mimic conventional banks on the asset side but use the Islamic model of silent partnership on the liabilities side. Though the firstly emerged Islamic finance theory intended the silent partnership model for both sides of the balance sheet. In today's silent partnership models, the so-called investment accounts cause agency problems because the account holders have no control over the bank decisions. On the other side, the replication of conventional products to adjust the products to the Shariah framework leads to inefficiency and higher interest rates, causing adverse selection and moral hazard problems. El-Gamal says that this structure leads Islamic banks to supreme lending, which he calls the "Shariah-arbitrage incentive". As a solution for these problems, he offers an entirely new structure to Islamic banks, the mutuality structure. According to this structure, all depositors are shareholders, and there are no shareholders from the outside. As in such a case raising capital is difficult, the downside risk for the bank manager is higher, and the agency problem seems to be solved.

In his paper "How 'Islamic' is Islamic Banking?" Khan (2010) explains the theory and practice of Islamic Finance and its evolution over the years. He underlines the Kuran Thesis, which says that Islamic Finance is not meant to be an alternative form of finance; it is rather an expression of identity. After a theoretical analysis, he comes to the conclusion that Islamic banking practice does not follow the theoretical Sharia-guidelines and

that the Islamic banking practice is functionally indistinguishable from conventional banking. It is claimed that Islamic finance instruments are the same as conventional instruments, just with different names and a higher price. He assesses Islamic finance according to the four main characteristics risk-sharing, materiality, no exploitation, and no financing of sinful activities. He concludes that none of these characteristics are currently met. The reasons for that are that Islamic finance uses predominantly debt-like modes of finance instead of the recommended equity financing modes, that Islamic debt securities often have no real underlying transaction, that Islamic institutions exploit religious beliefs because they mimic conventional finance products and that the Sharia compliance is not ensured and in the most cases is not under supervision.

Asutay (2012) illustrates in his work the discrepancies between the initial aims of the Islamic finance framework, which he calls the Islamic Moral Economy (IME), and the realities of current Islamic finance. IME aims to create an economic system according the Islamic principles. Its main objective is economic development rather than growth and the distribution of social justice. Islamic finance within the IME framework should have the following attributes: consideration of Islamic prohibitions, ethical investing, risk sharing, profit-and-loss sharing, embedding in real economic transactions, and social orientation. Evaluating the current Islamic finance institutions, Asutay argues that they are replicating conventional finance and are not suitable for the concept of IME. He names this as "the social failure" of Islamic finance. He argues that Islamic finance institutions are part of the conventional monetary system and therefore are affected directly; the usage of interest rates as a benchmark proves this. Furthermore, Islamic financial institutions are using financial engineering to develop complex products trying to copy conventional products. In an analysis of different banks, Asutay shows that the preferred PLS financing is limited and that debt financing is the most used finance mode. The broader aims of economic development and social justice are also not met as Islamic financial institutions mostly offer short-term finance and lack Corporate Social Responsibility activities. Asutay claims that the profit orientation and the Shariah scholars considering "form" over "substance" are social failure sources.

Beck et al. (2013) try to answer the question "How different are Islamic banks from conventional banks?". They argue that, in theory, Islamic banking seems to be different from conventional banking, but "anecdotal evidence" shows that Islamic banking

is mimicking conventional banking in practice. They analyze several indicators of Islamic banks and conventional banks of 22 countries, comparing their business models, efficiency, asset quality, and stability for the period 1995 to 2009. For the business orientation, the authors assume that Islamic and conventional banks' different business models should be visible in their balance sheets. They measure the business orientation by the ratio of fee-based to total operating income and non-deposit funding to total funding. For the efficiency, it is expected that Islamic banks are less efficient because of their younger age and their complexity. Efficiency is measured with the indicators overhead costs and cost-income ratio. The asset quality is measured with the indicators loss reserves, loan loss provisions, and non-performing loans. Bank stability is measured with the indicators ratio of liquid assets to deposit and short-term funding and z-score. The results show no significant differences in business orientation; Islamic banks are less cost-effective but have a higher intermediation ratio, higher asset quality, and are better capitalized. When specifically looking at crisis periods, the results indicate that Islamic banks better perform in times of crisis is due to their higher capitalization and better asset quality. Islamic banks also reduce less their lending activities. The authors interpret that Islamic banking has a more conservative approach toward risk.

Aström (2012) analyzes the asymmetric information, credit risk, rate of return risk, and withdrawal risk for profit and loss sharing instruments of Islamic finance and suggests ways of mitigation for these types of risk. The reason for the analysis is the lack of use of PLS-instruments in Islamic banking despite their shariah-superiority. The author argues that PLS-instruments cause higher risk and that they are therefore not preferred.

4.2.ISLAMIC FINANCE INSTRUMENTS COMPARED TO CONVENTIONAL FINANCE INSTRUMENTS

Cevik and Charap (2011) offer an empirical analysis of the behavior of conventional bank deposit rates and the rate of return on retail sharia-compliant PLS investment accounts for Turkey and Malaysia. The starting point of their work is the discrepancy in the literature towards Islamic financial institutions. As one group argues that Islamic finance is a better alternative, another group advocates that Islamic finance replicates conventional finance and gains profit through arbitrage. Their results show a correlation between conventional deposit rates and the rate of return on retail PLS accounts in Malaysia

and Turkey for the time period 1997 and 2010. The methodology they use is as follows: With Johnson Cointegration, they show that Malaysia and Turkey PLS-returns and conventional deposit returns are cointegrated. With the Granger Causality test they show that conventional interest rates granger causes the rate of return on Islamic PLS-accounts. VECM confirms this unidirectional causal relationship. They show a correlation between the volatility of conventional interest rates and PLS return in Malaysia and Turkey with a time-varying volatility pattern. The authors underline through a balance sheet analysis of banks in both countries that though the equity-based modes of financing are superior, Islamic banks use mainly debt-like instruments on the financing side with so-called mark-up rates, which are linked to conventional interest rates like LIBOR. However, they use risk-sharing PLS instruments on the deposit sides. This constellation should lead to a discrepancy on the balance sheets, but as the analysis shows, the PLS-rates are correlated with conventional interest rates. The authors interpret this as the reflection of the debt-side to the deposit side and the result of income smoothening.

Chong and Lui (2009) aim to find out the reasons for the Islamic banking sector's growth and thus want to see the extent of difference to conventional banking as a vital part of the growth. Therefore, they analyze Islamic banking in Malaysia, especially the PLS mode Mudarabah, as it makes Islamic banking unique. Furthermore, it is argued that through the PLS modes, Islamic banking becomes more resistant as losses can be better absorbed because they are partly passed to the customers. However, their analysis shows that the PLS paradigm is not used on the banks' asset side. The PLS paradigm is used widely on the deposit side, but a more in-depth examination shows that Islamic bank deposits are very similar to conventional bank deposits. With the Engle-Granger error-correction methodology the authors show that Islamic banking deposit rates are directly influenced and connected to conventional deposit rates from 1995 to 2004. So, they conclude that the Islamic banking sector's growth is not due to its uniqueness but rather due to Islam's revival after the 1960s.

Kaleem and Isa (2003) analyze in their work "Causal Relationship between Islamic and Conventional Banking Instruments in Malaysia" the interest rates of term deposits of Islamic banking products with conventional banking products from January 1984 to December 2002. The research question is whether the two instruments are substitutable as they act in the same financial system. They use the Granger causality test.

Results conclude that conventional term deposit rates granger cause the Islamic term deposit rates.

Baele et al. (2014) analyze the default rate of Islamic loans and compare them to conventional loans' default rates in Pakistan over April 2006 to December 2008 and address the question of the reason for the different credit risks. The so-called Islamic loan is the Murabahah contract. As it is "functionally identical" to a conventional loan, the comparison is possible. Nevertheless, the authors expect differences in credit risk as the structural background is different. The assumptions are that religious borrowers prefer Islamic banks and Islamic banks prefer religious borrowers. Religious borrowers are less likely to default, and a religious borrower is less likely to default on an Islamic loan on a conventional loan. The results show that the default rate of Islamic loans is significantly less than the default rate of conventional loans, borrowers with loans from conventional banks and Islamic banks are more likely to default on the conventional loan, and religious borrowers are less likely to default as in the default rates in the Ramadan period decrease more than a half. The authors claim to show the impact of religion on economic outcomes.

Lassoued (2018) compares Islamic banks' credit risk and stability to conventional banks in Malaysia from 2005 to 2015. Credit risk is measured using Z-score. The results show that Islamic banks in Malaysia are much more susceptible to credit and insolvency risk and have a lower degree of stability. The author lists the possible reasons for these results. Conventional banks have a more substantial capital base, and much more investment opportunities as the Shariah prohibitions restrict Islamic banks. PLS-instruments increase credit risk, the author claims that Malaysian banks frequently use PLS modes. Islamic banks use their capital less efficiently; they have higher liquidity ratios and higher costs for services. The Islamic banking sector is relatively new and inexperienced. Islamic banks have to take more significant risks to compete with conventional banks. Islamic banking instruments bear more credit risks than conventional instruments, e.g., in a Murabahah contract, the customer could refuse to accept the product's delivery. Islamic banks are limited in the use of risk management methods as they are mostly assessed speculative.

Cakir and Raei (2007) asses the question, "Is the secondary market behavior of Eurobonds and Sukuk so similar that there is limited value in issuing Sukuk instead of

Eurobond?" They analyze sovereign issues of Sukuk for the countries Malaysia, Pakistan, Qatar, and Bahrain. They choose these countries because secondary trading for Sukuk is still limited, and therefore available data only for these countries could be found. Hypothetical portfolios with Eurobonds and Sukuk are compared to hypothetical portfolios with only Eurobonds. The Value-at-Risk (VaR) methodology is used to determine the impact of bond issues and Sukuk issues on portfolios. The VaR estimates are done with the Delta-Normal Model and the Monte-Carlo Simulation. In all cases, including Sukuk in a portfolio lowers the portfolios VaR. So, the results show that Sukuk show different price behavior. However, they have similar features to bonds, and the correlation of Sukuk returns with conventional bond returns is smaller than the correlation of conventional bond returns with each other. Therefore, Sukuks can have a diversification effect on portfolios.

Godlewski et al. (2013) claim that Sukuk are similar to conventional bonds that give corporations the opportunity to raise funds in conformity with their religious belief. They aim to determine whether Sukuk are different from conventional bonds and how the stock market perspective towards bonds is. The authors use an event study to measure the impact of Sukuk and bond issues on the stock market for a sample of listed Malaysian companies in the timeframe 2002 to 2009. The analyzed corporations have issued only one of the two debt instruments. Their work shows that the stock market is neutral to announcements of conventional bond issues in general, but it reacts negatively to announcements of Sukuk issues. The cumulative average abnormal return is positive for conventional bonds but negative for Sukuk. Also, the difference in the stock market reaction is statistically significant. The authors interpret the negative reaction of the market to Sukuk as the result of the excess demand for Sukuk and the adverse selection mechanism as investors expect that less-healthy companies prefer Sukuk as they can share the loss or are excluded from the bond market. The paper gives evidence that stock markets distinguish between Sukuk and bond though it is often argued that the two instruments are indifferent.

Alam et al. (2013) investigate the impact of Sukuk and bond announcements on the stock market from 2004 to 2012. They use the same methodology as Godlewski et al. (2010; 2011), but with a sample from several countries (Malaysia, Indonesia, Singapore,

Pakistan, UAE, Bahrain, and Qatar) and a different timeframe also considering the financial crisis. The results show that the market reaction is negative for Sukuk's announcements before and during, and positive after the global financial crisis. The negative reaction before and during the crisis is related to the adverse selection mechanism, where investors believe that companies prefer Sukuk to share the loss. Whereas after the crisis, the asset-backed nature could have led to a positive effect. The market reaction is positive before the crisis period and negative during and after the crisis for conventional bonds. There is no significant market reaction to the issuance of Sukuk or conventional bonds in the overall period.

CHAPTER 5: EMPIRICAL STUDY

5.1.PURPOSE

In chapter 3, Islamic finance instruments are analyzed theoretically, legally, and in regard to their implementation in practice for Turkey's case. The analysis shows that participation banks try to mimic conventional banking products answering the research question partly as there are still differences between the instruments. This section shows empirical evidence for the significant difference between Turkish participation banks' one-month term deposit returns called participation accounts and Turkish conventional banks' one-month term deposit interest rates. The Turkish participation banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates are compared using the Wilcoxon signed-rank test and the two-sample Kolmogorov-Smirnov test. Apart from this Mudarabah instrument the other Islamic finance instruments could not be included into the analysis because of the lack of data. However, participation accounts based on Mudarabah are regarded as the industry's keystones as they are based on the PLS-paradigm and are disregarding current accounts, the main form of fund-raising for participation banks. The purpose is to determine whether there is a significant difference between Turkish participation banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates.

5.2.DATA

For the Turkish participation banks' one-month participation account returns, the average for participation accounts returns of all retail participation banks is calculated with data obtained from the Participation Banks Association of Turkey (TKBB). This variable is named IBAVR1M. For the Turkish conventional banks' one-month term deposit interest rates, the average of Turkish conventional retail banks' one-month term deposit interest rates is used. This data is obtained from the Turkish Central bank, and the variable is named CBAVR1M. The data is used monthly for the time frame June 2000 to December 2019, excluding February 2001, leading to 234 observations. Due to the financial crisis in February 2001 in Turkey, the interest rates rose abruptly, and the average interest rate of one-month term deposits was 7.021,71%. This makes statistical analysis difficult. February 2001, being an extensive outlier, is therefore excluded. The effects of

the following economic crisis are still visible in the following time period. Figure 5.1. shows the data used for the analysis. Figure 5.2. shows the data, including February 2001 with a logarithmic scale. Table 5.1. summarizes the descriptive information regarding the two variables. The inflation data for the period 2000 to 2019 is obtained from the monthly consumer price index data of the Turkish Statistical Institute.

Table 5.1. Data Description

Variable	Obs.	Mean	Std. Dev.	Min	Max
IBAVR1M*	234	16,00	11,21	6,02	49,8
CBAVR1M**	234	20,47	18,95	5,29	109,4

*IBAVR1M: Turkish participation banks' one-month average participation account returns

**CBAVR1M: Turkish conventional retail banks' one-month average term deposit return

(Source: Own Tabulation)

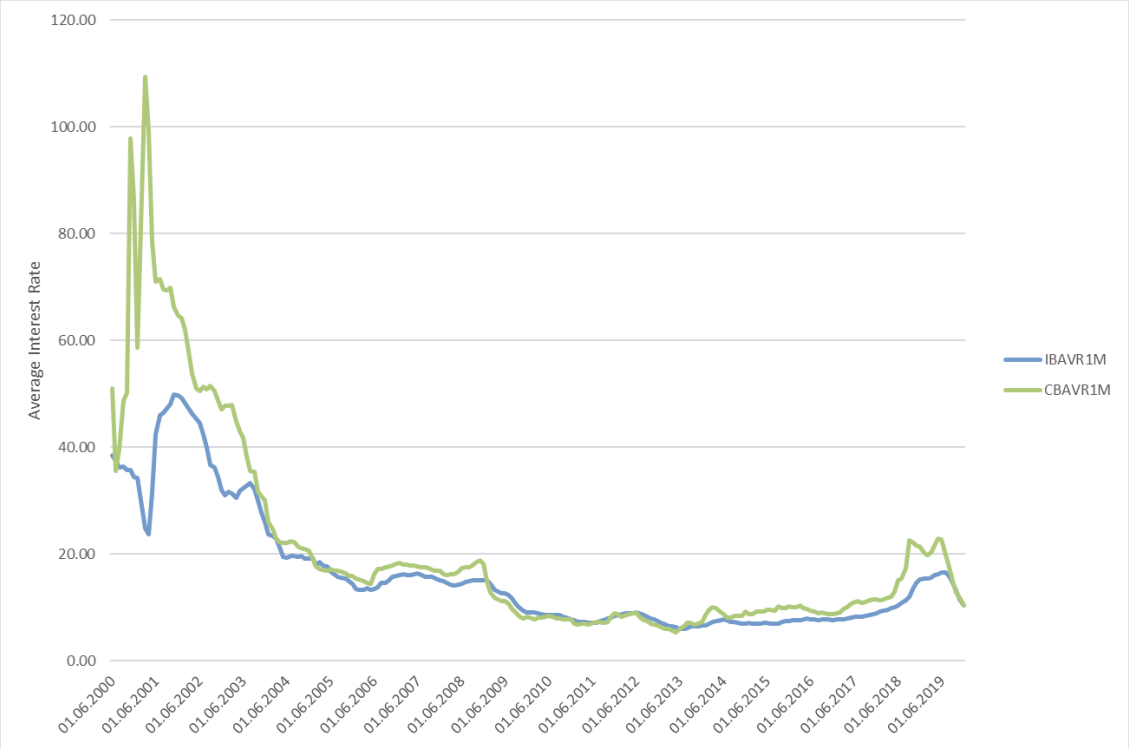

Figure 5.1.: Average Monthly Interest Rates/ Returns (excluding February 2001)

Figures 5.1. and 5.2. visualize that IBAVR1M and CBAVR1M have in general a similar movement in time and are nearly overlapping by the majority. However, in the majority CBAVR1M is above IBAVR1M. Especially in the crisis periods in Turkey; 2000/01, 2008, and 2018/19 CBAVR1M is considerably above. It can be seen that difference between IBAVR1M and CBAVR1M is higher in the crisis periods than in the other

periods. Figure 5.3. illustrates the movement of the difference between CBAVR1M and IBAVR1M shown by the subtraction of IBAVR1M from CBAVR1M for the analyzed time period.

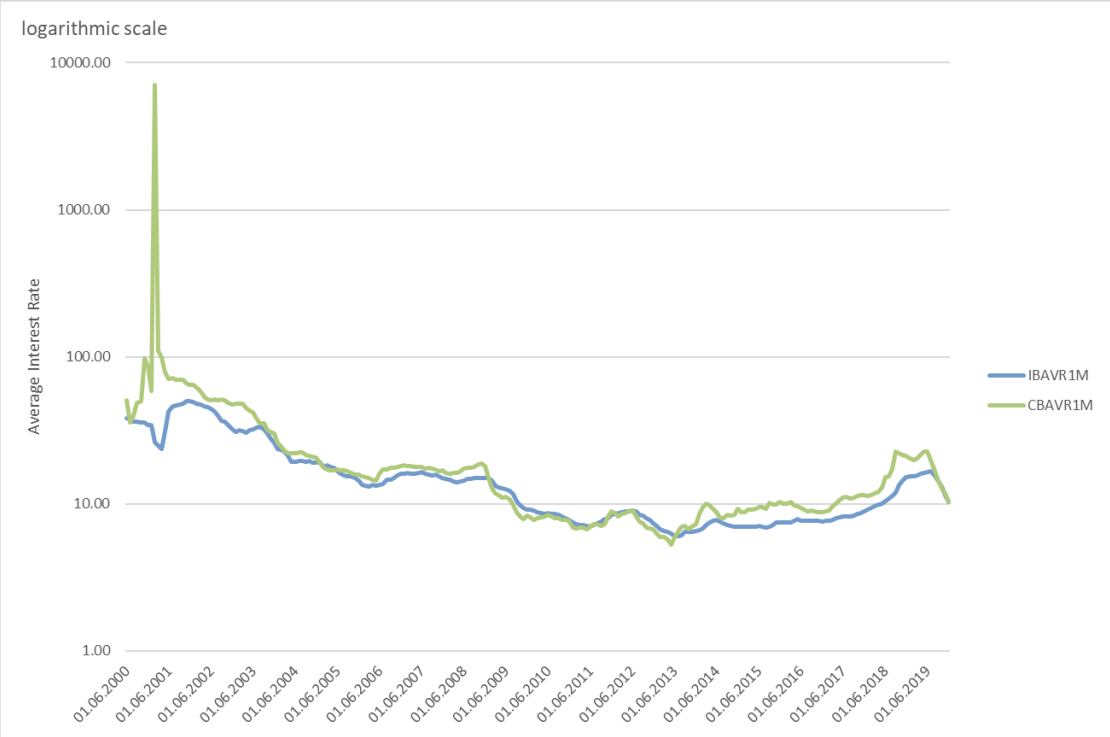

Figure 5.2.: Average Monthly Interest Rates/ Returns (including February 2001) - Logarithmic Scale

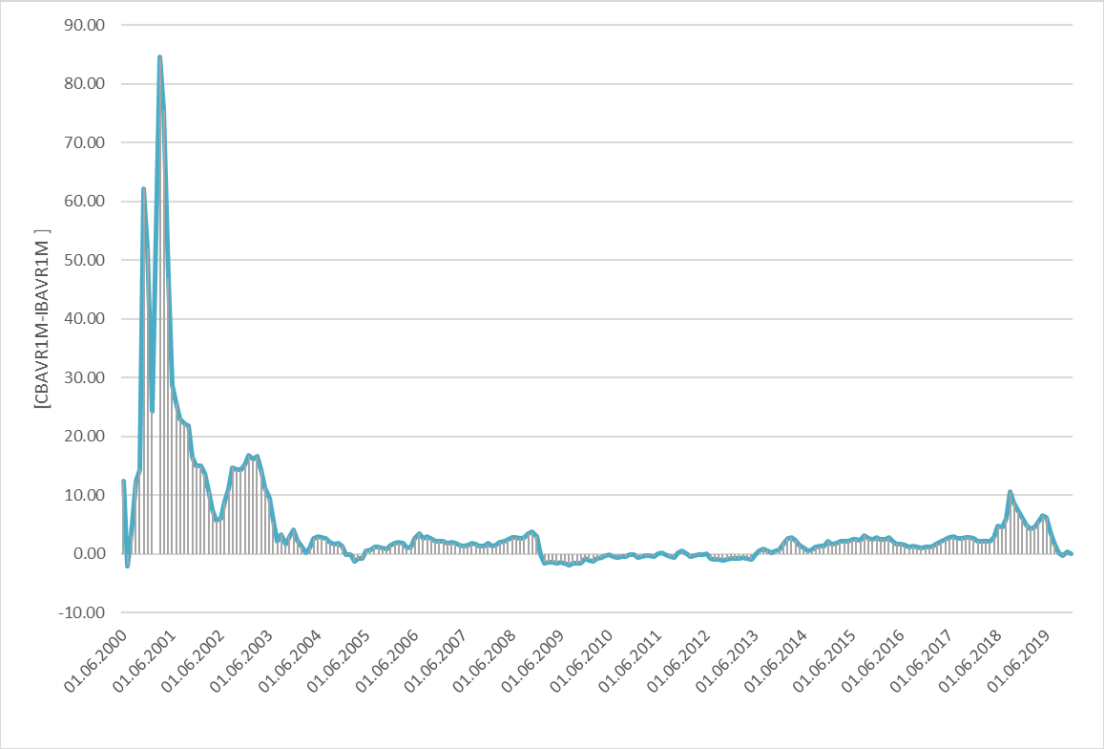

Figure 5.3.: Difference between CBAVR1M and IBAVR1M

5.3. METHODOLOGY

With the aim to determine whether there is a significant difference between IBAVR1M and CBAVR1M the Wilcoxon signed-rank test is applied. The Wilcoxon signed-rank test is a non-parametric test. As IBAVR1M and CBAVR1M are not normally distributed the Wilcoxon signed-rank test is used. The normality tests of the variables can be found in Appendix A. The null hypothesis of this test is that the compared distributions are the same.

H_0: $IBAVR1M_t = CBAVR1M_t$

H_1: $IBAVR1M_t \neq CBAVR1M_t$

Apart from the Wilcoxon signed-rank test the two-sample Kolmogorov-Smirnov test is applied. This is also a non-parametric test. Here the cumulative distributions of the two samples are compared. The null hypothesis is that the samples' distributions are equal.

5.4.RESULTS

The Wilcoxon signed-rank test results are presented in Table 5.2. The overall comparison of IBAVR1M and CBAVR1M shows that there is a significant difference at the 1% level. In a further step, the variables are compared separately for each year in the analyzed period. Generally, the test results show that there is a significant difference between IBAVR1M and CBAVR1M in most years with CBAVR1M being higher which is also visible in the graphics of section 5.3. Still, there is different behavior in the years 2005, 2009, 2010, 2011, 2012, and 2013. In the years 2005 and 2013 there is no significant difference between IBAVR1M and CBAVR1M. In the years 2009, 2010, 2011, and 2012 there is a significant difference between the two variables but in these years the average participation bank returns are higher than the average interest rates of conventional banks. The results of the two-sample Kolmogorov-Smirnov test are presented in Table 5.3. It can be seen that the distributions of IBAVR1M and CBAVR1M are different from each other as the Combined K-S p-value is significant at the 1% level.

A possible explanation for the different behavior in the years 2005, 2009, 2010, 2011, 2012, and 2013 could be inflation. The related inflation rates are given in Table 5.4. The table shows the average monthly inflation rates for each year and the average IBAVR1M and CBAVR1M values for each year. It can be seen that in the years 2005, 2010, 2012, and 2013 the inflation is lower than the average, and in the years 2009 and 2011 lowest for the analyzed period. Whereas in times of relatively low inflation term deposit rates decline, the participation account returns remain higher which could be due to the direct relationship with the real economy. But as term deposit interest rates, as well as participation account returns, are determined by many different internal and external factors, inflation cannot be the only determinant. Nevertheless, it could be a sign of the reason for participation account returns being higher in the mentioned years. The reason for this can be explained with the PLS-paradigm of participation accounts. Participation accounts' returns are generated by the participation account funds managed by the participation bank, so low inflation can have a positive effect on the participation accounts' returns. Nevertheless, to proof, that there is a relationship between participation account returns and the real economy further research including other real economy variables have to be examined.

Table 5.2. Wilcoxon Signed Rank Test Results

Year	Obs.	Positive	Negative	Prob > |z|
Total	234	56	177	0.000***
2000	7	1	6	0.028**
2001	11	0	11	0.003***
2002	12	0	12	0.002***
2003	12	0	12	0.002***
2004	12	0	12	0.002***
2005	12	5	7	0.272
2006	12	0	12	0.002***
2007	12	0	12	0.002***
2008	12	0	12	0.002***
2009	12	12	0	0.002***
2010	12	12	0	0.002***
2011	12	8	3	0.091*
2012	12	11	1	0.005***
2013	12	6	6	0.638
2014	12	0	12	0.002***
2015	12	0	12	0.002***
2016	12	0	12	0.002***
2017	12	0	12	0.002***
2018	12	0	12	0.002***
2019	12	1	11	0.005***

*Significance at 10% level; **Significance at 5% level; ***Significance at 1% level

(Source: Own Tabulation)

Table 5.3. Two-Sample Kolmogorov-Smirnov Test Results

Smaller Group	D	P-Value
1: IBAVR1M	0.1838	0.000***
2: CBAVR1M	0.0214	0.899
Combined K-S	0.1838	0.001***

***Significance at 1% level

(Source: Own Tabulation)

Table 5.4. Inflation Data

Year	Av. Inflation	IBAVR1M	CBAVR1M
2000	49.17	36.37	58.46
2001	55.28	40.36	75.27
2002	47.19	41.86	53.30
2003	25.55	30.89	39.57
2004	10.65	20.51	22.39
2005	8.18	16.64	16.97
2006	9.60	14.14	16.37
2007	8.78	15.88	17.57
2008	10.45	14.67	17.25
2009	6.26	11.94	10.57
2010	8.58	8.54	8.00
2011	6.48	7.49	7.30
2012	8.94	8.49	7.96
2013	7.49	6.43	6.39
2014	8.75	7.23	8.87
2015	7.66	7.08	9.46
2016	7.80	7.65	9.39
2017	11.13	8.21	10.57
2018	16.23	11.32	16.26
2019	15.48	14.75	17.88

(Source: Own Tabulation)

So, it can be concluded that participation banks' participation accounts' returns are significantly different from interest rates of conventional banks' term deposit accounts, despite having a similar trend which can be seen in Figures 5.1. and 5.2. This result is contrary to the findings of Cevik & Charap (2011), Chong & Lui (2009), and Kaleem & Isa (2003), which argue that that participation banks' participation accounts' returns mimic interest rates of conventional banks' term deposit accounts. Furthermore, the supposed effect of inflation on the participation accounts' returns can be interpreted as a sign of the linkage to the real economy being another distinctive feature. But this assumption has to be proven in further research.

CHAPTER 6: CONCLUSION

In this thesis, the Islamic finance instruments are compared to conventional finance instruments according to their theory and their use in practice for Turkey's case to answer the research question of whether Islamic finance instruments are different from conventional finance instruments. Firstly, the most important Islamic finance instruments are analyzed conceptually, and their use in practice for Turkey's case is explained. Secondly, the Turkish Islamic banks' one-month term deposit returns and the Turkish conventional banks' one-month term deposit interest rates are compared.

Islamic finance arose in the 1970s in Muslim countries as an alternative form to conventional finance, intending to distribute social justice and wealth distribution. The primary method to reach this goal was the PLS-approach as the opposite of conventional finance's interest-bearing debt approach. However, the analysis shows that the PLS-approach is mainly used on the liabilities side of Islamic finance institutions like with Mudarabah used by participation accounts in Turkey as the primary way of fund-raising. Other PLS instruments like Musharakah are not preferred at all. Musharakah is rarely used as a mode of finance by participation banks. On the asset side of Islamic finance institutions, debt-like instruments dominate; in Turkey, more than 90% of participation banks' assets are debt-like. Debt-like instruments are preferred due to the competition with conventional banks for which the risk-sharing nature is problematic and the lack of legal structures. Instruments like Mudarabah and Tawarruq are the primary forms used for funding as they are similar to conventional credit arrangements. Scholars (El-Gamal, 2007; Khan, 2010; Asutay, 2012) criticize the extensive use of these instruments without considering Islamic finance's higher goals. They accuse Islamic finance institutions of mimicking conventional finance instruments. Another debt-like instrument are Sukuk. Sukuk are used for fund-raising by participation banks and sovereigns; in Turkey, Sukuk are called lease certificates. Lease certificates have basically the same structure as bonds but are bound to an underlying asset.

For Turkey's case, the implementation of Islamic finance products shows that participation banks try to replace conventional finance instruments. However, there are differences between Islamic finance and conventional finance instruments, like the existence of Sharia rules, the asset-backed nature of the instruments, the relationship of the involved

parties, and the risk involvement. Furthermore, the evaluation in Chapter 5 shows that despite having a similar trend, there is indeed a significant difference between the participation banks' participation accounts' returns and the interest rates of conventional banks' term deposit accounts in Turkey for the analyzed period. Additionally, it can be seen that inflation has an effect on the participation accounts' returns. This could be due to the relationship of participation accounts with the real economy. But this assumption has to be examined in further research with additional variables in connection with the real economy.

Islamic finance emerged from a need for an alternative in Muslim societies. This is also the case for Turkey, where Islamic finance could be a way for the financial inclusion of the conservative part of the Turkish population, which refuses the use of interest-bearing products. This thesis shows the differences between Islamic finance instruments and conventional finance instruments, which are essential for Islamic finance's integrity and trustworthiness, especially regarding the criticism of Islamic finance mimicking conventional finance. Islamic finance instruments are similar to conventional finance instruments as they obviously try to be an alternative. Nevertheless, it would be a rash conclusion to say that Islamic finance just replaces the word "interest" with "mark-up". The analysis shows that there is a significant difference, especially regarding the results in Chapter 5. In this thesis, just the Mudarabah instrument could be analyzed due to the lack of data. In a further step, empirical evidence for the comparison of other instruments could be considered.

BIBLIOGRAPHY

Abdul-Rahman, Y. (2014). *The Art of RF (Riba-Free) Islamic Banking and Finance: Tools and Techniques for Community-Based Banking* (2nd ed.). Hoboken, NJ: Wiley.

Alam, N., Hassan, M. K., & Haque, M. A. (2013). *Are Islamic Bonds Different from Conventional Bonds? International Evidence from Capital Market Tests.* Borsa Istanbul Review, *13*(3), 22–29. https://doi.org/10.1016/j.bir.2013.10.006

Alharbi, A. (2015). *Development of the Islamic Banking System.* Journal of Islamic Banking and Finance, *3*(1), 12–25. https://doi.org/10.15640/jibf.v3n1a2

Aström, Z. H. (2012). *Risk Analysis and Loss Sharing Instruments.* International University of Sarajevo. (unpublished doctoral dissertation). https://tkbbe-gitim.org.tr/Documents/Yonetmelikler/thesis.pdf

Asutay, M. (2012). *Conceptualising and Locating the Social Failure of Islamic Finance: Aspirations of Islamic Moral Economy vs the Realities of Islamic Finance.* Asian and African Area Studies, *11*(2), 93–113.

Ayub, M. (2007). *Understanding Islamic Finance*. Chichester, West Sussex: Wiley.

Baele, L., Farooq, M., & Ongena, S. (2014). *Of Religion and Redemption: Evidence from Default on Islamic Loans.* Journal of Banking and Finance, 44(1), 141–159. https://doi.org/10.1016/j.jbankfin.2014.03.005

Bankacılık Kanunu No: 5411. (October 19, 2005). Resmi Gazete (Sayi: 25983). https://www.mevzuat.gov.tr/MevzuatMetin/1.5.5411.pdf

Bayındır, S. (2018, November 12). *Katılım Bankacılığının Ruhuna el-Fatiha mı?* İktisad. Retrieved March 7, 2020 from https://www.iktisad.org.tr/katilim-bankacilig-inin-ruhuna-el-fatiha-mi/.

Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). *Islamic vs. Conventional Banking: Business Model, Efficiency and Stability.* Journal of Banking and Finance, 37(2), 433–447. https://doi.org/10.1016/j.jbankfin.2012.09.016

Borsa Istanbul (n. d.). *Lease Certificates*. Retrieved March 21, 2020 from https://www.borsaistanbul.com/en/products-and-markets/products/lease-certificates

Çekin, S. (2019). *Türkiye'de Finans Sisteminin Yapısı ve Dönüşüm Gereksinimi*. SETA Analiz, Temmuz 2019 (290). SETA Yayınları.

Cevik, S., & Charap, J. (2015). *The Behavior of Conventional and Islamic Bank Deposit Returns in Malaysia and Turkey*. International Journal of Economics and Financial Issues, 5(1), 111–124. https://doi.org/10.5089/9781455293704.001

Chong, B. S., & Liu, M. H. (2009). *Islamic Banking: Interest-free or Interest-based?* Pacific Basin Finance Journal, 17(1), 125–144. https://doi.org/10.1016/j.pacfin.2007.12.003

Çizakça, M. (2011). *Islamic Capitalism and Finance: Origins, Evolution and the Future.* Journal of Islamic Business and Management, 2(2), 183–189. https://doi.org/10.12816/0004984

Eken, M. F. (n. d.). *Faizsiz Bankacilik Modelleri ve Türkiye Uygulamalari.* Akademi Iktisat. Retrieved April 4, 2020 from http://www.akademiktisat.net/calisma/banka_finans/faizsiz_bankacilik_mfeken.htm.

El-Gamal, M. A. (2006). *Islamic Finance: Law, Economics, and Practice*. Cambridge University Press.

El-Gamal, M. A. (2007). *Mutuality as an Antidote tTo Rent-Seeking Shariah Arbitrage in Islamic Finance.* Thunderbird International Business Review, 49(2), 187–202. https://doi.org/10.1002/tie.20139

Ersoy, M., Çatıkkaş, Ö., & Soytürk, A. (2017). *Katılım Bankalarında Blokeli Toplu Konut Finansmanları*. Marmara Üniversitesi Öneri Dergisi 48(12), 1–16. https://doi.org/10.14783/maruoneri.vi.331560

Godlewski, C. J., Turk-Ariss, R., & Weill, L. (2010). *Are Islamic Investment Certificates Special? Evidence on the Post-Announcement Performance of Sukuk Issues*. LaRGE Working Paper, 2010 (05). http://dx.doi.org/10.2139/ssrn.1594716

Godlewski, C. J., Turk-Ariss, R., & Weill, L. (2011). *Do Markets Perceive Sukuk and Conventional Bonds as Different Financing Instruments?* SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1833344

Godlewski, C. J., Turk-Ariss, R., & Weill, L. (2013). *Sukuk vs. Conventional Bonds: A Stock Market Perspective*. Journal of Comparative Economics, 41(3), 745–761. https://doi.org/10.1016/j.jce.2013.02.006

Gümrük ve Ticaret Bakanlığı Konut Finansmani Sözleşmeleri Yönetmeliği. (May 28, 2015). Resmi Gazete (Sayı: 29369). https://www.resmigazete.gov.tr/eskiler/2015/05/20150528-2.htm

Hassan, M. K., & Aliyu, S. (2018). *A Contemporary Survey of Islamic Banking Literature*. Journal of Financial Stability, *34*(2018), 12–43. https://doi.org/10.1016/j.jfs.2017.11.006

Hazıroğlu, T. (2018, November 30). *Katılım Bankaları ve Yatırım Vekaleti Hesapları*. İslam İktisadı. Retrieved March 7, 2020 from http://islamiktisadi.net/index.php/2018/11/30/katilim-bankalari-ve-yatirim-vekaleti-hesaplari/.

Henry, C. M., Wilson, R., & Yousef, T. M. (2004). *The Murabahah Syndrome in Islamic Finance: Laws, Institutions and Politics.* In The Politics of Islamic Finance. Edinburgh University Press.

Islamic Financial Services Board. (2020). (rep.). *ISLAMIC FINANCIAL SERVICES INDUSTRY STABILITY REPORT 2020*. Kuala Lumpur, Malaysia.

Kaleem, A., & Isa, M. M. (2003). *Causal Relationship between Islamic and Conventional Banking Instruments in Malaysia*. International Journal of Islamic Financial Services, 4(4), 1–8.

Kapici, N. (2018). *Katılım Bankalarının Murabahah İşlemlerinde Malın Kabzı Meselesinin İslam Hukuku Açısından Değerlendirilmesi.* Uluslararası İslam Ekonomisi ve Finansı Araştırmaları Dergisi, 4 *(2), 43-61. Doi: 10.32957/ijisef.452591*

Kazancı, K. (2018). *Türkiye'de Faizsiz Bankacılık Prensiplerine Uygun Teverruk Pazarı: Ürün İhtisas Borsası*. İslam Ekonomisi ve Finansı Dergisi, 4(1), 17-47.

Khan, F. (2010). *How "Islamic" is Islamic Banking?* Journal of Economic Behavior and Organization, 76(3), 805–820. https://doi.org/10.1016/j.jebo.2010.09.015

Kuran, T. (1996). *The Discontents of Islamic Economic Morality*. The American Economic Review, 86 (2), 438-442.

Lassoued, M. (2018). *Comparative Study on Credit Risk in Islamic Banking Institutions: The Case of Malaysia*. Quarterly Review of Economics and Finance, *70*, 267–278. https://doi.org/10.1016/j.qref.2018.05.009

Mevduat ve Katilim Fonunun Kabulüne, Çekilmesine ve Zamanaşımına Uğra-yan Mevduat, Katilim Fonu, Emanet ve Alacaklara İlişkin Usul ve Esaslar Hakkında Yönetmelikte Değişiklik Yapılmasına Dair Yönetmelik. (October 18, 2018). Resmi Gazete (Sayı: 30569) https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=10735&Mevzuahttps://www.mevzuat.gov.tr/mevzuat?MevzuatNo=10735&MevzuatTur=7&MevzuatTertip=5tTur=7&MevzuatTertip=5

Mücahitoğlu, N. (2015). *Türkiye'de Katilim Bankalarinin Finansal Kiralamadaki Yeri, Diğer Finansal Kiralama Şirketleriyle Karşilaştirilmasi ve Sektörde Sukuk Uygulamasi Beklentileri.* Marmara Üniversitesi. (unpublished dissertation). http://katalog.marmara.edu.tr/veriler/yordambt/cokluortam/6E923202-F100-8943-BCCB-371EC9AD212E/FD168930-FC0F-364B-ACF8-EC52C35B1637.pdf

Orhan, Z. H. (2018). *Mit Ghamr Savings Bank: A Role Model or an Irreplicable Utopia?* The Journal of Humanity and Society, 2018, 85-102. doi: 10.12658/M0263

Özdemir, M. &Aslan, H. (2018). (rep.). *The Political Economy of the Transformation of Islamic Finance in Turkey*. SETA Yayınları. Istanbul, Turkey.

Pilbeam K. (2005). *Financial Intermediation and Financial Markets. In: Finance and Financial Markets*. Palgrave, London. https://doi.org/10.1007/978-1-349-26273-1_2

Raei, F., & Cakir, S. (2007). *Sukuk vs. Eurobonds: Is there a Difference in Value-At-Risk?* IMF Working Papers, *07*(237), 1-20. https://doi.org/10.5089/9781451868012.001

Saidu, S. K., Junaidu, A. S., & Jibril, R. S. (2018). *Financial Instruments: Islamic Versus Conventional.* Accounting from a Cross-Cultural Perspective, 110–122. https://doi.org/10.5772/intechopen.76775

Sermaye Piyasası Kurulundan: Kira Sertifikaları Tebliği (June 7, 2013). Resmi Gazete (Sayı: 28670). https://www.resmigazete.gov.tr/eskiler/2013/06/20130607-14.htm

Taner, S. (2011). *An Analysis of 'Murābaḥa To Purchase Orderer' with Particular Reference to Turkey and its Adaptation to AAOIFI Standards.* University of Manchester (unpublished dissertation).

Terzi, A. (2013). *Katılım Bankacılığı: Kitaba Uymak mı, Kitabına Uydurmak mı?* Karadeniz Sosyal Bilimler Dergisi, 5 (9). https://dergipark.org.tr/tr/pub/ksbd/issue/16222/169887

TKBB Danışman Kurulu Kararı No:2 Yatirim Vekaleti. (2018). https://tkbbdanismakurulu.org.tr/karar-no-2-yatirim-vekaleti/

Türkiye Cumhuriyet Merkez Bankasından Mevduat ve Kredi Faiz Oranları ve Katılma Hesapları Kâr ve Zarara Katılma Oranları Hakkında Tebliğ Sayı: 2020/3. (February 10, 2020). Resmi Gazete (Sayı: 31035). https://www.resmigazete.gov.tr/eskiler/2020/02/20200210-9.htm

Türkiye Finans (2018). *Konut Kredisi_Ek Sözleşme*. Retrieved March 7, 2020 from https://www.turkiyefinans.com.tr/tr-tr/bireysel/sozlesmeler-ve-formlar/SozlesmelerVeFormlarYururlukte/01-02501089_R01_Konut%20Kredisi_Ek%20S%C3%B6zle%C5%9Fme.pdf

Türkiye Katılım Bankaları Birliği. (2018). (rep.). *KATILIM BANKALARI 2018*. Istanbul, Turkey.

Türkiye Katılım Bankaları Birliği. (2021). (rep.). *Participation Banking Strategy Update Report 2021-2025*. Istanbul, Turkey.

Ülev, S. & Selçuk, M. (2018). *Tarımsal Üretimin Finansmanı için Seleme dayalı Finansman Modeli: Fındık Örneği*. Katılım Finansmanında Yeni Yaklaşımlar, TKBB Yayınları, 9-34.

Yardımcıoğlu, M., Ayrıçay, Y., Sabuncu, I., Gerekli I. (2014). *Türkiye'de Sukuk: Kira Sertifikaları*. Kahramanmaraş Sütçü İmam Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 4(2), 199-222.

APPENDIX

Appendix A: NORMALITY TESTS

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skew-ness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
IBAVR1M	234	0.0000	0.0020	48.79	0.0000
CBAVR1M	234	0.0000	0.0000	.	0.0000

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
IBAVR1M	234	0.77381	38.706	8.478	0.00000
CBAVR1M	234	0.69842	51.607	9.145	0.00000

Shapiro-Francia W' test for normal data

Variable	Obs	W’	V’	z	Prob>z
IBAVR1M	234	0.77595	41.727	7.794	0.00001
CBAVR1M	234	0.69721	56.392	8.423	0.00001

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