

**T. C.**  
**İSTANBUL 29 MAYIS ÜNİVERSİTESİ**  
**SOSYAL BİLİMLER ENSTİTÜSÜ**  
**EKONOMİ ANABİLİM DALI**

**SUKUK INSTRUMENT IN ISLAMIC FINANCE**

**YÜKSEK LİSANS TEZİ**

**Mehmet Ali AYDIN**

**Danışman:**  
**Prof. Dr. Yaşar AKGÜN**

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**SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜNE**

Ekonomi Anabilim Dalı, 030216YL02 numaralı Mehmet Ali AYDIN'ın hazırladığı “*Sukuk Instrument in Islamic Finance*” konulu yüksek lisans tezi ile ilgili tez savunma sınavı, 19/09/ 2018 günü 12:30 – 14:30 saatleri arasında yapılmış, sorulan sorulara alınan cevaplar sonunda adayın tezinin başarılı olduğuna oy birliği ile karar verilmiştir.

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## **BEYAN**

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Mehmet Ali AYDIN

19/09/2018

## ÖZ

İslam'da hayatın her alanında olduğu gibi finans alanında da ahlaki prensipler mevcuttur. Dolayısıyla İslami Finans'ın bir parçası olarak *Sukuk* Enstrümanı bu prensipler doğrultusunda değerlendirilmeye çalışıldı ve *sukuk*'un alternatif bir finansman enstrümanı olma ve topluma fayda sağlama potansiyeli analiz edildi. Bu bağlamda ilk olarak, İslami Finans'a genel bir çerçeve çizmek için İslam Ekonomisi'nin prensiplerine değinildi. Ardından, İslam Hukuku'nun amaçlarına göre ideal *sukuk* enstrümanlarından bahsedildi. Ek olarak, vakıf-*sukuk* ve sosyal sorumluluk yatırımları *sukuk* gibi sosyo-ekonomik kalkınmayı finanse eden araçlar açıklandı. Ardından mevcut *sukuk* enstrümanı İslam Hukuku ve uluslararası finansal standartlara göre eleştirildi. Tezin son kısmında, araştırmanın neticesi olarak *sukuk* enstrümanını geliştirmek ve alternatif bir finansman enstrümanı yapabilmek için gerekli politika önerileri sunuldu.

**Anahtar Kelimeler:** *Sukuk*, İslam Ekonomisi, İslami Finans, Alternatif Ekonomik Düzen, Alternatif Finansman, Sosyo-Ekonomik Kalkınma, Vakıf-*Sukuk*, Sosyal Sorumluluk Yatırımları *Sukuk*

## ABSTRACT

In Islam there are ethical principles in every aspect of life including finance. Therefore, *Sukuk* Instrument as part of Islamic finance is explored from the perspective of these principles, and potential of *sukuk* as an alternative financing instrument and its benefits to society are analyzed. In doing so, firstly the principles of Islamic Economics are mentioned to draw the general framework of Islamic Finance. Then, ideal *sukuk* instruments are elaborated according to objectives of Islamic law. Moreover, *sukuk* types that are designed to finance socio-economic development like socially responsible investments *sukuk* and *waqf-sukuk* are explained. Then current *sukuk* instrument is criticized according to Islamic law and International Financial Standards. In the last part of thesis, policy recommendations as an outcome of this research are presented to develop *sukuk* further as an alternative financing instrument.

**Key Words:** *Sukuk*, Islamic Economics, Islamic Finance, Alternative Economic Order, Alternative Financing, Socio-Economic Development, *Waqf-sukuk*, Socially Responsible Investments *Sukuk*

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## **LIST OF ABBREVIATIONS**

AAOIFI: Accounting and Auditing Organization for Islamic Financial Institutions

ESG: Environmental, Social and Governance

EURIBOR: Euro Interbank Offered Rate

GCC: Gulf Cooperation Council

GDP: Gross Domestic Product

GIC: Government Investment Certificates

GSWP: Green *Sukuk* and Working Party

IASB: International Accounting Standard Boards

IBF: Islamic Banking and Finance

IBFIs: Islamic Banking and Financial Institutions

IFRS: International Financial Reporting Standards

LIBOR: London Interbank Offered Rates

IMF: International Monetary Fund

IMFIs: Islamic Microfinance Institutions

IDB: Islamic Development Bank

INCEIF: International Centre for Education in Islamic Finance

IIFM: International Islamic Financial Market

KSA: Kingdom of Saudi Arabia

MENA: Middle East and North Africa Region

MF: Microfinance

MFIs: Microfinance Institutions

MSMEs: Micro Small and Medium Enterprises

MYR: Malaysian Ringgit

OBOR: One Belt One Road Initiative

OECD: Organization for Economic Co-operation and Development

PLS: Profit-Loss Sharing

R&D: Research and Development

SIC: Social Impact Bond

SMEs: Small and Medium Enterprises

SPV: Special Purpose Company

SRI: Socially Responsible Investments

UAE: United Arab Emirates

UK: United Kingdom

US: United States

USA: United States of America

USAID: United States Agency for International Development

USD: United States Dollar



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# 1. INTRODUCTION

In the 1970s, Islamic economics was born in its contemporary version. Islamic Economics was founded based on Qur'an and hadiths, which are the main sources of Islam. According to Al-Makarim Islamic economics is "the science that deals with wealth and its relation to the man from the point of view of the realization of all forms of economic activities".<sup>1</sup> Like in every side of life Islam has principles in economic life. There are some advises and prohibitions in economic life. The most basic rules in Islamic Economics are prohibition of interest high risk (*gharar*), gambling (*maisir*), encouraging profit and loss sharing (PLS), ethical investments (banning pig, intoxicant substances like drug and alcohol etc.) and all transactions must be directly related with real sector. In other words, money can only be generated by real economic activity.<sup>2</sup>

Islamic Finance and Islamic financial institutions were founded in order to put the principles of Islamic Economics into practice. In the beginning these institutions were belittled. However, as time progresses these institutions have become very popular in the world. Even non-Muslim countries have great interest in Islamic Finance. Islamic Finance reached above US\$ 2 trillion at the end of 2015 and it is expected to reach US\$ 3,8 trillion by 2022 in 131 countries all over the world.<sup>3</sup>

Financial institutions have two main goals. On the one hand, they aggregate funds from investors on the other hand, they meet the financing needs of people. There are two main financing methods. First method is credit system. Other method is borrowing

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<sup>1</sup> Mehmet Asutay, "Islamic Moral Economy as the Foundation of Islamic Finance." *Islamic Finance in Europe: Towards a Plural Financial System*. Ed. Valentino Cattelan (Cheltenham: Edward Elgar Publishing, 2013), pg. 58.

<sup>2</sup> Salmanulfarisi Abdulrahaman, "Alternative Economies and Allocation of Investment in Global Markets: the Islamic Economic Perspectives." *Kuwait Chapter of Arabian Journal of Business and Management Review* 2, no. 4 (2012): pg. 63-65; Md Shafi Alam, "Islamic Finance: an Alternative to the Conventional Financial System?." *Korea Review of International Studies* (2009): pg. 41.

<sup>3</sup> Mehmet Asutay, "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* Vol. 11 No. 2 (2012): pg. 99; Khaled Al Aboodl and Mustafa Adll "Islamic Finance Development Report Towards Sustainability" (Jeddah, ICD Thomson Reuters, 2017), pg.4.



instruments like conventional bonds. *Sukuk* instrument was invented to meet the need of borrowing in line with principles of Islamic Finance as an alternative to conventional bonds.

Over time, *sukuk instrument* has been one of the key drivers of the growth of Islamic Finance and has become the most popular instrument in Islamic Finance according to International Monetary Fund (IMF). Different sources have different statistics about the amount of *sukuk* issuances. According to Thomson Reuters Islamic Finance Report in 2017, total *sukuk* outstanding reached above US\$ 320 billion at the end of 2015 and reached US\$ 349,1 billion in December 2016.<sup>4</sup>

*Sukuk* comes from the word “*sakk*”. In Arabic language, ‘*sakk*’ literarily means a note or financial certificates of equal value and it is seen as equivalent to conventional bonds in Islamic Finance. Although it is similar to conventional bonds they have lots of differences structurally.<sup>5</sup> These differences will be explained in the sixth section of the thesis.

The main characteristic of *sukuk* is Islamic securitization. Asset securitization means issuing certificates, which rely on underlying assets. It is an important financing method. This system provides funding for projects by using the assets, which are in conformity with the spirit of Islamic Law and creates dispersion of risk.<sup>6</sup>

According to historical records, *sukuk* as a financing instrument was seen in Ottoman State for public financing. Ottoman State had great financing requirements due to the devastating loss against Russia in 1774. This borrowing instrument was named as

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<sup>4</sup> Andreas Jobst, Peter Kunzel, Paul Mills, and Amadou Sy, “Islamic Bond Issuance: What Sovereign Debt Managers Need to Know.” *International Journal of Islamic and Middle Eastern Finance and Management* Vol. 1, no. 4 (2008): pg. 335; Reuters and Dinar Standards, “Global Islamic Economy report 2016/17.”), pg. 54.

<sup>5</sup> Inam Ullah Khan, “Islamic Bonds (Sukuk) in Malaysia.” *Islam and Civilisational Renewal (ICR)* Vol. 6, no. 4 (2015): pg. 489; Tan Wan Yean, “Sukuk: Issues and the Way Forward.” *International Legal News* Vol. 6, no. 2 (2009): pg. 2; Zhamal K Nanaeva, “How Risky Sukuk Are: Comparative Analysis of Risks Associated with Sukuk and Conventional Bonds (Master’s thesis, The British University in Dubai, 2010), pg.10

<sup>6</sup> Andreas Jobst, “The Economics of Islamic Finance and Securitization,” *Journal of Structured Finance*, Vol. 13, No. 1 Spring, (2007): pg. 13.

*esham*. *Sukuk* was invented by INCEIF scholars by inspiring from borrowing instrument of Ottoman State.<sup>7</sup>

A Malaysian company, called Shell MDS Sdn. Bhd, issued the first *sukuk* in 1990. This company is a foreign owned, multi-national and non-Islamic corporation and the issue was denominated in Malaysian Ringgit at the amount of RM125 million. The type of first *sukuk* issuance was *Ijarah Sukuk*. Then, the first public *sukuk* was issued in 1998.<sup>8</sup>

After that, *sukuk* gained popularity in the world and emerged rapidly. The key driver markets of the world are Saudi Arabia, United Arab Emirates and Malaysia. But, non-Muslim countries like Hong Kong, United Kingdom, South Africa and Luxembourg also have great interest in issuing *sukuk*. The rapid growth of global *sukuk* market can be seen easily in the Figure 1. Before 2007-2008 Global Financial Crisis it reached to \$50 billion with more than threefold rise then, it reached to its maximum value of \$137,6 billion in 2012 with almost ten times rise in 7 years. With the drop of oil prices, *sukuk* issuances decreased sharply after 2014. Until Dec 2016 total global *sukuk* issuances reached to \$856,7 billion.<sup>9</sup> If global total *sukuk* issuances are

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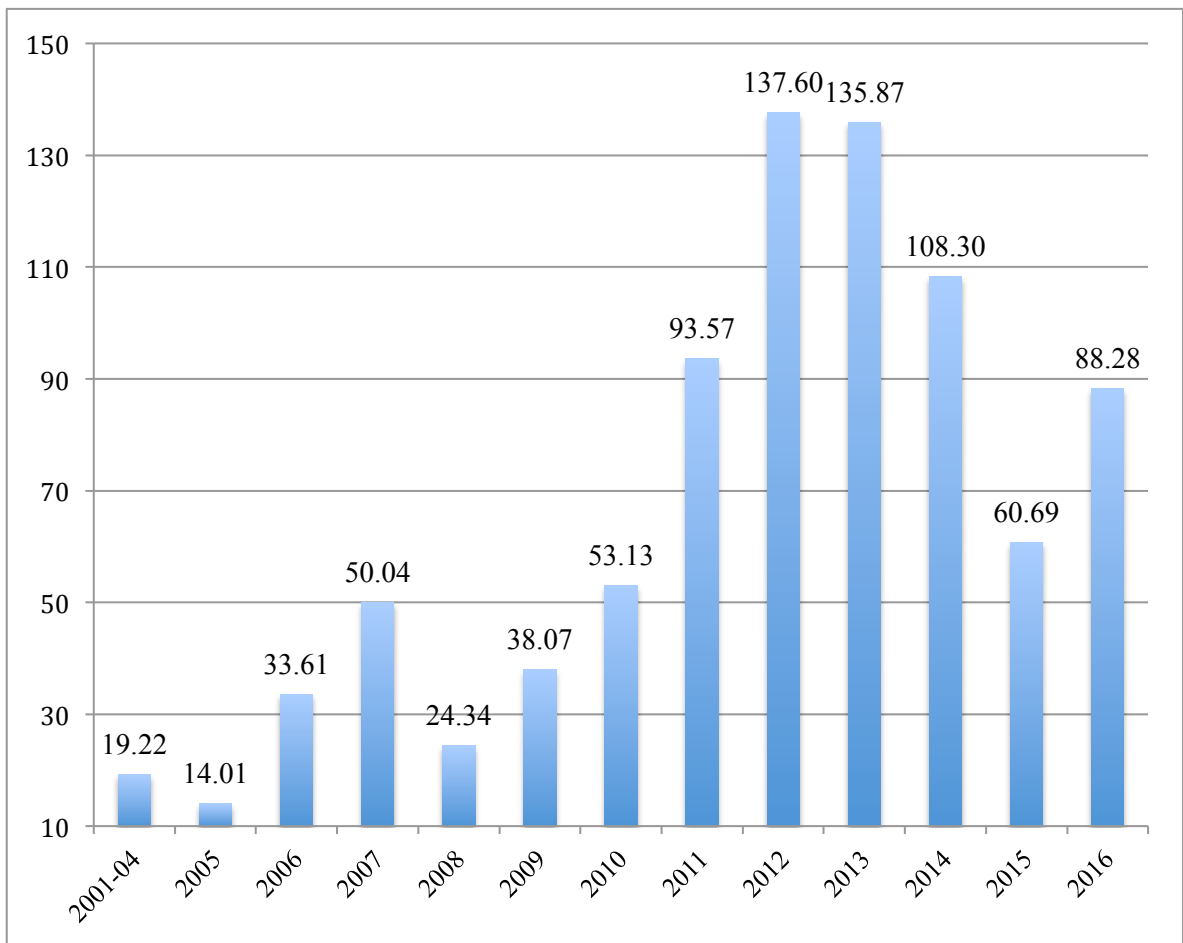
<sup>7</sup> Murat Cizakca, "Can There be Innovation in Islamic Finance? Case Study: Esham." *11th IFSB Summit, Knowledge Sharing Partner Session: "New Markets and Frontiers for Islamic Finance: Innovation and the Regulatory Perimeter"*, convened on May 20th (2014): pg. 2; Meysam Safari, Mohamed Ariff, and Shamsher Mohamad. "Introduction to Sukuk Markets" *Sukuk Securities: New Ways of Debt Contracting*. (Singapore: John Wiley and Sons, 2014), pg. 6.

<sup>8</sup> Usama DeLorenzo, "Building up an Islamic Capital Market: The Malaysian Example" *Islamic capital markets: products and strategies*. Ed. Kabir Hassan and Michael Mahlkecht (Wiltshire: John Wiley and Sons, 2011), pg. 227; Sabri Nayan, Norsiah Kadir, and Mat Saad Abdullah, "Financial Development and Economic Growth: A Panel Test of Supply-leading Hypothesis from the Perspective of Sukuk Market." *Proceedings of International Conference on Contemporary Economic Issues* Ed. Hooi Hooi Lean, Ee Shiang Lim, Suet Leng Khoo and Saidatulakmal Mohd (2014): pg. 18; Muhammad Al Bashir and Muhammad Al Amine, "Sukuk Market: Innovations and Challenges" *Islamic capital markets: Products, regulation and development*, Ed. Salman Syed Ali (Jeddah: Islamic Research and Training Institute, 2008), pg. 36; Safari, Ariff, and Mohamad. "Introduction to Sukuk Markets", pg. 4.

<sup>9</sup> Syed Aun R. Rizvi, Obiyathulla I. Bacha, and Abbas Mirakhor, "Capital Markets: Conventional Versus Islamic." In *Public Finance and Islamic Capital Markets*, Ed. Zamir Iqbal, Jahangir Sultan and Mehmet Asutay (New York: Palgrave Macmillan, 2016), pg. 51; Sulistya Rusgianto and Nursilah Ahmad, "Volatility behavior of sukuk market: An empirical analysis of the Dow Jones Citigroup Sukuk Index." *Middle East Journal of Scientific Research* Vol. 13, no. 1 (2013): pg. 95; Bilgehan Yildiz, "Basic Terminology in Islamic Finance and Turkish Perspective." *Islamic Finance Alternatives for Emerging Economies: Empirical Evidence from Turkey*, Ed. Murat Ustaoglu and Ahmet Incekara (New York: Palgrave Macmillan, 2014), pg. 59; Mr. Ijlal Ahmed Alvi and others "International Islamic Financial Market(IIFM) Sukuk Report" *A comprehensive Study of the Global Sukuk Market 6<sup>th</sup> edition* (Bahrain: IIFM, 2017), pg. 2.

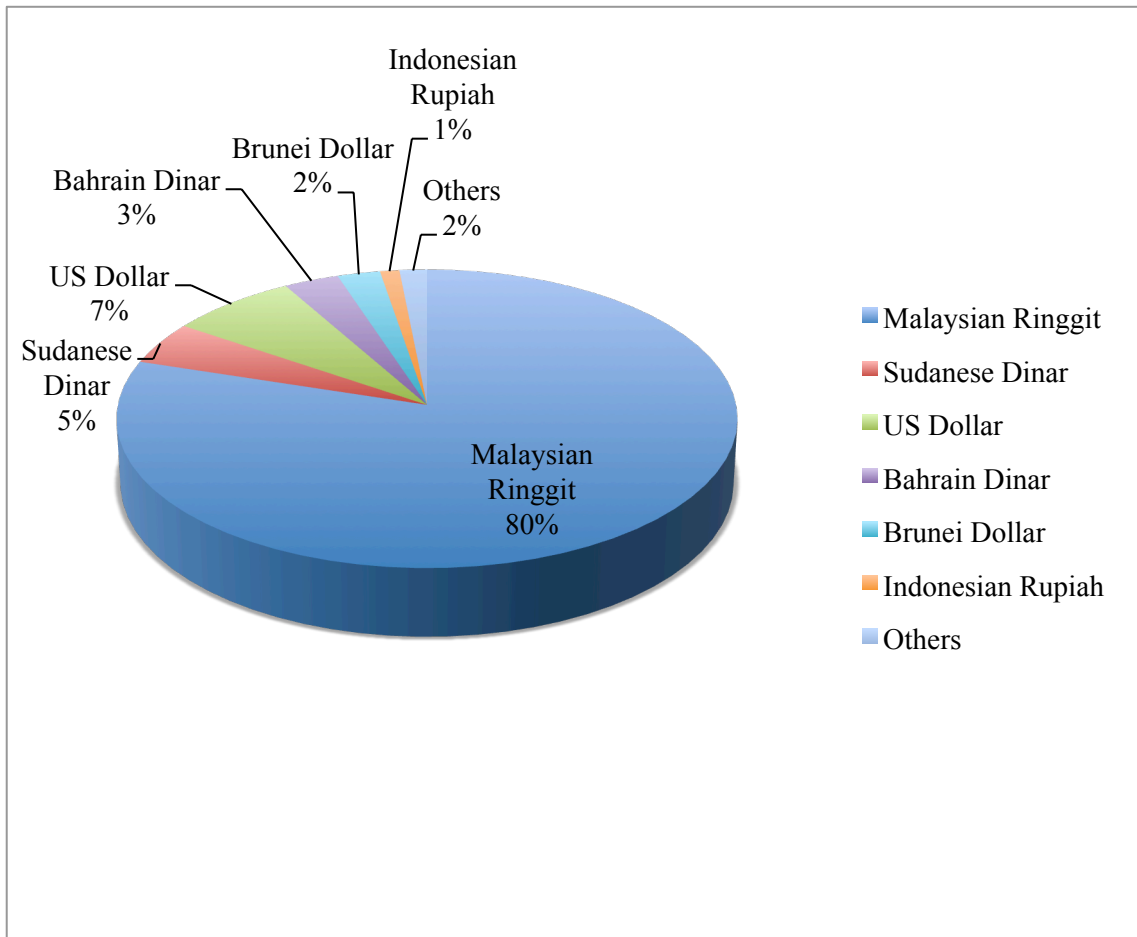
examined, dominance of Malaysia on the market is clear. Figure 2 shows that between January 2001 and December 2016, %87 of global short term *sukuk* was issued by Malaysia and Figure 3 demonstrates that %80 of issued global short term *sukuk* was denominated in MYR (Malaysian Ringgit).

**Figure 1**  
**Total Global *Sukuk* Issuances between Jan 2001-Dec 2016 – All Tenors, All Currencies In USD Millions**



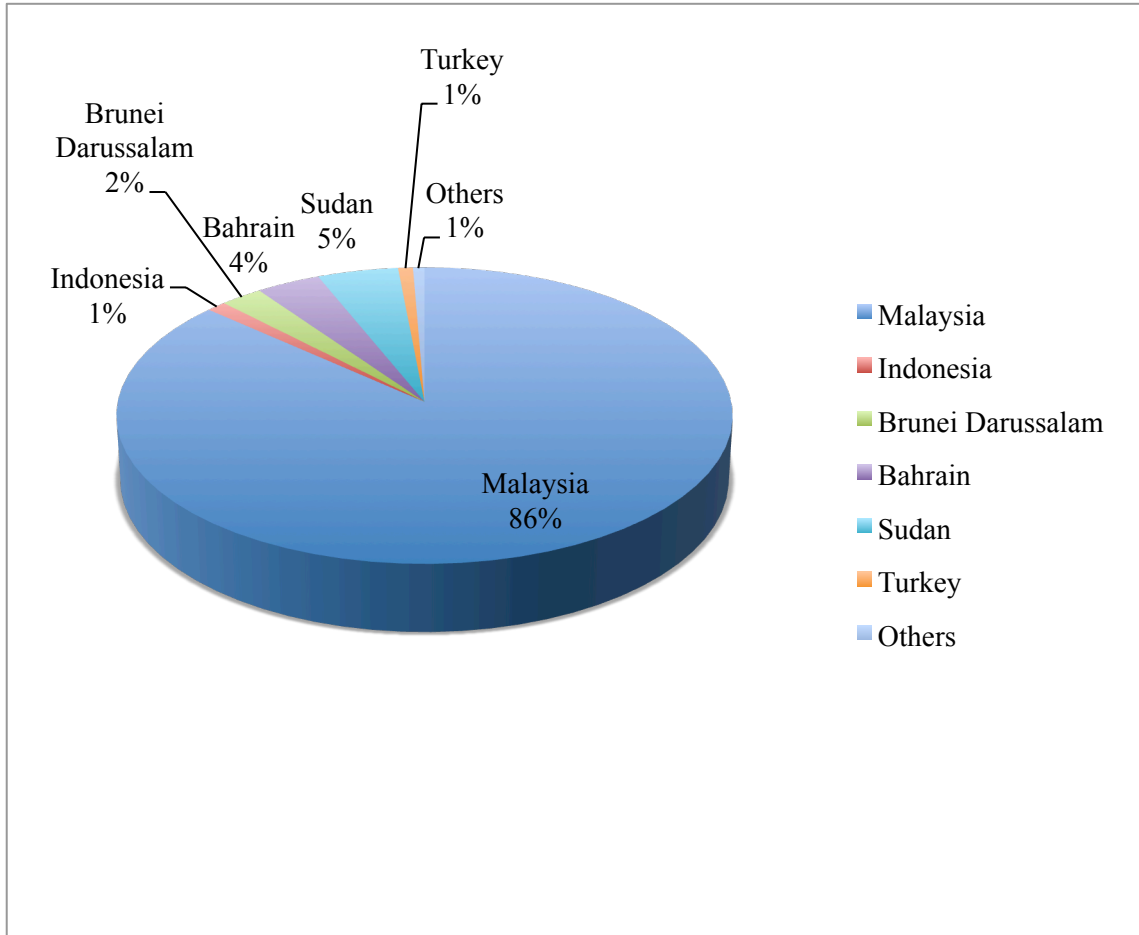
**Source:** International Islamic Financial Market (IIFM) *Sukuk* Report, 2017, pg.

**Figure 2**  
**Total Global Short Term *Sukuk* Issuances (All Currencies) ≤ 12 Months**  
**Jan 2001 – Dec 2016**



**Source:** International Islamic Financial Market(IIFM) *Sukuk* Report, 2017, pg. 8

**Figure 3**  
**Total Global Short Term *Sukuk* Issuances ≤ 12 Months Jan 2001-Dec 2016**  
**Amount in USD Millions**



**Source:** International Islamic Financial Market(IIFM) *Sukuk* Report, 2017, pg. 10

In this thesis *sukuk* instrument in Islamic Finance will be evaluated from the perspective of the objectives of the Islamic Law (*Maqasid al-Shariah*). In the next section the main principles of Islamic Economics, as an alternative economic system, will be mentioned and Islamic Finance, as practical a face of it, will be evaluated. In the third section primary *sukuk* types will be described. In the fourth section *sukuk* instrument will be presented as an alternative-financing instrument and more specifically, secondary *sukuk* types will be mentioned. In the fifth section, social aspects of *sukuk* and role of *sukuk* in socio-economic development will be explained. In the sixth section, it will be investigated whether *sukuk* is compliant with the Islamic Law

and international financial standards. Finally, in the conclusion section, *sukuk* will be evaluated briefly then, existing and required applications will be mentioned.

In this thesis, I aimed to show that Islamic finance and its instruments like *sukuk* has a potential to be an alternative financing instrument and can serve for benefit of the society. I tried to show the deficiencies of *sukuk* according to the objectives of Islamic Law and how *sukuk* must be designed to be an alternative financing instrument and to benefit financially excluded people. First question is, therefore, what are the main principles of Islamic Economics and what are the main objectives of Islamic Law? Second question is that are there some samples of *sukuk*, which are in compliant with *Maqasid al Shariah*? Thirdly, can *sukuk* be used for the socio-economic development of people, especially for the poorest segment? Fourthly, is current *sukuk* instrument in compliant with Islamic Law and international financial standards?

Current Islamic financial sector cannot serve for the lower segment of people. Although they have potential, they cannot create benefit different than interest-based financial institutions. I tried to show that these institutions can succeed to serve people by completely integrating with the objectives of Islamic Law and I benefitted from the articles that show the ideal samples of *sukuk* instrument. Originality of my thesis comes from the perspective. It is observed that no study evaluated *sukuk* instrument by both criticizing *sukuk* instrument and presenting ideal *sukuk* instruments. I tried to draw attention to these issues and tried to show that a better financial system can be established in line with the objectives of Islamic Law.

## 2. ISLAMIC ECONOMICS AS AN ALTERNATIVE SYSTEM AND ISLAMIC FINANCE

The economic and financial data show us that there is a great need for alternative economic and financial system and many countries in the world are seeking for a new alternative system. Islamic Economics was born with the assertion of creating an alternative economic order, which aims to ensure human-centric order by providing an alternative avenue for socio-economic evolution in conformity with the moral and welfare principles, instead of the present *riba* based, profit-centered, capitalist order; because this order causes environmental devastation and cannot ensure the sustainability of economic development. Islamic Economics has been generated by benefiting from the primary sources of Islam which are *Qur'an*, Holy Book of Islam, and the sayings (*hadith*) and the traditions (*sunnah*) of the Prophet Muhammad (pbuh) and the concurrence among Islamic scholars. Islamic Economics can be defined as the system which aims to ensure justice in acquiring, distributing and managing economic resources in compliance with the Objectives of Islamic Law and aims to create an environment where the people meet the liabilities to their creator and to all community in order to gain prosperity (*falah*) and ensuring satisfaction of all communities by organizing the connection between the wealth and the human being. This system aims to create a society which adopts the moral principles like altruism, social equity, brotherhood, charity and co-operation and tries to realized social justice, growth with purification, harmony with natural and social environment and allocation of resources according to social priorities alongside financial ones; against the rationalist, self-seeking and efficiency-oriented capitalist economic order. Now although all aspirations of Islamic Economics have not been realized, this system has been assessed as alternative economic system that can provide permanent solutions to the economic problems in the world.<sup>10</sup>

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<sup>10</sup> Alam, "Alternative to the Conventional", pg. 38; Abdulrahaman, "Alternative Economies", pg. 60; Asutay, "Islamic economics", pg. 1; Asutay, "Social failure", pg. 93; Mehmet Asutay and Nazim Zaman, "Divergence between aspirations and realities of Islamic economics: A political economy approach to bridging the divide." *IIUM Journal of Economics and Management* Vol. 17, no. 1 (2009): pg. 74; Mehmet Asutay, "Islamic banking and finance and its role in the GCC and the EU relationship: Principles, developments and the bridge role of Islamic finance." *The EU and the GCC: Challenges and*

## 2.1 Partnership in Islam

In Islam partnership has a special place. Attempting to build a business and partnership is strongly advised to Muslims in *ayahs* of the *Qur'an* and *hadiths* and *sunnah* of Prophet Muhammad (pbuh). In person, Prophet Muhammad (pbuh) as a trader attempted to build a business and made partnership with His wife Khadijah (May Allah bless her). According to Prof. Dr. Sabri Orman, one reason of the banning *riba* in Islam may be to encourage partnership. This condition cause to increase solidarity in society, partners live through the senses like happiness and sadness together, people get richer together and wealth are distributed more equally. If the *riba* was allowed, every businessman would get credit from banks and s/he would be alone in business life s/he face challenges alone, s/he gain profit alone or make loss alone.<sup>11</sup>

## 2.2 Main Financing Methods

There are two main ways of financing. Equity financing is one of the ways of structuring partnership. In this system, each partner gets profit in accordance with the amount of the investment. On the other hand, debt financing can be defined as that investor funds a business enterprise and expects to get a fixed return from this fund whether or not the enterprise is successful. *Mudarabah* and *Musharakah* are the most popular types of equity financing. Debt based financing methods are *Murabaha*, *Istisna*, *Salam* and *Ijarah* as quasi-debt based. Since, *Qur'an* promotes risk sharing and prohibits risk-shedding, risk-shifting and risk transfer and desire that people ensure productive economic environment, equity financing is encouraged and debt financing is not supported. However, unfortunately IBFIs have largely adopted the instruments of

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*Prospects under the Swedish EU Presidency*. Ed. Christian Koch and Leif Stenberg (Dubai: Gulf Research Center, 2010), pg. 35-36; Asutay, "Islamic moral economy as the foundation of Islamic finance", pg. 57; Mohd Ramadili, "Islamic Financial Culture: Alternative Economic System for Rapid and Sustainable Economic Growth in West African Countries." *Australian Journal of Basic and Applied Sciences* Vol. 5, no. 7 (2011): pg. 286; Ibrahim Warde, "The relevance of contemporary Islamic finance." *Berkeley J. Middle E. & Islamic*. Vol. 2 No. 6 (2009): pg. 166.

<sup>11</sup> Bruton, Garry D., David J. Ketchen Jr, and R. Duane Ireland. "Entrepreneurship as a solution to poverty." *Journal of Business Venturing* Vol. 28, no. 6 (2013): pg. 683; Sabri Orman, "Kur'an ve İktisat", *Kur'an ve Tefsir Araştırmaları* Vol. 2 (2001): pg. 254-257.



debt financing which are similar to *riba* based financial instruments of western financial system. The financial data from 1984 to 2006 show that 88.1% of all financing are composed of *Murabaha* for the Bank Islam Malaysia Berhad and this ratio was 67.3% in the Dubai Islamic Bank between 1988 and 2006. On the other hand, in the same period, using *Musharakah* and *Mudarabah* instruments for financing was averagely about 1.7% for the Bank Islam Malaysia Berhad and 9.3% in the Dubai Islamic Bank, which are two biggest Islamic Banks. According to this study, *mudarabah*, *qard al-hassan* and *musharakah* financing, which are the most suitable financing methods for IE, is unfortunately very limited. In these banks, the remaining part of the financing, as in others, composed of *murabaha* and similar debt-financing instruments. This situation indicates that IBFIs has diverged from its aspirational origins and has tendency towards more western banking and finance. Such an outcome shows the fact that IBF has preferred efficiency and profitability over equity and ethical propositions of Islamic Economics. According to banks, financial instruments using for equity financing are more risky, than *murabaha* or other debt-financing instruments.<sup>12</sup>

Since *sukuk* has securitization characteristic, it can provide and facilitate to create great partnerships by issuing certificates to large masses. Thus, corporations have

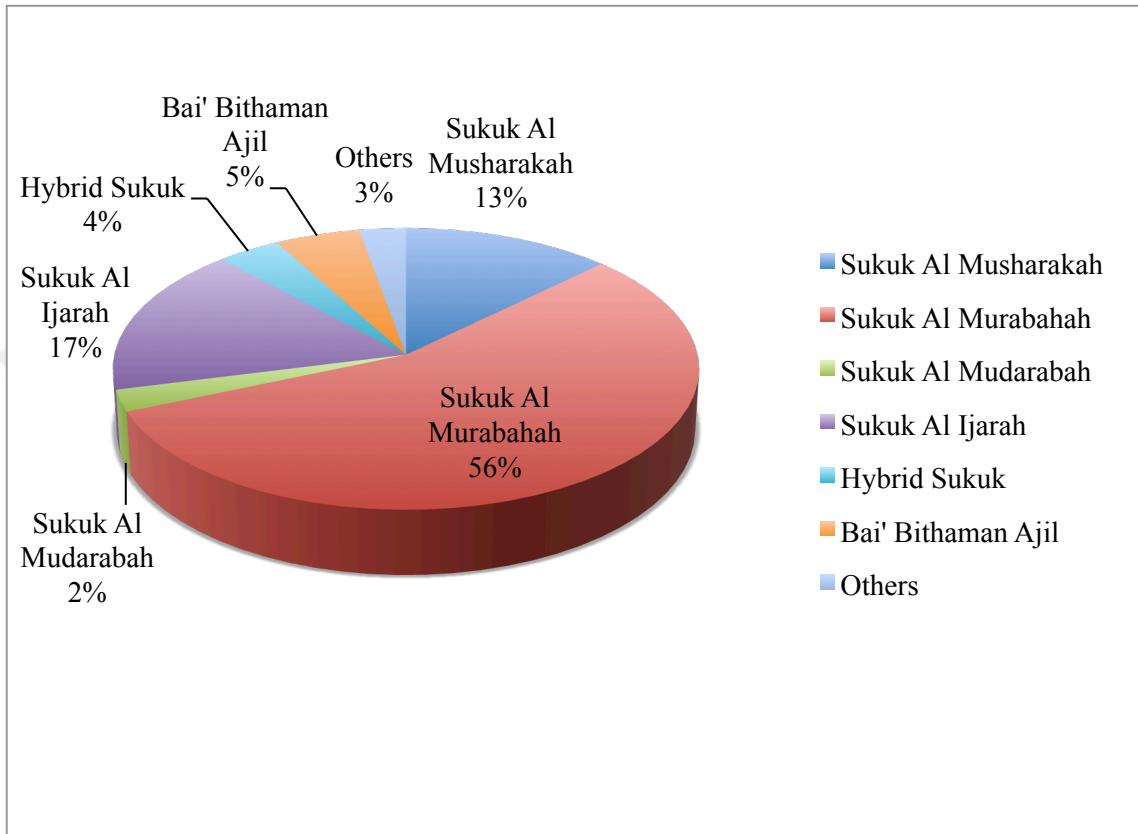
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<sup>12</sup> Muhammad Al-Bashir Al-Amine, “Product development and Maqāsid in Islamic finance: towards a balanced methodology.” *Islamic Economic Studies* Vol. 23, no. 1 (2015): pg. 54; Mehmet Asutay, “Conceptualisation of the second best solution in overcoming the social failure of Islamic finance: Examining the overpowering of homoislamicus by homoeconomicus.” *IJUM Journal of Economics and Management* Vol. 15, no. 2 (2007): pg. 174; Asutay, “Social failure”, pg. 102-103; Mehmet Asutay, “Islamic microfinance: fulfilling social and developmental expectations.” *Islamic Finance Institution and Market* (2010): pg. 26; Zamir Iqbal and Abbas Mirakhor, “Glossary” *An introduction to Islamic finance: theory and practice*. Ed. Zamir Iqbal and Abbas Mirakhor (Singapore: John Wiley and Sons, 2011), pg. xiii; Zamir Iqbal and Abbas Mirakhor, “Overview” *Economic development and Islamic finance*. Ed. Zamir Iqbal and Abbas Mirakhor (Washington DC: World Bank Publications, 2013): pg. 21; Hossein Askari, “Economic Development in Islam” *Economic development and Islamic finance*. Ed. Zamir Iqbal and Abbas Mirakhor (Washington DC: World Bank Publications, 2013): pg. 163; Hunt-Ahmed, Karen. “Introduction: Islamic Finance in the World Economy” *Contemporary Islamic finance: innovations, applications and best practices*. Ed. Karen Hunt-Ahmed (New Jersey: John Wiley and Sons, 2013): pg. 9; Mahmoud Mohieldin, Zamir Iqbal, Ahmed Rostom, and Xiaochen Fu, “The role of Islamic finance in enhancing financial inclusion in Organization of Islamic Cooperation (OIC) countries.” *Policy Research Working Paper* No. 5920, (2011): pg. 46; Múcahit Özdemir and Öznur Özdemir, “Bridging the Gap: The Restitution of Historical Cash *Waqf* Through Vakıf Participation Bank.” *International Journal of Islamic Economics and Finance Studies* Vol. 3, no. 2 (2017): pg. 91; Elena Platonova, “Corporate social responsibility from an Islamic moral economy perspective: A literature survey.” *Afro Eurasian Studies* Vol. 2, no. 1/2 (2013): pg. 291; Zetty Zahureen Mohd Yusoff, “The Effectiveness of Monetary Policy in a Dual System: the case of Malaysia.” (Phd Thesis, University of South Australia, 2017), pg. 76-77.

no more need for external financing and saving rates increase in countries. As a consequence, interest rates will fall down and debt burden of governments will be relieved.

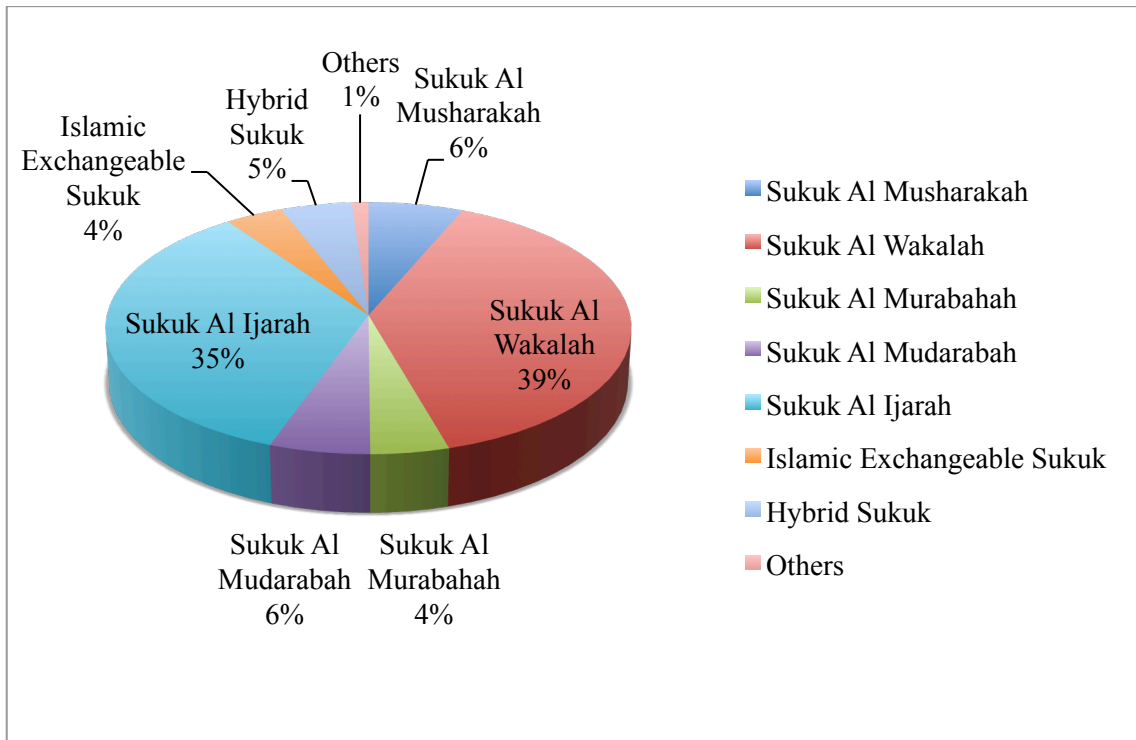
However, dominance of debt based and asset-based instruments like *Ijarah* and *Murabaha* instead of partnership based and asset-backed instruments like *Musharakah* and *Mudarabah* can also be seen in Global *Sukuk* Market. As it can be seen in the Figure 4 and Figure 5, both domestic and sovereign *sukuk* issuances have been mostly comprised of debt-based methods like *Ijarah*. While, in international *sukuk* issuances, main partnership methods like *Musharakah* and *Mudarabah* are comprised of %10 of all international *sukuk* issuances between Jan 2001 and Dec 2016. In domestic *sukuk* issuances, debt based methods are dominant with %78 of all domestic *sukuk* issuances between Jan 2001 and Dec 2016.

**Figure 4**  
**Domestic *Sukuk* issuances between Jan 2001 and Dec 2016**



**Source:** International Islamic Financial Market(IIFM) *Sukuk* Report, 2017, pg. 29

**Figure 5**  
**International *Sukuk* Issuances between Jan 2001 and Dec 2016**



**Source:** International Islamic Financial Market(IIFM) *Sukuk* Report, 2017, pg. 31

### 2.3 Bridging The Real Sector with The Financial Sector

In order to ensure closer coordination between the real and financial sector, better allocation of the advantages of economic growth and financial system stability, an efficient stock market is vital for disseminating risks among a great number of investors. Thanks to efficient and robust stock markets, unemployment decreases as entrepreneurs can meet their capital requirement in a project through public offering. Thus, they ensure faster turnaround of capital and economic growth is maintained sustainably. This system ensures the longer period and equity based funding instead of shorter period and debt based funding; so the productive real sector projects can be easily financed. Stock markets are required for decreasing debt financing and mobilizing foreign and domestic resources. Since “*sukuk* is tantamount to Islamic

securitization”<sup>13</sup> it can easily finance the real economic activities.<sup>14</sup> Lots of sector can be financed with securitization in stock markets thanks to *sukuk*. For instance, construction sector, automotive sector even entertainment sector. Construction sector is financed with the real estate certificates<sup>15</sup>, automotive sector is financed with the automobile bonds<sup>16</sup> and entertainment sector is financed with the tv series<sup>17</sup> bonds.



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<sup>13</sup> Heiko Hesse, Andreas A. Jobst, and Juan Sole, “Trends and challenges in Islamic finance.” *World Economics* Vol. 9, no. 2 (2008): pg. 183.

<sup>14</sup> Hossein Askari and Nouredine Krichene, “Islamic finance: an alternative financial system for stability, equity, and growth.” *PSL Quarterly Review*, Vol. 67 No. 268 (2014): pg. 10, 32-36; Syed Aun R. Rizvi, Obiyathulla I. Bacha, and Abbas Mirakhor. “Government Finance and the Equity Market.” *Public Finance and Islamic Capital Markets*, Ed. Zamir Iqbal, Jahangir Sultan and Mehmet Asutay (New York: Palgrave Macmillan, 2016), pg. 119; Tariqullah Khan, Elsayed Elsiefy, and Lee Eun Kyoung, “Legal and Regulatory Issues in Issuing Sukuk in Muslim-minority countries Lessons from Developed Countries’ Experience.” (2014): pg. 6.

<sup>15</sup> Borsa Istanbul. “Gayrimenkul Sertifikaları.” <http://www.borsaistanbul.com/urunler-ve-piyasalar/urunler/gayrimenkul-sertifikalari> (accessed in 23/04/2018)

<sup>16</sup> Haber7 Internet News. “Borsada popüler diziler ve otomobil dönemi.” <http://otomobil.haber7.com/turkiye-ekonomisi/haber/2310929-borsada-populer-diziler-ve-otomobil-donemi> (accessed in 23/04/2018)

<sup>17</sup> Haber7.com. “Borsada popüler diziler ve otomobil dönemi.” <http://otomobil.haber7.com/turkiye-ekonomisi/haber/2310929-borsada-populer-diziler-ve-otomobil-donemi> (accessed in 23/04/2018)

### 3. PRIMARY SUKUK TYPES

#### 3.1 In Terms of Issuer Institution

*Sukuk* is categorized into four groups in terms of issuer institutions. These categories are sovereign *sukuk*, quasi-sovereign *sukuk*, corporate *sukuk* and financial institutions *sukuk*. These types of *sukuk* is issued, respectively, by sovereign entities like Government of Malaysia, Central Bank of Turkey or issued by quasi-sovereign entities like Khasanah Nasional Bhd, Cagamas Bhd or issued by corporations like Etihad Airways, Emaar Properties or issued by financial institutions like Kuveyt Turk and Ahli United Bank.<sup>18</sup>

#### 3.2 In Terms of Contract Methods

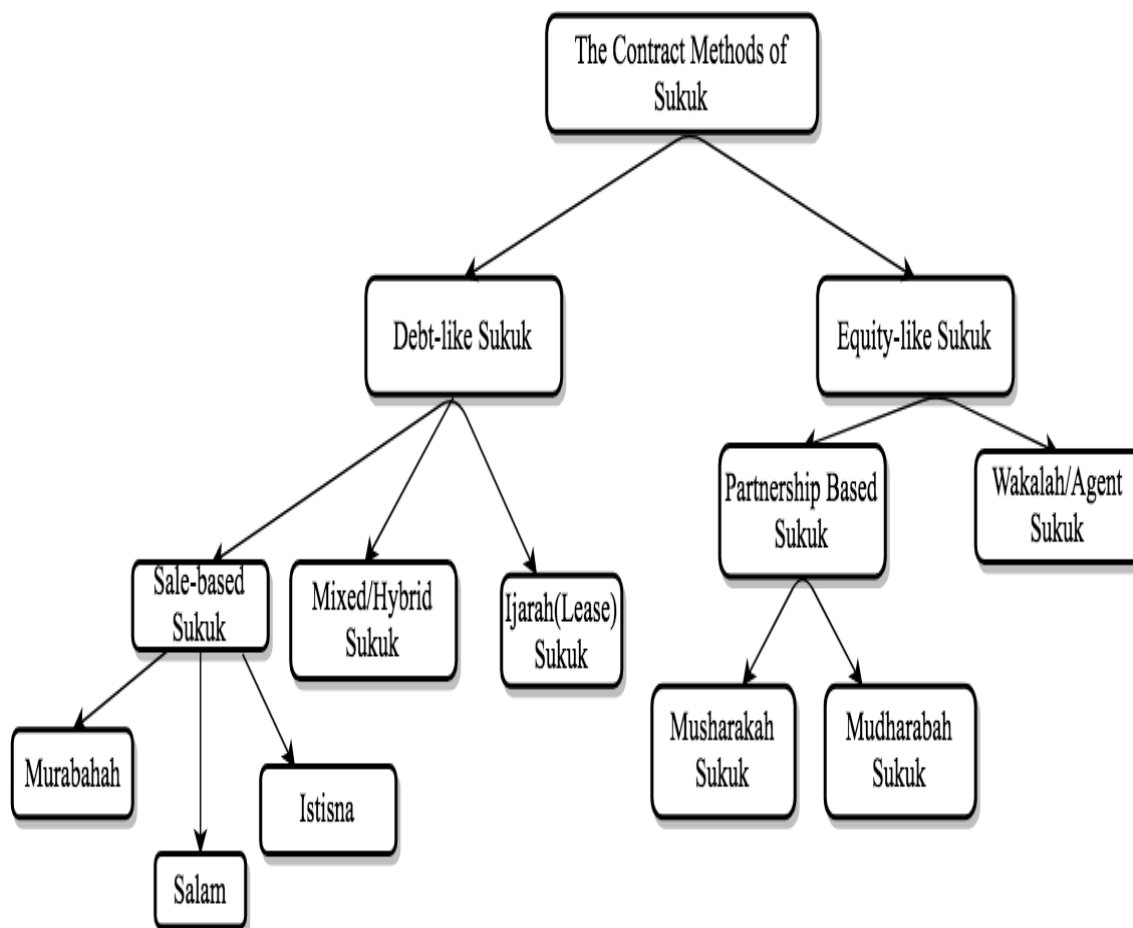
In general structure originator company is the party who needs financing. Originator makes a contract with SPV and sells its assets. SPV issues *sukuk* to mobilize funds by using transferred assets as underlying asset. Then, SPV generates income through the contract methods. Pre-determined percentage of gained profit is disseminated among *sukuk* investors, another part of profit is allocated between SPV and the originator. When the process is completed, principal amounts returned to investors and originator purchase back its assets. Mentioned contract methods are divided into two parts. These are debt-like contracts such as *murabaha*, *Istisna*, *salam* and hybrid methods lease based contract like *ijarah* and equity like contracts such as *musharakah* and *mudharabah* as main partnership methods and *Wakalah*<sup>19</sup> as facilitator in business. These classifications can be seen in the Figure 6.

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<sup>18</sup> Mohamed Ariff and Meysam Safari. “Are Sukuk securities the same as conventional bonds?.” *Afro Eurasian Studies*, Vol. 1, Issue 1 (2012): pg. 103; Alvi and others “IIFM Sukuk Report”, pg. 27.

<sup>19</sup> Jobst, “Islamic Finance and Securitization”, pg. 13; Hesse, Jobst, and Sole, “Trends and challenges”, pg. 183-184.

**Figure 6**  
**The Contract Methods of *Sukuk***



**Source:** Capital Market Imperfections and Corporate *Sukuk*, 2016, pg. 28

### 3.2.1 Debt-Like Methods

#### 3.2.1.1 *Ijarah Sukuk*

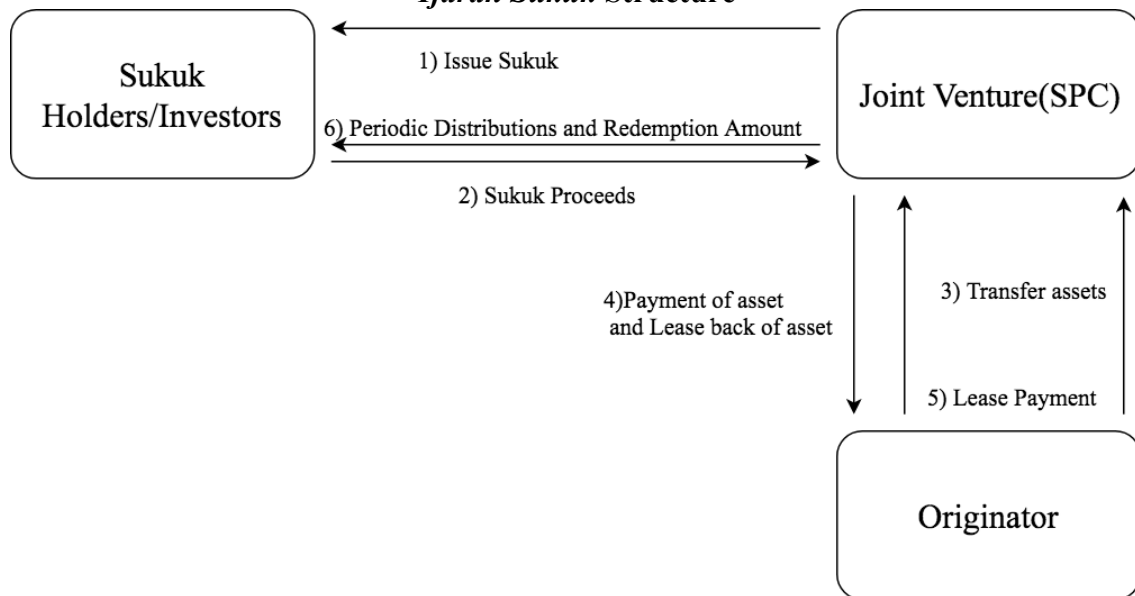
This *sukuk* type is the most popular. In the beginning, as based on leased real estate or usufruct of real estate, certificates are issued. To be *Sharia*-compliant, this financial agreement must be based on physical durable properties. Unlike lease financing under capitalist system, the maintenance commitment of the related asset belongs to the investors. Investors can freely buy and sell this security in the financial markets at all types of prices, which are determined by the market. Firstly, SPV issues certificates to create fund. Then, SPV purchases the real estate of the originator, temporarily, with the created fund. Then, the SPV rents the properties to the originator. Return, which is gained from leasing, is distributed to *sukuk* investors. Then, SPV sells this real estate to the originator at a predetermined price. Then, pays back the principal amounts to *sukuk* investors at the due date. *Sukuk*, which was issued by Sarawak Economic Development Company in 2004, was one of the examples of *Ijarah Sukuk*. *Sukuk* was issued with 5 years maturity. Size of this *sukuk* issuance was 350 million USD. Determined assets from 1<sup>st</sup> Silicon Sdn Bhd was purchased with the gained fund from investors. Then these assets were leased to originator company with pre-determined rent price. Then, gained profit from leasing is disbursed to investors. Finally principal amount was paid back to investors at maturity date.<sup>20</sup> This process is pictured in the Figure 7.

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<sup>20</sup> Rodney Wilson, "Innovation in the structuring of Islamic sukuk securities." *Humanomics* Vol. 24, no. 3 (2008): pg. 175; Ali Alshamrani. "Sukuk issuance and its regulatory framework in Saudi Arabia." *Journal of Islamic Banking and Finance* Vol. 2, no. 1 (2014): pg. 313; Faezeh Raei and Selim Cakir, "Sukuk vs. Eurobonds: Is there a difference in value-at-risk?" *IMF Working Paper* No. 7-237. International Monetary Fund, (2007): pg. 4; Khalid Alsaeed. "Sukuk issuance in Saudi Arabia: recent trends and positive expectations." (Phd Thesis, Durham University, 2012), pg. 49; S. R. Vishwanath and Sabahuddin Azmi. "An overview of Islamic sukuk bonds." *The Journal of Project Finance* Vol. 14, no. 4 (2009): pg. 60; Yean, "Sukuk: and the way forward.", pg. 4.



**Figure 7**  
***Ijarah Sukuk Structure***



**Source:** Green *Sukuk*: An Innovation in Islamic Capital Markets , 2016, pg. 175, Be Modified

### **3.2.1.2 *Murabaha Sukuk***

*Murabaha* is a financing method. In this structure, one party acquires the products and paid the price then and same party sells these products in installments with pre-determined profit rate. Thanks to this method the required product, which could not be afforded for a bank or an individual, could be acquired. Since Prophet Muhammad (p.b.u.h), companions (*ashaab*) and majority of jurists give permission to this method; *murabaha* is a halal transaction. The target of the *Murabaha Sukuk* is to facilitate this financing method and provide funding. Firstly, the *sukuk* certificates are issued in order to create funds for the acquiring of products via *murabaha* method, so that the *sukuk* investors become the possessor of the products. *Murabaha Sukuk* can not be traded except primary market due to the liquidity deficiency. To finance this transaction, SPV issues *sukuk* for investors. The originator gained the products at pre-determined deferred price and by adding profit it is conveyed to the investors. Since, the originator has not real possession on the products, s/he couldn't use these products. Then, s/he makes a financial agreement with his agent to sell the commodity to get profit. Finally, the principal amount is given back to the investors at due date. In this method, since

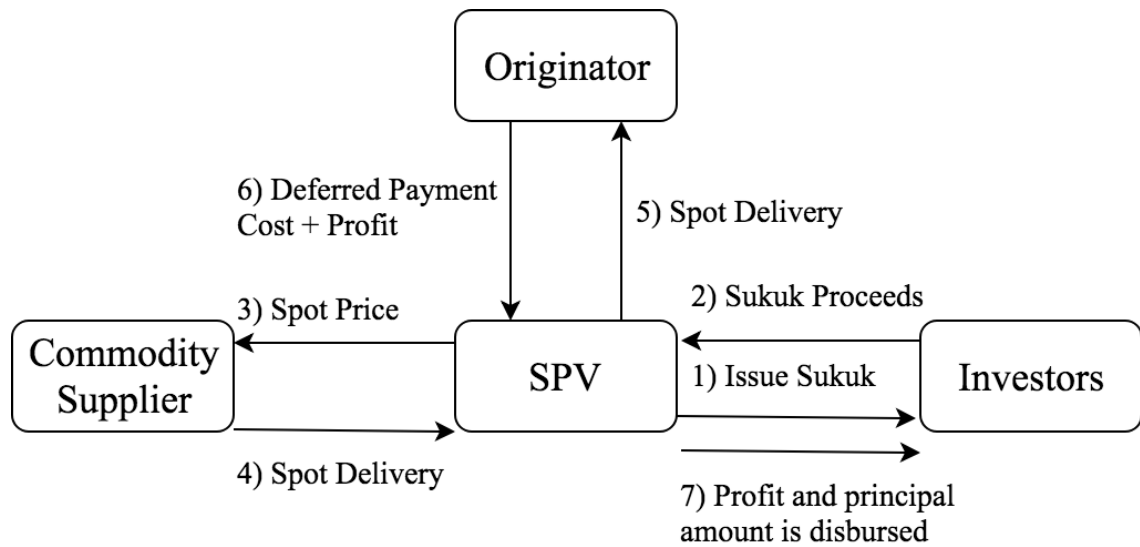
high liquidity and the power of immediate trade via appointed brokers, financial agreements are made on the London Metal Exchange Market in order to minimize risks.<sup>21</sup> *Murabaha Sukuk* structure is described in Figure 8.



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<sup>21</sup> Alshamrani. "Sukuk issuance in Saudi Arabia.", pg. 319; Nouredine Krichene, "Sukuks" *Islamic Capital Markets: Theory and Practice*. (Singapore: John Wiley and Sons, 2013), pg. 654; Aktham I. Maghyereh and Basel Awartani, "Dynamic transmissions between Sukuk and bond markets." *Research in International Business and Finance* Vol. 38 (2016): pg. 253; Azmi Omar, Muhamad Abduh, and Raditya Sukmana, "An Overview of Sukuk" *Fundamentals of Islamic money and capital markets*. (Singapore: John Wiley and Sons, 2013), pg. 106; Saad, Noriza Binti Mohd, and N. E. A. B. Mohamad. "Sukuk in Malaysian capital market." In *3rd International Conference on Business And Economic Research*. 2012, pg. 6; Vishwanath and Azmi. "Islamic bonds.", pg. 65.

**Figure 8**  
***Murabaha Sukuk Structure***



**Source:** An Investigation of *Sukuk* structure risk, 2017, pg. 76

### 3.2.1.3 *Salam Sukuk*

*Salam* is a method, which is used to fund the people who have financial need. In this form of financing, products are sold and price is paid in advance. In agriculture and extracting industries this form is used frequently in order to acquire fund for the short term. For instance, in agriculture the price of under ripe fruits is paid and then farmer promises to deliver these fruits at pre-determined future date. *Salam Sukuk* is used to create funds based on *salam* transaction. In this system, originator sells the products; the *sukuk* investors purchase these products. When this transaction is finalized, *sukuk* investors acquired profit. The differences between the sale and purchase prices create this profit. Since the profit is pre-determined and fixed, risk of this form of *sukuk* is very high. Bahrain Monetary Agency is one of the implementer of this form of *sukuk*. Firstly, a raw material like aluminum or crude oil is purchased and prices are paid readily. Related corporation would deliver the raw materials at pre-determined future date. The originator commits to purchase these raw materials on the due date of the delivery. The

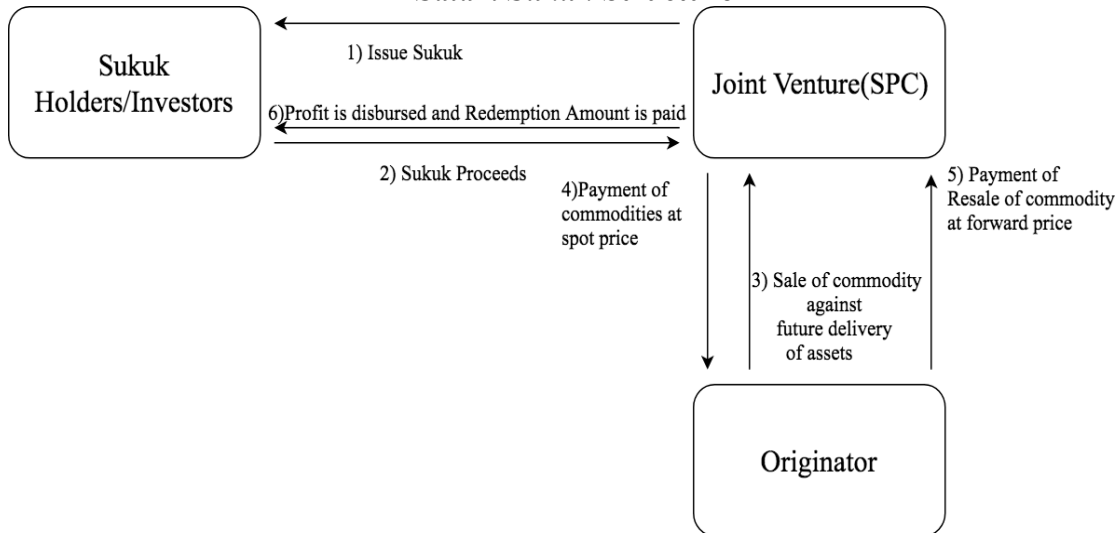
Bahrain Islamic Bank is accountable to administer the financial agreements in this continuum. Government of Bahrain is assigned as the agent in market and deliveries are made thanks to its distribution channel.<sup>22</sup> The Structure of *Salam Sukuk* is figured in the Figure 9.



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<sup>22</sup> Abdul Aziz Abdullah, Ahmad Shukri Yazid, Adam Abdullah, and Mohd Shahril Kamarudin. "Risk in funding infrastructure projects through sukuk or Islamic bonds." *International Review of Management and Business Research* Vol. 3, no. 2 (2014): pg. 924; Alshamrani. "Sukuk issuance in Saudi Arabia.", pg. 320-321; Iqbal and Mirakhor, "Capital Markets", pg. 189; Stuart Locke and Dani Foo. "The impact of Islamic Debt on firm performance." (Phd thesis., University of Waikato, 2013), pg. 60; Meysam Safari, Mohamed Ariff, and Shamsher Mohamad. "Sukuk Securities: Definition, Classification and Pricing Issues" *Sukuk securities: New ways of debt contracting*. (Singapore: John Wiley and Sons, 2014), pg. 25; Nor Balkish Zakaria, Mohamad Azwan Md Isa, and Rabiatul Alawiyah Zainal Abidin. "The construct of Sukuk, rating and default risk." *Procedia-Social and Behavioral Sciences* Vol. 65 (2012): pg. 664.

**Figure 9**  
**Salam Sukuk Structure**



**Source:** *Sukuk securities: New ways of debt contracting*, 2014, pg. 69

### 3.2.1.4 *Istisna Sukuk*

*Istisna* is one of the contracts, which provide funding for especially large infrastructure investments and construction projects. In this method, asset prices must be fixed otherwise it violates the Objectives of Islamic Law (*Maqasid al-Shariah*). In this method, customer wants to produce or construct special product and finance the project before finish, so entrepreneurs are encouraged with this early finance. Since this method is very suitable to finance mega infrastructure projects; municipalities, private companies, governments and ministries can use this method to fund their development projects. *Istisna Sukuk* provides large public funding opportunity by issuing certificates for investors. Firstly, SPV issued the certificates for chosen projects and gathered fund is given to contractor to finance chosen projects. SPV is entitled to these assets. Then, SPV makes an agreement with contractor/builder to complete related project. Then, the project is sold to the buyers in part or leased to originator. This return is distributed to investors as profit. Finally, full ownership of project is transferred to originator and full payment is gained. That gained full payment is distributed to *sukuk* investors as redemption amount. There are various examples of this type of *sukuk*. In UAE, with the

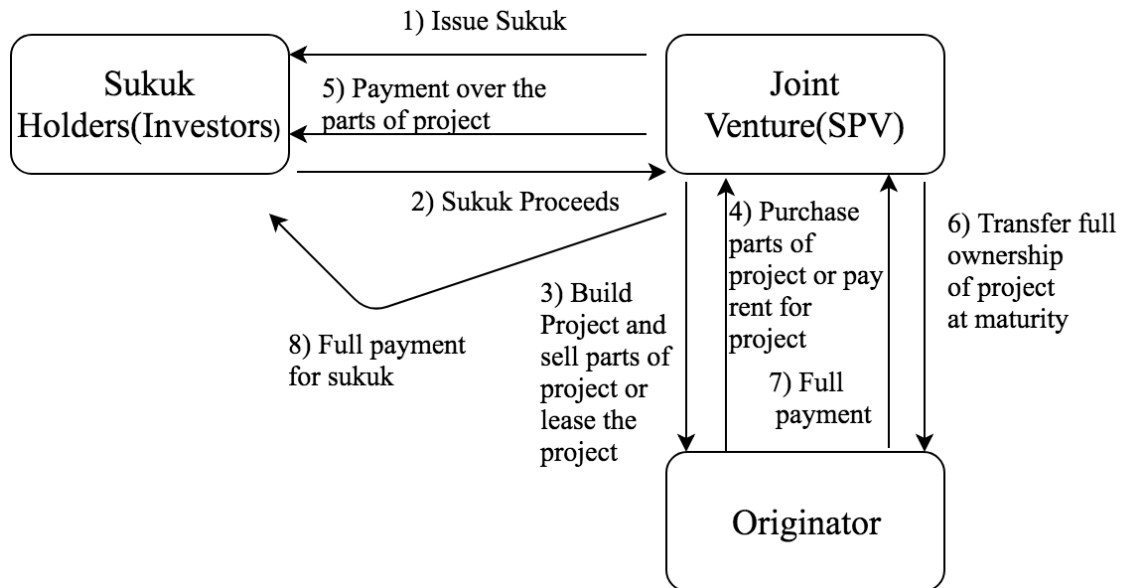
guarantee of National Central Cooling Company (Tabreed) issued global corporate *sukuk* with %5,5 fixed rate and 5 years maturity in 2004. Thanks to this method this corporation eliminated its active debt, which is approximately 136 million USD.<sup>23</sup> *Istisna Sukuk* is described in the Figure 10.



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<sup>23</sup> Alshamrani. "Sukuk issuance in Saudi Arabia.", pg. 323-324; Alswaidan, " An investigation of Sukuk structure risk.", pg. 82; Simon Archer and Rifaat Ahmed Abdel Karim. "Appendix A: Nominate Contracts Employed as a Basis for Shari'ah-Compliant Financial Transactions." *Islamic Capital Markets and Products: Managing Capital and Liquidity Requirements Under Basel III* (Chichester: John Wiley and Sons, 2018), pg. 300; Mohamed Ariff, Meysam Safari, and Mohamad Shamsher, "Sukuk securities, their definitions, classification and pricing issues." *The Islamic debt market for sukuk securities: The theory and practice of profit sharing investment*, Ed. Mohamed Ariff, Munawar Iqbal and Shamser Mohamad (Cheltenham, Edward Elgar Publishing, 2012), pg. 18-19; Davood Manzoor, Majid Karimirizi, and Ali Mostafavisani, "Financing infrastructure projects based on risk sharing model: Istisna sukuk." *Journal of Emerging Economies & Islamic Research* Vol. 5, no. 3 (2017): pg. 74-75; S. A. Mousavian and Mostafa Zehtabian. *Operational Models for Ijarah, Istisna and Murabaha Sukuk from Islamic point of view*. Working Paper. Official website of Bank Melli Iran, [www. bmi. org. ir](http://www.bmi.org.ir), (2009), pg. 7; C. R van Hilten, "Islamic Securitization by Means of Sukuk and the Struggle for Shari'ah Compliance." (Bachelor's thesis, Utrecht University, 2014), pg. 15.

**Figure 10**  
***Istisna Sukuk Structure***



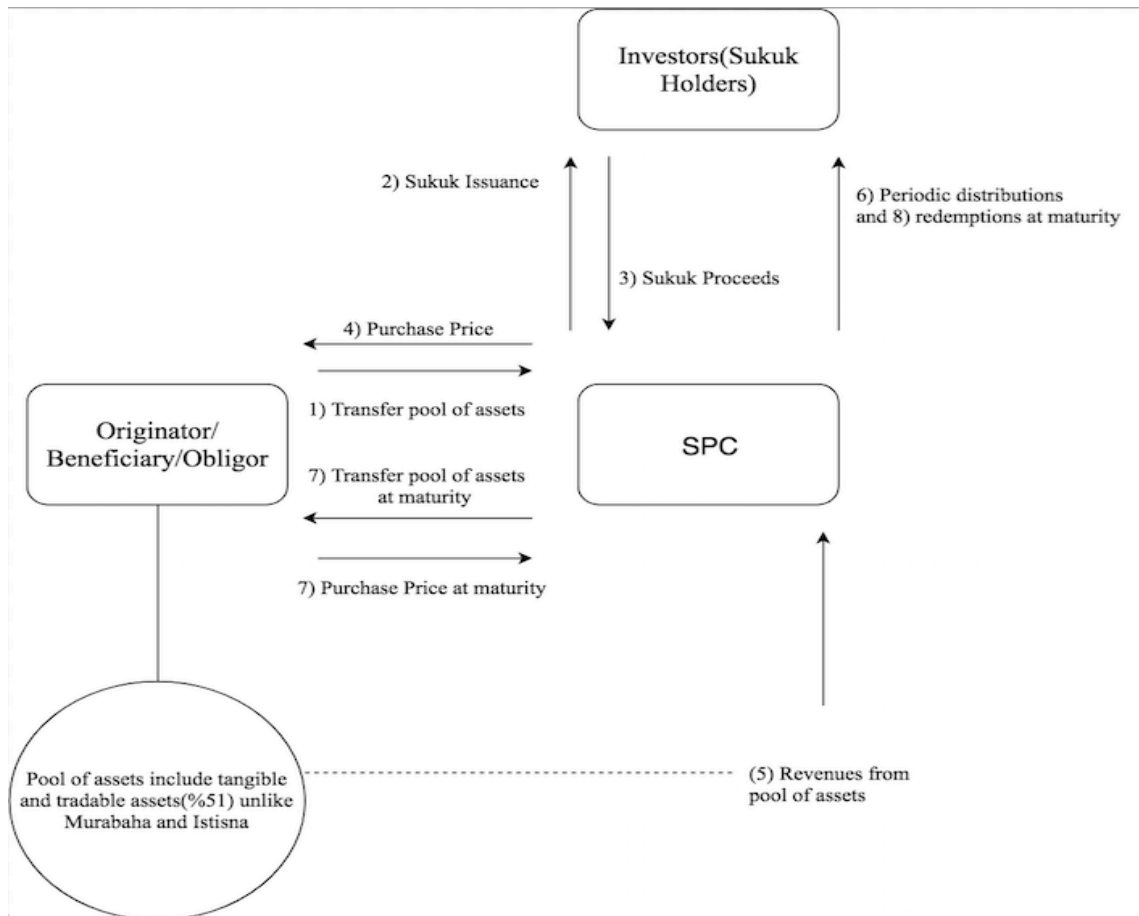
**Source:** An investigation of *Sukuk* structure risk , 2017, pg. 82

### 3.2.1.5 Hybrid/Mixed *Sukuk*

Hybrid/Mixed *Sukuk* was designed by integrating different form of contract methods like *Mudarabah*, *Ijarah*, *Murabaha* and *Istisna*. This process begins with the gathering assets of these *sukuk* kinds in order to generate a pool. This sort of *sukuk* is very elastic so it can be planned in various forms for the several demands of the investor. However, tradable assets, unlike *Murabaha* and *Istisna*, must be taken a part in this kind, at least %51. In this method, the authorization of related assets is taken by SPV and *Murabaha* contract is prepared by this corporation. Then, *sukuk* is issued by SPV to activate funds, gathered from public. After that, profit is distributed among *sukuk* investors. First Hybrid *Sukuk* was issued by IDB. The size of this *sukuk* issuance was 400 million USD and *Sukuk Al Istisna*, *Sukuk Al Ijarah* and *Sukuk Al Murabaha* comprised %3, %65,5 and %31,5 of this *sukuk* issuance, respectively.<sup>24</sup> The structure of hybrid *sukuk* is pictured in the Figure 11

<sup>24</sup> Alsaeed. "Sukuk issuance in Saudi Arabia.", pg. 56-57; Alshamrani. "Sukuk issuance in Saudi Arabia.", pg. 324-235; Junaid Haider and Muhammad Azhar, "Islamic Capital Market: Sukuk and its Risk Management in the Current Scenario." (Master's Thesis, Umea University, 2011), pg. 30-31; Locke

**Figure 11**  
**Hybrid Sukuk Structure**



**Source:** Development of *sukuk*: pragmatic and idealist approaches to *sukuk* structures, 2014, pg. 49

and Foo. "The impact of Islamic Debt", pg. 67; Mohamad Zaid Mohd Zin, Ahamad Asmadi Sakat, Nurfaahratul Azlina Ahmad, Mohd Roslan Mohd Nor, Azri Bhari, Saurdi Ishak, and Mohd Sapawi Jamain, "The effectiveness of Sukuk in Islamic finance market." *Australian Journal of Basic and Applied Sciences* Vol. 5, no. 12 (2011): pg. 474.



## 3.2.2 Equity-Like Methods

### 3.2.2.1 *Musharakah Sukuk*

Musharakah means ‘to participate, to join, to share in English. While a *riba*-based loan is used loss is not realized, in partnership methods like *musharakah* loss can be experienced. The value of this sort of agreement is emphasized frequently by the primary sources of Islam, which are *Qur’an*, the *hadiths* and *sunnah* and concurrence of Islamic scholars and Muslim society. In a *qudsi hadith*, partnership is encouraged by emphasizing that *Allah* becomes the other collaborator of the people who originate partnership and in the event of infidelity Allah mentioned to withdraw from this partnership.<sup>25</sup>

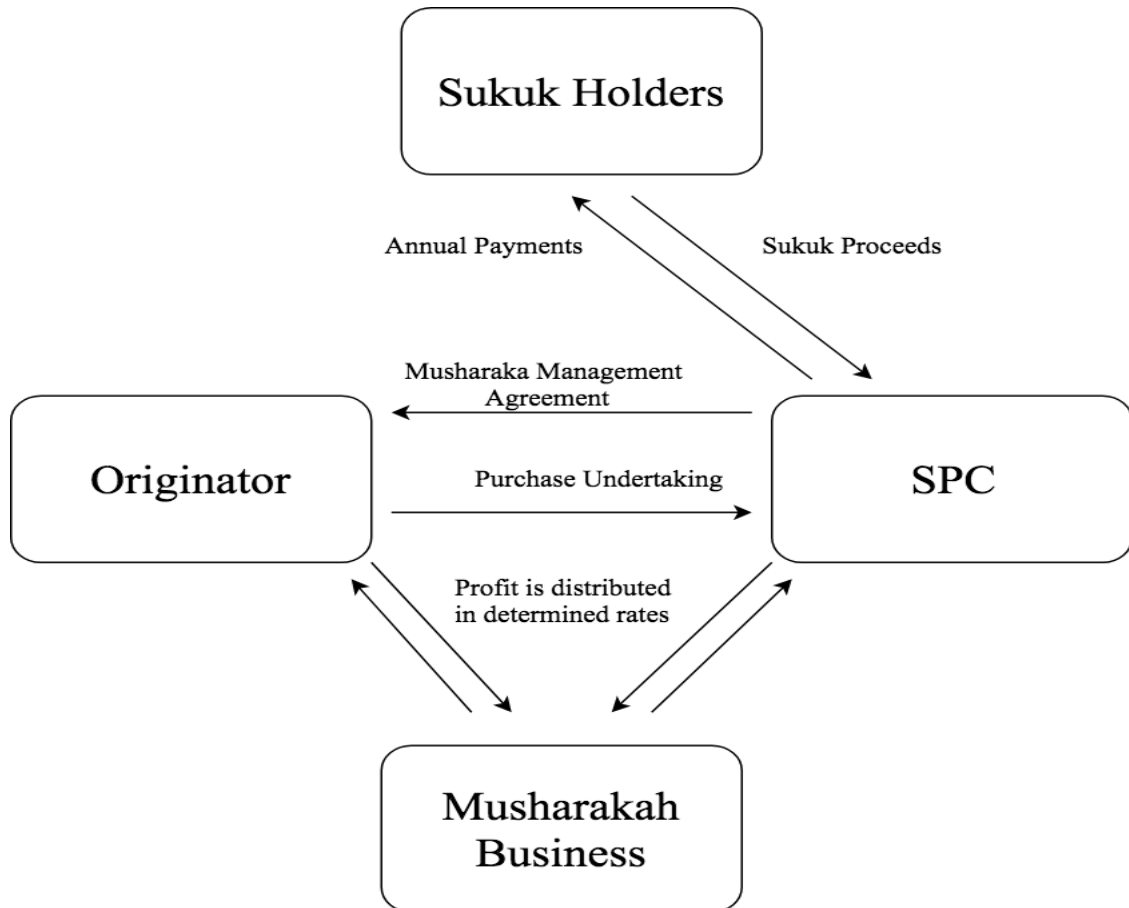
*Musharakah Sukuk* is issued to gather funds in order to generate new enterprises or working up an existing project. In this structure, investors come in the possession of new equity participant of the related project investment or the collateral asset as large as their allotment. The name *Sukuk Wakalah bi Istithmar* may be used instead of *sukuk al musharakah*. Thanks to this sort of *sukuk*, big commercial enterprises can be funded. There is an opportunity to trade in secondary markets for this kind. Process begins financial agreement between SPV and the originator, with agreed up on period (5 to 7 years) profit-sharing ratio. *Musharakah* certificates are periodically sold to related corporation by SPV. The corporation uses its assets for the financial agreement and *sukuk* is issued by the SPV. As profit is acquired, it is distributed among the *sukuk* investors. At the end of the determined period, SPV hand over their shares and principal is paid back to investors.<sup>26</sup> This process is described in the Figure 12.

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<sup>25</sup> Hassan Scott Odierno, “Investments in Takaful” *Takaful and mutual insurance: alternative approaches to managing risks*. Ed. Serap Gonulal (Washington DC: World Bank Publications, 2013), pg. 119; Omar, Abduh and Sukmana, “An Overview of Sukuk”, pg. 88; Shafiq ur Rahman. “Lexical Analysis of Islamic Banking Terminologies.” *Journal of Islamic Banking and Finance* Vol. 30, no. 4 (2013): pg. 86.

<sup>26</sup> Alshamrani. “Sukuk issuance in Saudi Arabia.”, pg. 314; Muhammad Ayub, “Securitization, sukuk and fund management potential to be realized by Islamic Financial Institutions.” In *Sixth International Conference on Islamic Economics, Banking and Finance*. (2005): pg. 351; Asyraf Wajdi Dusuki, “Do equity-based Sukuk structures in Islamic capital markets manifest the objectives of *Shariah*?” *Journal of Financial Services Marketing* Vol. 15, no. 3 (2010): pg. 208; Nienhaus. “Self-Adjusting Profit Sharing Ratios for *Musharakah* Financing” *Journal of Islamic Banking and Finance* 31, no. 4 (2014): 31;

**Figure 12**  
***Musharakah Sukuk Structure***



**Source:** Islamic Finance and *Shariah*-Compliant Real Estate Investment, 2009, pg. 173

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Vishwanath and Azmi. "Islamic bonds.", pg. 62-63; Zakaria, Isa, and Abidin. "The construct of Sukuk", pg. 664.

### 3.2.2.2 *Mudarabah Sukuk*

In this method, one party contributes with capital; other party administers the projects and contributes with his/her labor force (*Mudarib*). As the response of contributions, in the event of profit, it is allocated among parties. If loss is occurred, it belongs to capital provider (*Rabb-al Maal*)<sup>27</sup>

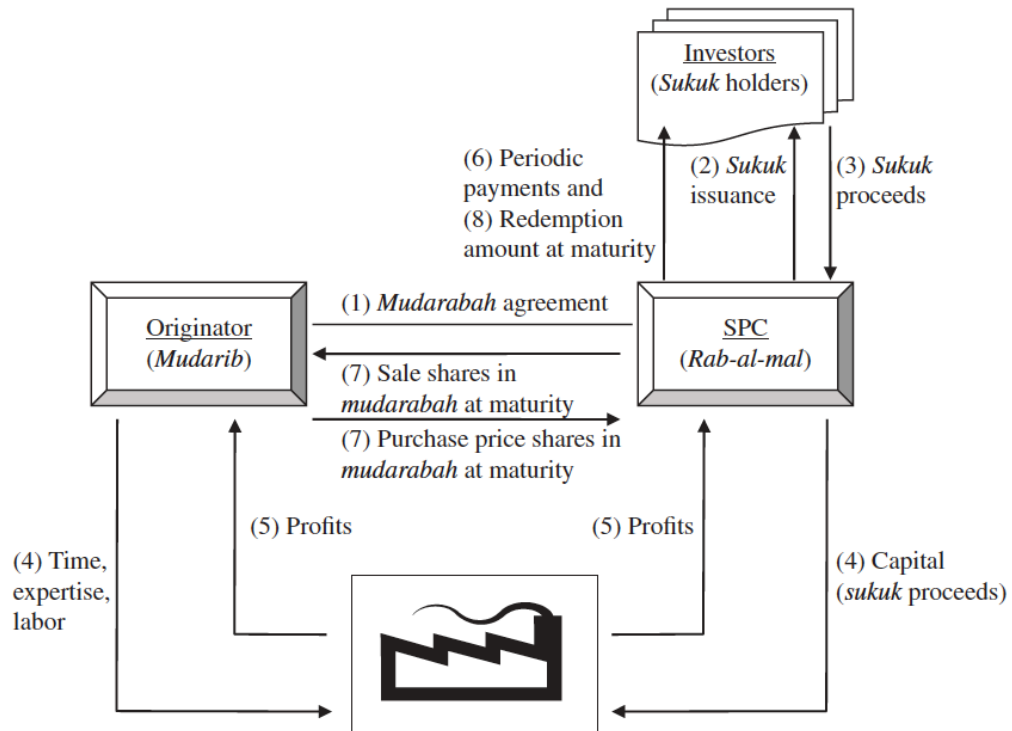
*Mudarabah sukuk* is structured based on *mudarabah* agreement. Existing value from this agreement is divided into certificates and the fund is collected from investors. Firstly, SPV is founded by originator and a *mudarabah* contract is signed between SPV and the originator to become partners in related project. The originator is assigned as the entrepreneur of this enterprise and makes contribution with his/her expertise, skills and labor. The SPV is assigned as silent partner, the *rabb al-mal* of the *mudarabah* venture and provides the required capital, which is obtained from *sukuk* investors thanks to certificates. The profits are allocated among *sukuk* investor in accordance with their shares and investor may be informed early about expected profits. Finally the principal is returned to investor at maturity date.<sup>28</sup> *Mudarabah Sukuk* Structure is pictured in the Figure 13.

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<sup>27</sup> Zairihan. "Capital market imperfections and corporate sukuk, pg. 31.

<sup>28</sup> Ayub, "Securitization", pg. 350; Bilal A. Fleifel, "Risk management in Islamic banking and finance: The Arab finance house example." (Phd Thesis, University of North Carolina Wilmington, 2009), pg. 64; Meysam Safari, Mohamed Ariff, and Shamsher Mohamad. "Pragmatistic and Idealistic Approach to Structuring Sukuk" *Sukuk securities: New ways of debt contracting*. (Singapore: John Wiley and Sons, 2014), pg. 50-51; Vishwanath and Azmi. "Islamic bonds.", pg. 63.

**Figure 13**  
**Mudarabah Sukuk Structure**



**Source:** *Sukuk securities: New ways of debt contracting*, 2014, pg. 51

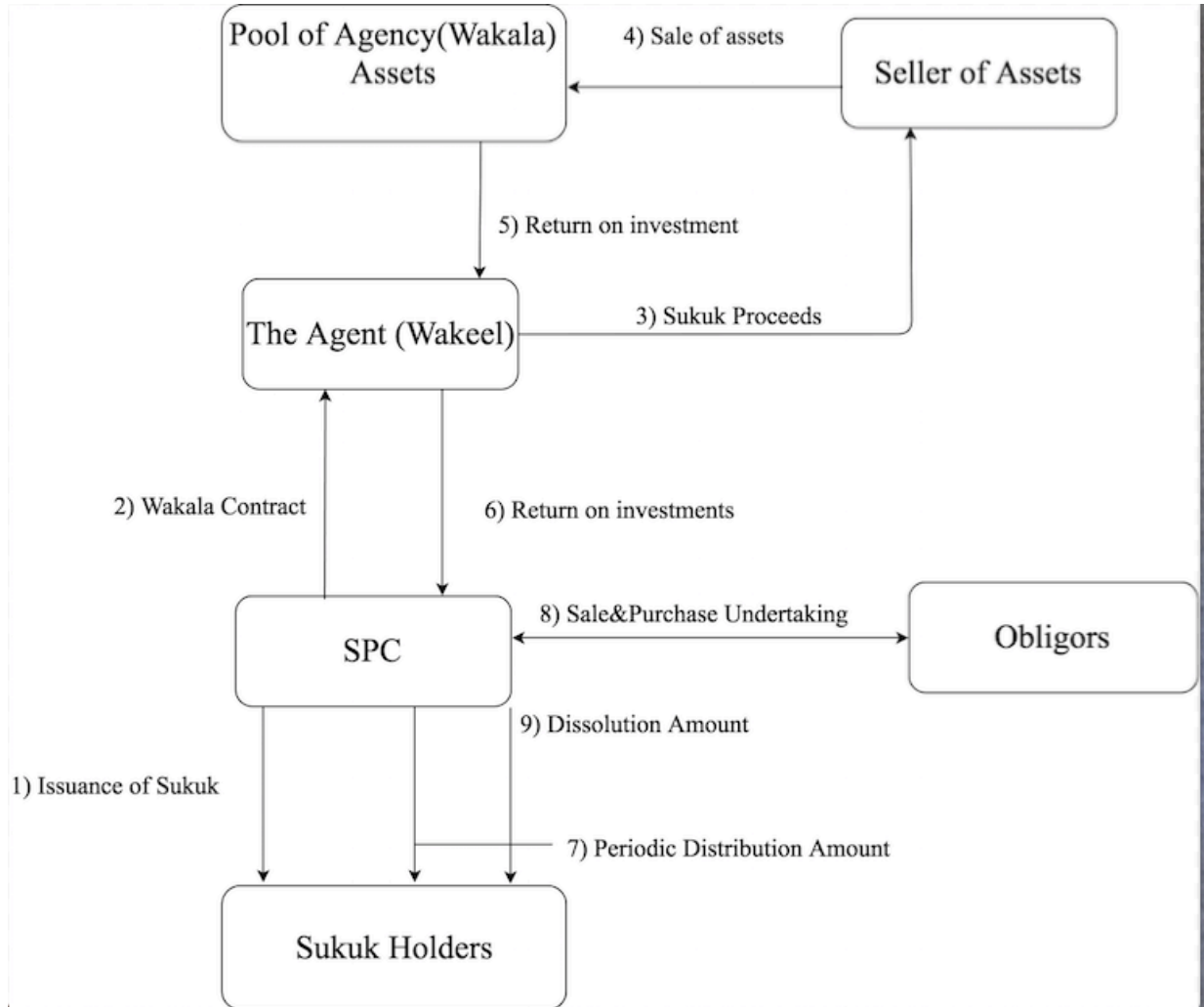
### 3.2.2.3 *Wakalah Sukuk*

In this method one party is authorized by actual investor and become an agent of him/her. The Agent (*Wakeel*) manages the investments in the name of actual investor and get payment for this service from him/her. *Sukuk al wakala* is an instrument, which based on *wakala* principle. *Sukuk al wakala* is similar to *sukuk mudaraba* in terms of some characteristics. Nevertheless, while in *mudarabah*, agent partner takes a lot from total profit; the *wakeel* in *wakala* get pre-agreed allotment from acquisition. Since there are lots of attractive characteristics *sukuk al wakala* is very popular among originators. Firstly, the *wakeel* can decide freely what to invest with the obligation of choosing from Islamic Law compliant options. Secondly the beneficiaries can use their balance sheets as underlying asset. Thirdly, there is permission for the originator to use some of the non-marketable assets like *sukuk al mudaraba*. In this method, firstly SPV made a financial agreement with investors to be assigned as agent of the actual investor. Then, certificates are issued by SPV and fund is aggregated from *sukuk* investors. Aggregated funds are invested in *Shariah*-compliant assets, like *Ijarah* and *Murabaha*. Then acquirements from the investment are allocated among *sukuk* investors. Dubai Nakheel *Sukuk* is the first implementation of *sukuk al wakala* in 2009. Dar al Arkan *Sukuk* is another implementation of *wakala sukuk*. Dar al Arkan, which is one of the real estate development associations, assigned as the warrantor of the *sukuk*. This association is the greatest real estate development association in Saudi Arabia and established in 1994. Primary duty of this corporation is obtaining unproductive terrains, transform them to valuable terrains with construction projects and finally commercialize them to middle class in KSA. The size of this *sukuk* is 450 million USD with the 5-year maturity and %10,75 annual profit rate.<sup>29</sup> *Wakalah Sukuk* is classified into equity like methods but it is very different from main partnership methods like *musharakah* and *mudarabah*. This method has a facilitator characteristic in business. *Wakalah sukuk* structure is described in the Figure 14.

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<sup>29</sup> Locke and Foo. "The impact of Islamic Debt", pg. 66; Omar, Abduh and Sukmana, "An Overview of Sukuk", pg. 114-117; Meysam Safari, Mohamed Ariff, and Shamsheer Mohamad. "Contract Design and the Structure of Sukuk Securities Yet Issued" *Sukuk securities: New ways of debt contracting*. (Singapore: John Wiley and Sons, 2014), pg. 77-78.

**Figure 14**  
***Wakalah Sukuk Structure***



**Source:** Fundamentals of Islamic money and capital markets, 2013, pg. 115

#### 4. SUKUK AS AN ALTERNATIVE FINANCING INSTRUMENT

If the last 150 years of economic history of our world is evaluated, lots of financial crises, which have damaged the economy of world, can easily be seen. This situation has forced the banks, companies and governments to search alternative financing methods to western and interest-based financial system. *Sukuk* is an effective financing and investment instrument and considered as an alternative to mobilize and raise funds especially in the long-term for financing government budgets and their development and reform plans and financing MSMEs (Micro, Small and Medium Enterprises), MFIs (Microfinance Institutions) and various projects like infrastructure, regeneration, non-profit public sector, R&D, construction and shipping projects etc. Many scholars claim *sukuk* is a better financing tool than interest-based debt financing due to its features like decreasing risk through risk sharing, integration of real projects and assets to financial system and its factors of investment cooperation.<sup>30</sup>

Moreover, *sukuk* has a potential to provide more equal society, juster wealth distribution, decrease dependency of governments on domestic and foreign bank credits by decreasing their debts, finance the real economy and mobilization of idle savings in the country and create liquidity opportunities, decrease unemployment by financing micro-enterprise and all in all, keep the stability of economy, prevent the economic

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<sup>30</sup> Haizhou Huang and Ning Zhu, "The Chinese Bond Market: Historical Lessons, Present Challenges, and Future Perspectives." *China's Emerging Financial Markets*. Ed. James R. Barth, John A. Tatom and Glenn Yago (New York: Milken Institute, 2009) pg. 526; Abdou Diaw, Obiyathulla Ismath Bacha, and Ahcene Lahsasna. "Public sector funding and debt management: A case for GDP-linked sukuk." *8th International Conference on Islamic Economics and Finance* (2011): pg. 3; Christophe J. Godlewski, Rima Turk-Ariss, and Laurent Weill. "Sukuk vs. Conventional Bonds: A Stock Market Perspective" *Journal of Comparative Economics* Vol. 41 (2013): pg. 749-750; Khairunnisa Musari, "Economic Sustainability For Islamic Nanofinance Through Waqf-Sukuk Linkage Program (Case Study In Indonesia)." *International Journal of Islamic Economics and Finance Studies*, Vol.2 no. 3 (2016b): pg. 73; Khairunnisa Musari, "Sukuk for Microfinance through Linkage Program: Case Study in Indonesia." *A paper was presented at The 10th International Conference on Islamic Economics And Finance (ICIEF) held by Islamic Research and Training Institute-Islamic Development Bank (IRTI-IDB) and Qatar Foundation. Doha, Qatar, (2015): pg. 1*; Khairunnisa Musari, "Waqf-Sukuk, Enhancing The Islamic Finance For Economic Sustainability in Higher Education Institutions." *World Islamic Countries University Leaders Summit* (2016c): pg. 5-6; Firmansyah Kusasi, Henry Eryanto, and Dodi Dermawan. "Sukuk as Alternative for Shipping Financing: International Standard and Malaysian Practice." *The 1st International Conference on Maritime Development Proceeding. Tanjungpinang* (2015): pg. 99; Lindawati Wardani, Bambang Hermanto, and Zaäfri Husodo. "The Pricing of Sovereign Sukuk for R&D Financing in Indonesia: Analysis and Modeling." (2014): pg. 8-9.

crises and ensure the balanced economic growth. Thanks to these features, some countries like Bahrain and Nigeria used *sukuk* in government budget financing as an alternative to treasury bills and in some countries like UK and China, *sukuk* is called as “Alternative Finance Investment Bonds”<sup>31</sup> and Alternative Bond Schemes and especially in China, *sukuk* is considered as a significant financing tool to realize One Belt One Road (OBOR) strategy.<sup>32</sup>

#### 4.1 *Sukuk* in Infrastructure Investment Financing

There is no doubt that infrastructure investments are very crucial and urgent for countries. In the world 2,1 billion people have not access to clean drinking water and basic sanitation services. Also, 1,06 billion people have no access to electricity and this number equal to approximately %15 of global population and 3,04 billion people still use kerosene and solid fuels for cooking and heating. Due to the inadequate infrastructure some African people experiences the trouble of infrastructural poverty beyond their existing abject poverty. Even rich Africans suffer from this situation. They don't have useful roads and adequate power plants<sup>33</sup>

Different institutions have various reports about infrastructure investment need of the world. For instance, World Economic Forum mentioned that infrastructure-financing need is \$1trillion per year. OECD (Organization for Economic Co-operation and Development) reports that investment need in the world for various infrastructure projects like school, hospital, power plant, warehouse, dam, transportation, water and telecommunication is \$71 trillion by 2030. According to estimation of International Finance Corporation \$21 trillion of all infrastructure investments would be required by

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<sup>31</sup> Khan, Elsiefy and Kyoung, “Sukuk in minority”, pg. 20.

<sup>32</sup> Abdullahi, “Sukuk as an alternative source of funds”, pg. 3, 5, 8-9; Ding Bo, Engku Rabiah Adawiah Engku, and Buerhan Saiti. “Sukuk Issuance in China: Trends and Positive Expectations.” *International Review of Management and Marketing* Vol. 6, no. 4 (2016): pg. 1020, 1024; Khairunnisa Musari, “Cooperative Sukuk, A Local Wisdom of Islam Nusantara.” *Al-Adalah* Vol. 19, no. 1 (2016a): pg. 92, 96, 100; I. Saba, “Islamic Finance—Local and Global Status.” *Developments in Islamic Finance* Ed. Nafis Alam and Syed Aun R. Rizvi (Cham: Palgrave Macmillan, 2017): pg. 9.

<sup>33</sup> World Health Organization and UNICEF, “Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines.” (Switzerland: World Health Organization, 2017), pg. 24; Basheer A Oshodi, “Reducing Poverty: The Prospects of Islamic Finance in Africa.” (2012), pg. 5.



developing countries. Only Africa needs \$93 billion investment per year according to estimation of World Bank. Funding problem for these investments can be solved by using *sukuk* instrument, which can serve as an advantageous financing tool, to meet their infrastructure requirements. Moreover, *sukuk* issuances ensure risk sharing and contribute to the economic and social growth of these countries by improving quality of life and increasing life standards of people, especially, who live in impoverished countries like Gambia, Nigeria and Sudan. *Sukuk* financing has lots of advantages such as flexibility, tax incentives, lower cost, larger transparency and ensuring security for investors. Today, great numbers of countries use *sukuk* for infrastructure investment. For instance, UAE used *sukuk* to finance Emirates Engineering Center in Dubai, Qatar benefited from *sukuk* to finance renewable energy investments, in Malaysia it is used for the construction and development of many large scale projects like high ways, Kuala Lumpur International Airport, Southern Link, Inter Urban Transport Terminal, upgrading electrification and communication systems, enhancing the rail system, enhancing Kuala Lumpur monorail capacity, Senai Dersu and Maju Expressway, Ampang LRT and Kelana Jeyana Line Extension. In Saudi Arabia utilities, power plants, transportation and construction projects have been financed through *sukuk* issuance. Also, African countries like Gambia, Sudan, Nigeria and Senegal issued *sukuk* for financing various infrastructure investments. *Sukuk*, which is used for financing infrastructure, have different names in different countries. For instance in Sudan, Government Investment Certificates (GIC) is used for infrastructure investment *sukuk*, ‘infrastructure bond’ is used in Malaysia.<sup>34</sup>

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<sup>34</sup> Diaw, Bacha, and Lahsasna, “Public funding”, pg. 1-2; Abdoulie Sireh-Jallow, “Revenue Diversification: Non-Traditional Sources of Development Finance as Game Changers in Africa.” *International Journal of Economics and Finance* Vol. 9, no. 3 (2017): pg. 276, 279; Ahlidin Malikov, “How Do Sovereign Sukuk Impact on the Economic Growth of Developing Countries? An Analysis of the Infrastructure Sector” *Critical Issues and Challenges in Islamic Economics and Finance Development*. Ed. Velid Efendić, Fikret Hadžić, and Hylmun Izhar (Cham: Palgrave Macmillan, 2017): pg. 12-13, 17; Arif Orcun Soylemez, “Current Issues of the Sukuk Market and Using Sukuk for the Global Infrastructure Projects.” *Browser Download This Paper* (2016), pg. 1, 4; Abdelaziz Chazi, Narendar V. Rao, and Lateef AM Syed. “Tapping Funds for Development: A Case for Sukuk Financing.” *Journal of Islamic Economics, Banking and Finance* Vol. 10, no. 3 (2014): pg. 172; Saadiah Mohamad, Omar Salah, Mafukhin Mokhtar, Syed Alwi, and Sharifah Faigah, “Enhancing Cross Border Connectivity: Venturing into Islamic Finance as a New Source of Infrastructure Financing.” *Journal of Emerging Economies and Islamic Research* Vol. 3 No.3 (2015): pg. 4, 11-12; Oshodi, “Poverty in Africa”, pg. 6; Ramadili, “Alternative System for African Countries.”, pg. 289; Ramla Sadiq and Afia Mushtaq, “The Role of Islamic Finance in Sustainable Development.” *Journal of Islamic Thought and Civilization* Vol. 5, no. 1 (2015): pg. 56; Terry Wambui Waweru, “The effect of macro economic

## 4.2 GDP Linked *Sukuk*

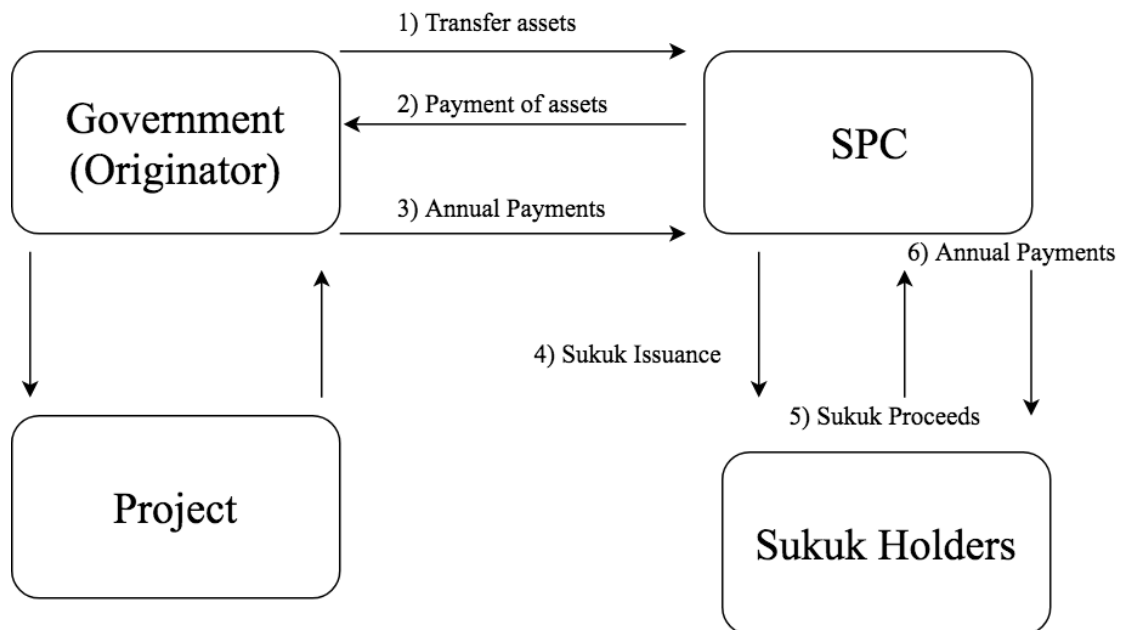
In the world, high debt levels are a significant problem for the many governments. These governments can solve the debt problem through GDP-Linked *Sukuk* by indexing their payments of sovereign debts to GDP and the economic growth of the *sukuk*-issuing country to create reliefs against recessions. This process is based on an improved risk sharing mechanism among international creditors and debtor countries. In this system as an indicator for the profit/loss of the enterprise, real economic growth of the country is used and as an underlying business enterprise, the economy of the country is considered. There are various advantages of this mechanism. This system decrease the possibility of economic crises by providing an alternative to traditional debt methods of countries so, create diversification in the source of funding for governments and solve the benchmark problem against interest-rate. Moreover, this fund raising method ensures less risk more yield return for investors in comparison with conventional bonds.<sup>35</sup> The structure of GDP-Linked *sukuk* is pictured in the Figure 15.

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variables on the liquidity of infrastructure bonds listed at Nairobi Securities Exchange.” (Unpublished MBA Research Project, University of Nairobi, 2014), pg. 3.

<sup>35</sup> Romana Bangash and Nazia Sherrin, “Portfolio Risk Management of Islamic Debt Capital Markets (Sukuk).” *Abasyn University Journal of Social Sciences Special Issue: Towards Financial Inclusion* Vol. 9 No.2 (2016): pg. 407-408; Obiyathulla Ismath Bacha and Abbas Mirakhor, “Funding development infrastructure without leverage: A risk-sharing alternative using innovative sukuk structures.” *The World Economy* Vol. 41, no. 3 (2018): pg. 757-758; Syed Aun R. Rizvi, Obiyathulla I. Bacha, and Abbas Mirakhor. “Macro Market Application.” In *Public Finance and Islamic Capital Markets*, Ed. Zamir Iqbal, Jahangir Sultan and Mehmet Asutay (New York: Palgrave Macmillan, 2016), pg. 137; Syed Aun R. Rizvi and Shaista Arshad. “Indexing government debt to GDP: A risk sharing mechanism for government financing in Muslim countries.” *Islamic banking and finance—Essays on corporate finance, efficiency and product development* Vol. 3 (2015): pg. 175; Syed Aun R. Rizvi and Shaista Arshad, “Stabilising economic growth through risk sharing macro instruments.” *The World Economy Special Issue Article* (2017): pg. 1.

**Figure 15**  
**The Structure of GDP-Linked *Sukuk***



**Source:** The Risk Sharing Philosophy of Islamic Finance, 2016, pg.69

### 4.3 Small and Medium Enterprises

SMEs have a crucial role in unemployment decrease poverty alleviation, boosting inclusive and sharing economic growth and income generation for the countries. According to Bank Indonesia, the loans given to SMEs have lower risk and better business performance in comparison with the large corporations. Also, SMEs have a key role in decreasing inequality because they benefit all of the society. European Commission classifies SMEs into three categories. According to this classification A microenterprise is an enterprise which has less than 10 employees and has annual turnover and/or annual balance sheet total fewer than EUR2 million. A small enterprise is an enterprise which has less than 50 persons and has annual turnover and/or annual balance sheet total are fewer than EUR10 million and a medium Enterprise is defined as the companies which has less than 250 employees and has annual turnover less than

EUR50 million, and/or annual balance sheet total fewer than EUR43 million.<sup>36</sup> This classification is summarized in the table 1.

**Table 1**  
**Classification and Definition of SMEs by European Commission**

SME Definition				
Enterprise category	Ceilings			
	Staff Headcount (number of persons expressed in annual work units)	Turnover	Or	Balance sheet total
Medium-sized	<250	≤ € 50 million		≤ € 43 million
Small	<50	≤ € 10 million		≤ € 10 million
Micro	<10	≤ € 2 million		≤ € 2 million

**Source:** An Islamic Finance Model for The Small and Medium-Sized Enterprises in France, 2013, pg. 156

#### 4.4 Microfinance (MF)

Elimination of poverty is one of the most significant issues for the policy makers of governments. Moreover, the poverty levels are related with income inequality and low productivity. Microfinance (MF) is a useful poverty reduction instrument against poverty. It is a system that provides financial services to only low-income and poor people, which are called very micro society. These people are excluded from existing financial system and mostly live in rural areas, so they are considered as non-bankable.

<sup>36</sup> Mohammed Saad Binzomah, "The feasibility of using profit and loss sharing for financing small and medium sized enterprises in Saudi Arabia." (Phd Thesis, Durham University, 2008) pg. i; Aswini Kumar Dash, "Inclusive Growth and Development with Specific Reference to India." *International Journal of Application or Innovation in Engineering & Management (IJAIEM)* Vol. 4 No. 4 (2015): pg. 68; Dian Masyita, "Sustainable Islamic microfinance institutions in Indonesia: an exploration of demand & supply factors and the role of *waqf*." (Phd Thesis, Durham University, 2012), pg. 1; Hae-Young Lee, Jongsung Kim, and Beom Cheol Cin, "Empirical analysis on the determinants of income inequality in Korea." *International Journal of Advanced Science and Technology* Vol. 53 (2013): pg. 106; Nyankomo Marwa, "Micro, Small and Medium Enterprises' External Financing Challenges: The Role of Formal Financial Institutions and Development Finance Intervention in Tanzania." *International Journal of Trade, Economics and Finance* Vol. 5, no. 3 (2014): pg. 230; Umar Aimhanosi Oseni, M. Kabir Hassan, and Dorsaf Matri, "An Islamic Finance Model for The Small and Medium-Sized Enterprises in France." *Journal of King Abdulaziz University: Islamic Economics* Vol. 26 No. 2 (2013): pg. 156.

They can not access to financial services because lack of collaterals and fixed income that can protect lender financial institutions against loss risks and repayment difficulties, low financial literacy levels, high costs of financing and poor marketing. Microfinance ensures accessing to financial services like loan, enterprise capital, insurance, remittance and saving is ensured on a micro-scale to the people who have limited financial capability. Especially small amount of loans are given to these people with a reasonable interest rate and can also finance the people to build their houses and their collective ventures. The household income and economic security of poor people have increased as they can build their houses and decrease their vulnerability through microfinance. But, in a typical emerging country the existing financial system can only serve fewer than 20–30% of the population. Poor people are bound into a vicious circle of poverty through financial exclusion. A major reason of financial exclusion is the insensitivity of western microfinance institutions to religious and cultural beliefs of the poor people in these countries.<sup>37</sup>

#### **4.4.1 Sukuk and Microfinance Collaboration**

Since *riba* is not allowed in Islam, Islamic Microfinance Institutions (IMFIs) use different types of non-*riba*-bearing financial tools. IMFIs innovated social collateral, so they minimize the loan risks and provide greater recovery rates. Since most of IMFIs have an integrated socio-economic development program, they adopted an approach, which can be implied in a much extensive program in order to create wealth for the poor people and bring them broader socio-economic development. In IMF sector there are various financial instruments such as micro-credit through interest-free financing (*qard al-hassan*), partnership (*sharikat*, *musharakah* or *mudarabah*) micro-savings like trustee

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<sup>37</sup> Abdul Rahman Rashidah and Faisal Dean, “Challenges and solutions in Islamic microfinance.” *Humanomics* Vol. 29, no. 4 (2013): pg. 293-294; Marwa Fersi and Mouna Boujelbene, “Capital Structure Decisions of Microfinance Institutions and Managerial Behavioral Biases: A Survey and Future Directions.” *ACRN Oxford Journal of Finance and Risk Perspectives* Vol. 6 No. 1 (2017): pg. 73; Habib Ahmed, “Financial Inclusion and Islamic Finance: Organizational Formats, Products, Outreach, and Sustainability” *Economic development and Islamic finance*. Ed. Zamir Iqbal and Abbas Mirakhor (Washington DC: World Bank Publications, 2013): pg. 205-206; Musari, “Nanofinance”, pg. 73-74; Mohammed Obaidullah. “Islamic Microfinance: The Way Forward.” *Islamic Capital Markets: Products and Strategies* Ed. Kabir Hassan and Michael Mahlkecht (Wiltshire: John Wiley and Sons, 2011), pg. 415.

financing (*mudarabah*), Micro-equity, pawn broking or rahn and exchange contracts (*mu'awadat*). Also, deferred-trading contracts like *bay-mua'jjal*, mark-up sale (*murabaha*) and leasing (*Ijarah*) methods are used frequently by IMFIs. Moreover, *zakat* and *waqf* can play a crucial role to create funds for IMFIs. There are many examples of Microfinance, *Waqf* and *Sukuk* collaboration. This issue will be explained in detail in the next sections. There is an extremely great gap between demand and supply of IMFIs. In Muslim-intense countries only about 0,5 percent of the total microfinance users are served by IMFIs. Unfortunately the majority of Muslims have to choose interest-based microfinance institutions or not use microfinance opportunity. For instance, according to USAID statistics, in Iraq only fewer than %1 of 820,000 households can access to IMFIs. Also, financial inclusion level is very low in Indonesia, while there are totally 600,000 MFIs only about 5,500 IMFIs exists in Indonesia. That donor funds or governments alone cannot fill this large gap. If there is a great increase in self-sustaining profitable MFIs, this gap can be filled. Funding problem can be solved as using *sukuk* in IMFIs.<sup>38</sup>

Islamic finance is expected to enhance socio-economic development of the poorest segment of the population (very micro society) with interest-free loans (*qard al-hassan*). Musari and Simanjuntak indicate some IMFIs now consider the very micro society and they innovated a new financing method, which is called 'nanofinance' in order to provide accessing financial services opportunities for the very micro society and very micro enterprises. Musari, Simanjuntak and Muazir claim that there are poorest segment of the society, which actually should be a goal of microfinance, however most of the banks do not yet access them. Ascarya and Sanrego also indicate that the micro, small, medium enterprises (MSMEs) must be re-classified to be able to reach the very micro society, to guide and help them to run their businesses up until

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<sup>38</sup> Rashidah and Dean, "Challenges in microfinance.", pg. 294; Nuradli Ridzwan Shah Mohd Dali, Mohamad Zaharuddin Zakaria, Ahmad Zaki Salleh, Mohamad Tahir Zainuddin, and Mohd Afiq Abdul Jalil, "*Waqf Sukuk—The Overview and Current Practices.*" In *Cd Proceedings* (2017): pg. 193; Adewale Abidiin Adeyemi and M. Kabir Hassan, "Islamic Microfinancing" *Handbook on Islam and Economic Life* Ed. M. Kabir Hassan and Mervyn K. Lewis (Cheltenham: Edward Elgar Publishing, 2014), pg. 418; Ahmed, "Financial Inclusion", pg. 209-210; Masyita, "Microfinance in Indonesia.", pg. 2; Musari, "Nanofinance", pg. 76; Muhammed MK Shafi, "Application of Islamic Economic Principles to Indian Financial Sectors: Prospects and Challenges." *International Journal of Management, Innovation & Entrepreneurial Research* Vol. 1, no. 2 (2015): pg. 37; Amuda Yusuff Jelili, "Commercialization of cash *waqf* in Nigeria: An analysis of its implementation." (Phd Thesis, University of Malaya, 2016), pg. 176.

self-sufficient. Unfortunately with the lack of banking facility, people in the very micro society and very micro enterprises frequently get money from acquaintances or the relatives however, if they have not extra money, people have to go to local moneylenders (loan sharks) who frequently charge very high interest rates.<sup>39</sup>

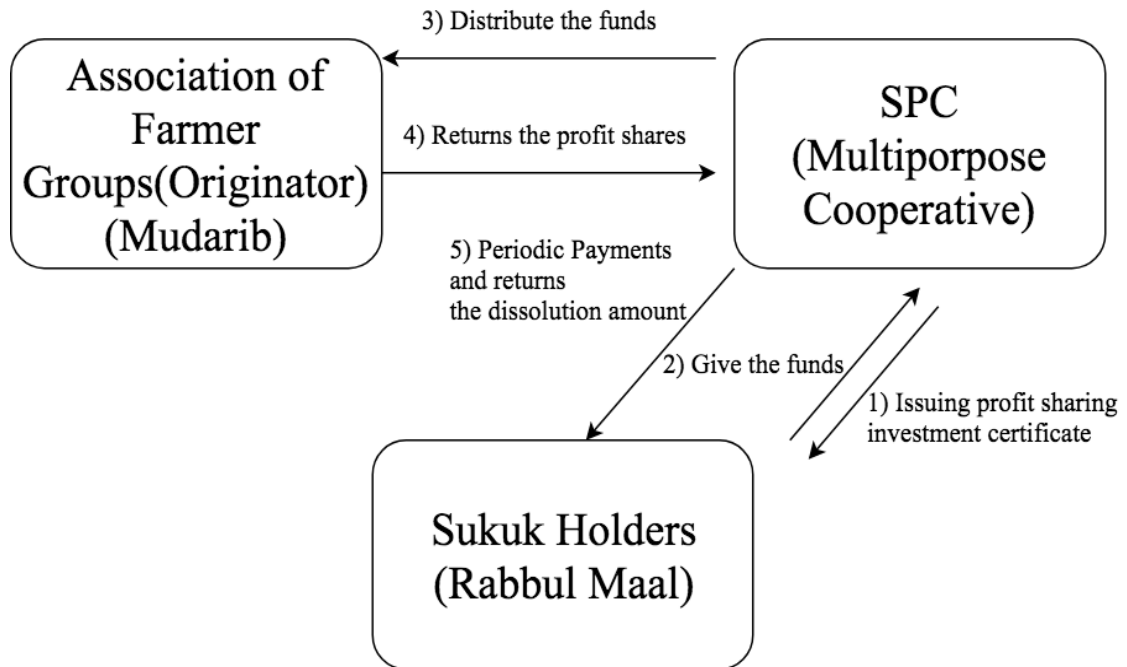
In order to eliminate high interest problem, *sukuk* is provided as a financing method with non-interest based funding and has a potential to manage the lack and excess of liquidity and may connect IMFIs and Interest-Free Financial Institutions. So, it creates an opportunity for IMFIs by funding them to finance very micro society, micro-enterprises and projects and real business sectors like agriculture. In Indonesia, Association of Farmer Groups, which is a cooperative, used *sukuk* as a micro-financing instrument for their society. To overcome the problem of high interest-based loan, the cooperative of Association of Farmer Groups issued an investment certificate and this certificate represents ownership paper of cocoa businesses based on profit sharing arrangement. At least there are five lessons learned from issuance *sukuk* by Association of Farmer Groups. Firstly, this cooperative demonstrates financing through bank loans is not the only way for the financing option for farmers. Thanks to cooperative investment networks have been strengthened and intensive assistance has been provided, the wealth distribution has been realized by Association of Farmer Groups. Secondly, possibility of issuance *sukuk* by a conventional institution (multi-purpose cooperative) has been seen. Third, instead of using *ijarah* contract as most popular method in *sukuk* issuances, profit sharing arrangement has been used with the percentages determined beforehand. Fourth, it is proven that *sukuk* can be financial instrument for managing excess and lack of liquidity and establishing connection between the real sector and financial sector. Fifth, this empirical study shows that *sukuk* has ability to funding microfinance and nanofinance.<sup>40</sup> This financing process through *Mudarabah Sukuk* is described in the Figure 16.

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<sup>39</sup> Musari, "Nanofinance", pg. 74.

<sup>40</sup> Musari, "Cooperative Sukuk", pg. 92, 96-97; Musari, "Nanofinance", pg. 75, 80-81.

**Figure 16**  
**The Structure of *Mudarabah Sukuk* by the Association of Farmer Groups**



**Source:** Economic Sustainability For Islamic Nanofinance Through *Waqf-Sukuk* Linkage Program, 2016, pg. 81



## 5. ROLE OF SUKUK IN SOCIO-ECONOMIC DEVELOPMENT

### 5.1 Socially Responsible Investments

Obtaining social good, encouraging ethical activities, ensuring social welfare and comprehensive development are supported by three biggest religions, which are Judaism, Christianity and Islam, in the world. SRI began with these principles in the 1960s and firstly appeared as investment boycotts such as preventing making business with apartheid government in South Africa and the boycott of the corporations related with Vietnam War. SRI is referred with different names but the most generally it is known as Socially Responsible Investment. Sustainable, Responsible and Impactful Investments and Sustainable and Responsible Investment may be used by some institutions. SRI is an investment, which combines social, environmental, and governance concerns and personal values and takes the impact of these investments on the society and the financial necessities into consideration in other words; it focuses on social problems and requirements. These investments are generally long-term and deal with labor relations, human rights, environmental issues and corporate governance and realized thanks to the investors such as pension funds, religious institutions, university endowments, foundations, asset managers and personal investors. SRI has several strategies. These are positive screening, ethical negative screening, which includes Islamic Law screening), impact, community, ESG (Environmental, social and governance) and sustainability theme investing<sup>41</sup>

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<sup>41</sup> Syed Marwan and Engku Rabiah Adawiah Engku Ali. "The potential of innovative financial tools: Social Impact Bond (SIB) and Sustainable and Responsible Investment (SRI) sukuk, towards the sustainable growth of the Islamic finance industry." *European Journal of Islamic Finance* No. 4 (2016): pg. 4; Michael S. Bennett and Zamir Iqbal, "How socially responsible investing can help bridge the gap between Islamic and conventional financial markets." *International Journal of Islamic and Middle Eastern Finance and Management* Vol. 6, no. 3 (2013): pg. 217; Syed Marwan and Engku Rabiah Adawiah Engku Ali, "Sustainable and Responsible Investment (SRI): trends and prospects." *Muzakarah Penasihat Syariah Kewangan Islam* (2015): pg. 3; Saadiyah Mohamad and others, "Social sukuk: A new mechanism to fund social services." *Journal of Emerging Economies & Islamic Research* Vol. 5, no. 1 (2017): pg. 69-70; Mohammed Obaidullah, "Managing Climate Change: The Role of Islamic Finance." *The Islamic Research and Teaching Institute (IRTI)*, No. 2017-1. (2017): pg. 21; Nor Syahirah Zain and Zulkarnain Muhammad Sori, "An Exploratory Study on *Ijarah* SRI Sukuk for The Development of *Waqf* Properties/Assets in Malaysia." (2017): pg. 3.

There are various SRI financial tools such as Green Bonds, Social Impact Bonds, Vaccine Bonds, and SRI *Sukuk*, which includes Green *Sukuk* and Vaccine *Sukuk*. Green bonds finance the projects that deal with environmental and climate-related issue so, the term Climate Bonds can be used instead of Green Bonds. There is growing interest in these types of bonds and many international institutions have issued these bonds and *sukuk*. For instance, World Bank issued green bond about \$ 440 million, European Investment Bank issued 600 million euro worth bond in order to finance renewable energy projects and IDB issued \$ 1 billion worth Green *Sukuk* to finance clean energy sector. Vaccine Bond and Vaccine *Sukuk* are financial tools that finance the research and development activities for new vaccines to overcome diseases like HIV/AIDS and aims to increase access to vaccines especially the people in poor countries who cannot access the vaccine. When the research is completed, the funds are returned. The International Finance Facility for Immunization issued \$1 billion worth Vaccine Bond in 2006 and same institution issued \$500 million Vaccine *Sukuk*. Social Impact Bond is another widely used SRI financial tool. The goal of this system is providing social services and in this system payment is made according to the performance of studied social outcomes. First Social Impact Bond was Peterborough Social Impact Bond issued in 2010. This bond aims to decrease reoffending rates among short-sentenced convicts and according to the statistic revealed in October 2013 %12 reductions was succeeded in comparison with the %11 increase among ex-convicts. SIB is so popular in Canada and UK, while the terms of Human Capital Performance Bond, Pay for Success Bonds are used in US; Social Benefit Bonds is used in Australia to define SIB.<sup>42</sup>

### **5.1.1 Socially Responsible Investment *Sukuk***

In December 2014, International Finance Facility for Immunization and World Bank issued first SRI *Sukuk* in order to immunize more children especially who lives in emerging countries. It had both social and economic return. In 2015, second SRI *Sukuk*

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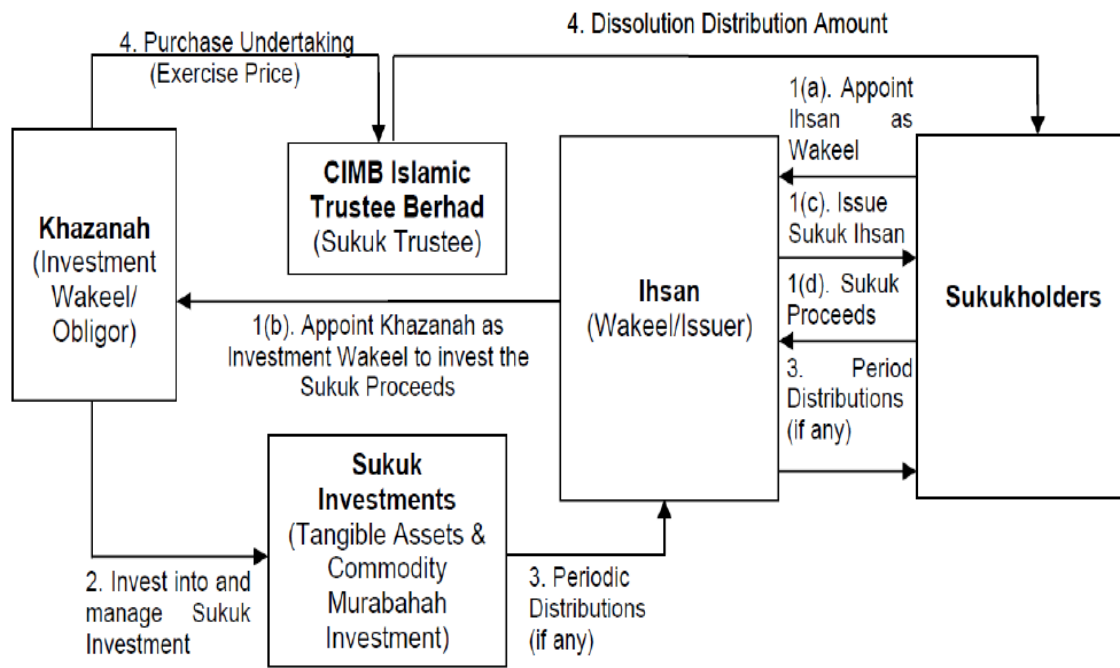
<sup>42</sup> Edward T. Jackson, "Interrogating the theory of change: evaluating impact investing where it matters most." *Journal of Sustainable Finance & Investment* Vol. 3, no. 2 (2013): pg. 96; Marwan and Ali, "SRI", pg. 5-7; Mohamad and others "Social *sukuk*", pg. 74-75.

was issued by Khazanah Nasional Berhad. This *sukuk* was the first SRI *Sukuk* of Malaysia, which is RM100 Million worth with %4,3 profit rate per year and 7 years to maturity, first Malaysian ringgit denominated *sukuk* of the world and possibly the first *sukuk* of the world issued in order to finance education. This *sukuk* was used to fund 20 schools under the umbrella of Yayasan Amir's Trust Schools. Yayasan Amir is one of the non-profit organizations under the umbrella of Khazanah. This foundation works in Malaysia by going into partnership with the Ministry of Education to increase education quality in public schools. Thanks to SRI *Sukuk*, this program reached to more students and schools. SRI *Sukuk* can be used to finance responsible and sustainable investment projects such as the projects that aims to protect natural resources and environment, preserve the using energy, decrease greenhouse gas emission, increase the life quality of the people and encourage proliferation of renewable energy systems and also SRI *Sukuk* can finance the projects which aims economic development like community services, sustainable building projects, public medical and hospital services, urban projects and house projects in order to increase the number of homeowner people.<sup>43</sup> The structure of Ihsan *Sukuk* is described in the Figure 17.

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<sup>43</sup> Syed Marwan Mujahid Azman, and Engku Rabiah Adawiah Engku Ali. "The Potential Role of Social Impact Bond (SIB) and Socially Responsible Investment (SRI) Sukuk as Financial Tools That Can Help Address The Issues of Poverty and Socio-economic Insecurity." (2015): pg. 4, 6; Marwan and Ali, "SRI", pg. 9-10; Mohamad and others "Social sukuk", pg. 71; Obaidullah, "Managing Climate", pg. 16.

**Figure 17**  
**Ihsan Sukuk Structure**



**Source:** Sustainable and Responsible Investment (SRI): trends and prospects, 2015, pg.10

### 5.1.1.1 Green Sukuk

Economic growth in any country results in consuming more energy. So, to provide sustainable development robust and sufficient energy resources are vital. Energy is not considered as fundamental need anymore, it has become a basic human right. However, since the fossil energy resources are limited and dirty - cause high level of carbon dioxide emission, renewable energy investments are seen as alternative solution to continuous energy problem.<sup>44</sup>

However, finding financing for environmental investments is difficult since the

<sup>44</sup> R. Stuart Haszeldine, "Carbon capture and storage: how green can black be?." *Science* Vol. 325, no. 5948 (2009): pg. 1647; Sergio Ricciardi, Davide Careglio, Francesco Palmieri, Ugo Fiore, Germán Santos-Boada, and Josep Solé-Pareta, "Energy-aware RWA for WDM networks with dual power sources." *Communications (ICC), 2011 IEEE International Conference on*, (2011): pg. 1.

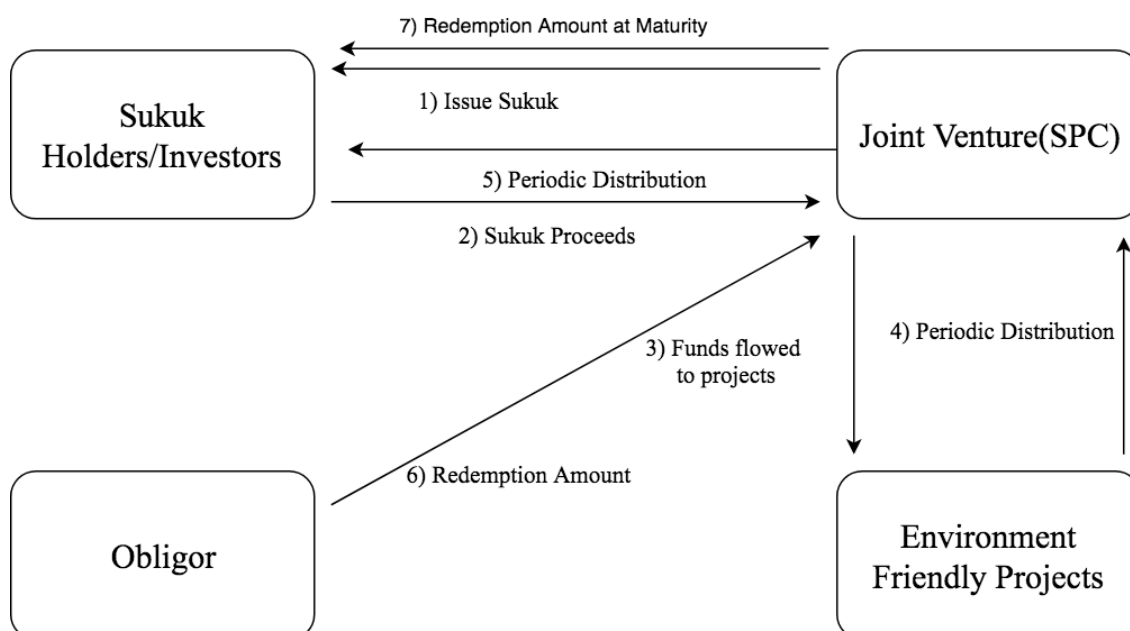
economies of the world face with economic crises and difficulties so many corporations have been seeking for alternative financing instruments to invest in clean energy projects. As one of the environment friendly Islamic Finance instruments, Green *Sukuk* is considered as an alternative avenue for the funding needs both in the long-term and the short-term. Since, Green *sukuk* has lower cost and risk and fits with The Objectives of Islamic Law (*Maqasid al-Shariah*) it attracts both the Islamic sensitive investors and other environmentally sensitive investors to invest in clean energy projects like low-carbon technologies, solar parks, mass transit, wind energy, forestry, electric vehicles, water conservation and light rail projects. Many countries have used green *sukuk* such as Bahrain, Jordan, Indonesia, UAE, UK, Malaysia and France to finance clean energy investments. For instance, One Solar Watt Per Person project in Indonesia, Orasis project in France, sovereign green *sukuk* of Jordan and UK and green *sukuk* issued by the Dubai Supreme Council of Energy and Dubai Clean Energy Business Council. Lots of institutions have become interested in green *sukuk* even new institutions and initiatives have been established for this issue. For example, the institutions like, International Finance Corporation, Islamic Development Bank, Arab Bank for Economic Development in Africa Arab Monetary Fund, Gulf Cooperation Council, the Arab Fund for Economic and Social Development and International Monetary Fund. The Abu Dhabi Vision 2030, the Dubai Integrated Energy 2030 Strategy and The King Abdullah City for Atomic and Renewable Energy are some of the initiatives for clean energy. Moreover, the Green *Sukuk* Working Party (GSWP) have been established by The Gulf Bond and *Sukuk* Association, The Climate Bonds Initiative and Energy Business Council MENA and First Energy Bank has been established in Bahrain to support green *sukuk* issuances in order to solve climate problems by investing on clean technology and renewable energy projects and improving best practices.<sup>45</sup> Sample green

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<sup>45</sup> Zeineb Abdmouleh, Rashid AM Alammari, and Adel Gastli, "Recommendations on renewable energy policies for the GCC countries." *Renewable and Sustainable Energy Reviews* Vol. 50 (2015): pg. 1181-1186; Adel M., V Al Taweel. Ismet Ugursal, and Donnie Boodlal. "Sustainable Management of Climate Change: The Case of the Middle East and North Africa Region." *Renewable Energy and Sustainable Development* Vol. 1, no. 1 (2015): pg. 155; World Bank, "Jordan Economic Monitor The Green Economic Boost " (2017): pg. 37; Paolo Pietro Biancone, and Mohammad Ziad Shakhathreh. "Asset Life Sukuk to Fund Utility Companies." *European Journal of Islamic Finance* No.6 (2017): pg. 1; Raymond Ling Leh Bin, Siti Nurhidayah Mohd Roslen, Salizatul Aizah Ibrahim, Lee Sin Yee, and Tung Soon Theam, "Feasibility Of Green Bonds Issuance In Malaysia Towards Financing A Sustainable Future—A Conceptual Review Of Literatures." *Proceedings of the Global Conference on Business and Economics*

*sukuk* structure is described in the Figure 18 and the Structure of Orasis project is pictured in Figure 19.

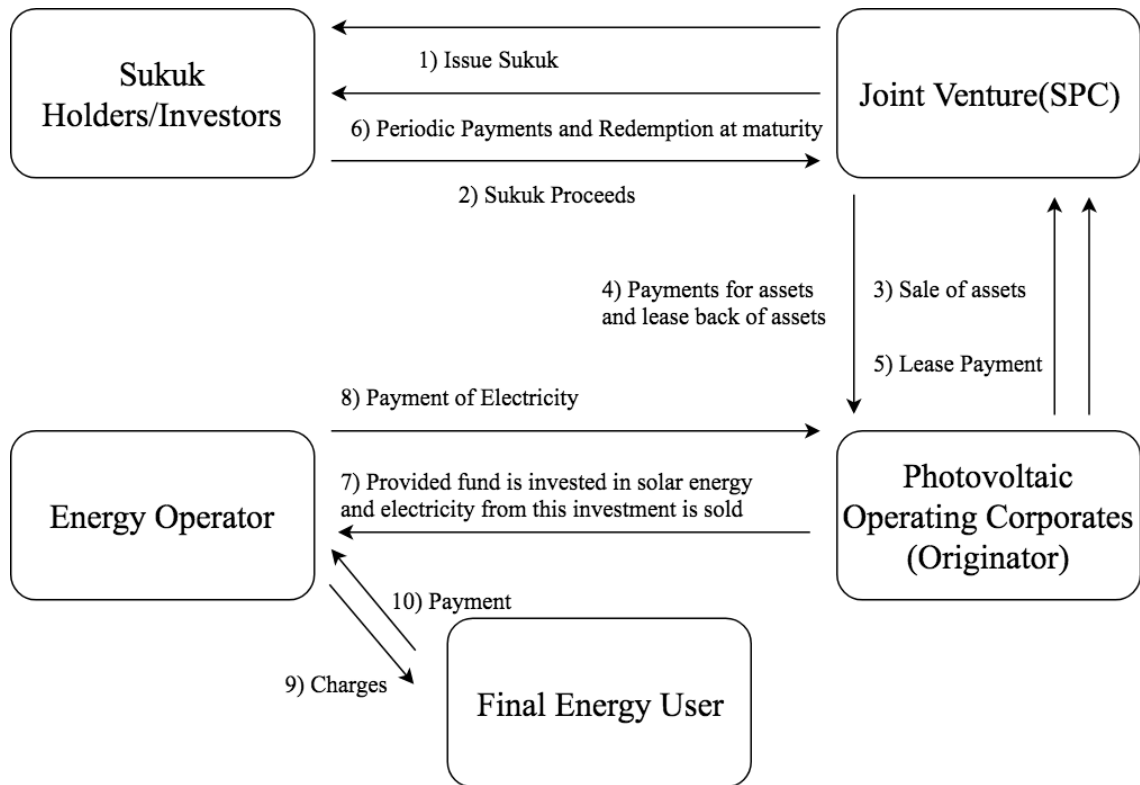
**Figure 18**  
**Green *Sukuk* Structure**



**Source:** Green *Sukuk*: An Innovation in Islamic Capital Markets , 2016, pg. 175, Be Modified

*Research (GCBER)* (2017): pg. 121, 126; Kankana Dubey, Steven Fawkes, Nicholas Howarth, Moncef Krarti, and Padu S. Padmanabhan, "Investing for Energy Productivity in the GCC: Financing the Transition." *King Abdullah Petroleum Studies and Research Center* (2016): pg. 20; Hamed Ghodusi, and Sajjad Khoshroo, "Islamic finance and the energy sector." (2015): pg. 11; Khan, "(Sukuk) in Malaysia.", pg. 501; Umar F. Moghul, and Samir HK Safar-Aly, "Green Sukuk: The Introduction of Islam's Environmental Ethics to Contemporary Islamic Finance." *The Georgetown International Environmental Law Review* Vol. 27 No. 1 (2014): pg. 50, 52-53; Donato Morea, "An innovative model for the sustainability of investments in the wind energy sector." *International Journal of Energy Economics and Policy* Vol. 7 No. 2 (2017): pg. 55-56; Obaidullah, "Managing Climate", pg. 24-25, 31; Tick Hui Oh, Shen Yee Pang, and Shing Chyi Chua, "Energy policy and alternative energy in Malaysia: issues and challenges for sustainable growth." *Renewable and Sustainable Energy Reviews* Vol. 14, no. 4 (2010): pg. 1241; Umar A. Oseni, "Toward a New Socio-Legal Framework for Faith-Based and Socially Responsible Investments." *Islamic Finance and Development* Ed. S. Nazim Ali (Massachusetts: Harvard Law School, 2014): pg. 125; Brit Samborsky, "The Arab State of Renewable Energy: Investigating Progress in Arab Electricity Markets." (Master Thesis, Lunds universitet Internationella miljöinstitutet, 2012), pg. 38, 48-49; Y. C. Sharma and B. Singh, "Development of biodiesel: current scenario." *Renewable and Sustainable Energy Reviews* Vol. 13, no. 6-7 (2009): pg. 1647; Nahed Taher and Bandar Hajjar, "Environmental Concerns and Policies in Saudi Arabia." *Energy and Environment in Saudi Arabia: Concerns & Opportunities*, (Cham: Springer International Publishing, 2014), pg. 54; Marcelina Wieckowska, "The role bonds in financing climate resilient economy." *Copernican Journal of Finance and Accounting* Vol. 2, no. 1 (2013): pg. 153; Nor Razinah Mohd Zain and Engku Rabiah Adawiah Engku Ali, "An Analysis on Islamic Social Finance for Protection and Preservation of Maqāṣid al-Sharī‘ah." *Journal of Islamic Finance (Special Issue)* Vol. 133 (2017): pg. 137-138.

**Figure 19**  
**The Structure of Orais Project**



**Source:** Green *Sukuk*: An Innovation in Islamic Capital Markets , 2016, pg. 180, Be Modified

## 5.2 *Waqf*

Literarily *waqf* can be defined with the words of to stop, to preserve or to prevent. In Islamic Law, it is donation of accumulated wealth by a wealthy person in order to use in charitable activities. Moreover, by the time *waqf* is founded, this asset is considered as property of Allah so it gains perpetuity. It cannot be given as gift or inherited or sold. Thanks to this feature many *waqfs* had life spans longer than 500 years even 1000 years. In *Qur'an* there is an ayah about creation of *waqf* and it is mentioned that “Never will you attain the good [reward] until you spend [in the way of Allah ] from that which you love. And whatever you spend - indeed, Allah is Knowing of it.” Also, in *hadith* according to report of Abu Hurairah(ra’) Prophet Muhamad (pbuh) said “When a man

dies his acts come to an end, except three things, recurring (lasting) charity (sadaqah jariah), or knowledge (by which people benefit), or pious offspring, who pray for him.” The term Sadaqah jariah is also used for *waqf* it means continuous charity. *Waqf* contributes economic sustainability by ensuring sustainable production, consumption, investing, development and distribution. *Waqfs* aim to alleviate poverty by benefiting people with the physical facilities, income generating projects, education and health institutions. For instance, in Bangladesh there are more than 8000 education institutions belonging to *waqf*. Also, in the Western World many popular universities were founded as belongs to *waqf* such as Oxford and Cambridge from UK and Harvard and Yale from USA. Especially, Oxford University was founded upon the Islamic *Waqf* Model. More than 123 000 mosques belong to *waqf* and these mosques serve as educational centers. In Pakistan, Hamdard Foundation studies on herbal medicine by belonging to *waqf*. Many medical centers, clinics, medical establishments, research institutions and social welfare-oriented organizations serve belongs to *waqfs* in India, Bangladesh and Pakistan. In addition, as secondary projects, which finance the primary projects like health and education institutions, many shopping complexes and commercial centers finance *waqfs* by earning income. For example, Baitul Mukarram shopping complex finances large auditorium, national mosque and helps to decrease unemployment by employing many people in Dhaka, Bangladesh. Also physical infrastructure and utilities such as flood control devices, roads, irrigation dams can be built through *waqf* institutions. *Waqfs* are also important for governments by decreasing the expenditures of governments and interest rates and provide better income distribuiton. For instance, in Ottomans welfare activities, education and health are under the responsibilities of *waqfs*.<sup>46</sup>

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<sup>46</sup> Murat Cizakca, “Awqaf in history and its implications for modern Islamic economies.” *Islamic Economic Studies* Vol. 6, no. 1 (1998): pg. 43, 45, 50; Murat Cizakca, “Merging *Waqf* and Sukuk: Should we or Shouldn’t We?.” *Global Waqf Conference* (2016): pg. 1; Magda Ismail Abdel Mohsin, Hisham Dafterdar, Murat Cizakca, Syed Othman Alhabshi, Shaikh Hamzah Abdul Razak, Seyed Kazem Sadr, Thamina Anwar, and Mohammed Obaidullah, “Legal Framework of the Institution of *Waqf*.” *Financing the Development of Old Waqf Properties*, (New York: Palgrave Macmillan, 2016): pg. 1-2; Musari, “*Waqf-Sukuk*”, pg. 4; AbulHasan M. Sadeq, “*Waqf*, perpetual charity and poverty alleviation.” *International Journal of Social Economics* Vol. 29, no. 1/2 (2002): pg. 141, 143-145.



### 5.2.1 Relation between Poverty and *Waqf*

Poverty is one of the huge obstacles in front of human rights. Due to the extreme poverty in the world many people can not access to most basic necessities like health care, sufficient nutritious food, housing, clothing, education, employment and suffer from infrastructural poverty with the lack of infrastructural necessities like electricity, water and roads. The lack of this necessities cause higher child mortality, restlessness and youth insecurity. The main reasons of poverty are low-income, poor health, low education level and high illiteracy rate and infrastructural poverty in other words lack of access to employment, physical facilities and resources. There are two-way causalities between them. Poor people cannot access to education opportunities so, they remain illiterate and have low level of education. In result of illiteracy and low level of education they cannot have well-paid jobs and so they remain poor. Moreover, poverty causes poor health since the lack of medical care, sufficient food, and so their productivity decreases and their poverty continues. Also, low income already means poverty. So, in order to reduce poverty levels, people must have sufficient health care, education and physical infrastructure opportunities. Poverty reduction is one of the most significant challenges for the countries since the great fund requirements to fight poverty. However, IE aims to alleviate poverty by ensuring human well-being and social equity. To get long run and sustainable poverty eradication IE uses various instruments, which solve the funding problems, like *waqf*, *zakat*, micro-finance, nano-finance, SRI, SIB, *sukuk* and their collaborations. From these, especially *waqf* can solve the most basic necessities problem by providing free education, health and employment generation opportunities.<sup>47</sup>

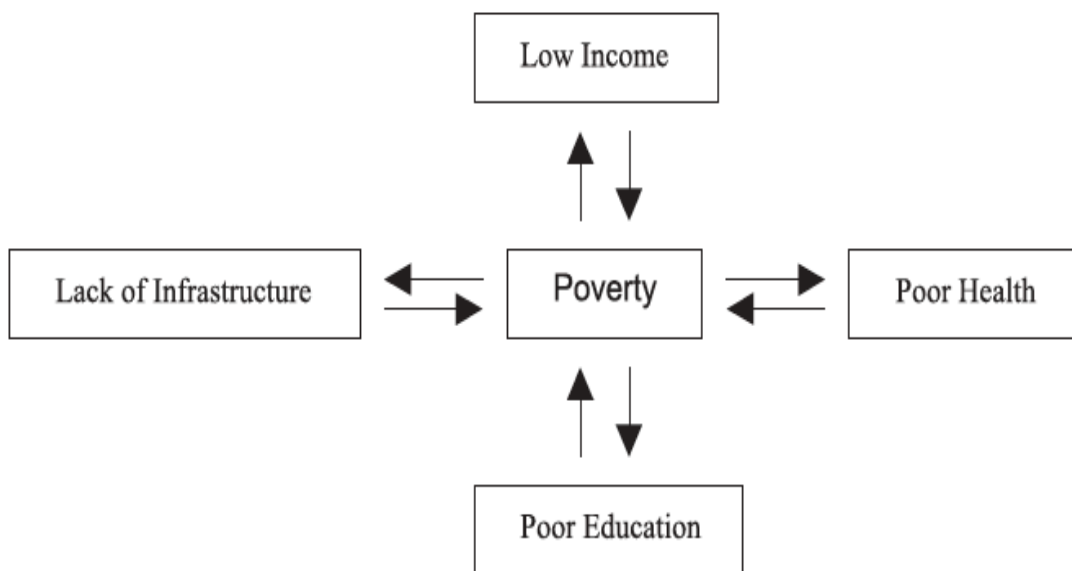
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<sup>47</sup> Rashidah and Dean, "Challenges in microfinance.", pg. 298; Azman and Ali. "SIB and SRI", pg. 1; Obaidullah. "Microfinance", pg. 415, 417; Umar A. Oseni, "Faith-Based Investments", pg. 115; Oshodi, "Poverty in Africa", pg. 5; Platonova, "Social responsibility", pg. 277; Sadeq, "*Waqf* and poverty", pg. 136, 140; Sadiq and Mushtaq, "Sustainable Development", pg. 51; Soylemez, "Sukuk for the Global Infrastructure", pg. 2; Abubakar Sadiq Usman and Rosmaini Tasmin, "The Relevance of Islamic Micro-finance in achieving the Sustainable Development Goals." *International Journal of Latest Trends in Finance and Economic Sciences* Vol. 6, no. 2 (2016): pg. 1117-1119; Fouad H. Beseiso, "Islamic Economics and Happiness Economics a Case Study on the Role of Central Banks in Approaching Human Wellbeing." *International Journal of Islamic Economics and Finance Studies* Vol. 2, no. 3 (2016): pg. 42-43.

At the times, when *waqf* system was strong,

A person could be born in a house belonging to a *waqf*, sleep in a cradle provided by that *waqf*, be educated in the school of the *waqf* and read the books provided by it, become a teacher in the *waqf*'s school, earn a *waqf* financed salary and at his death be placed in a *waqf* provided coffin for burial in a *waqf* cemetery.<sup>48</sup>

**Figure 20**  
**Two-Way Causalities between the Main Reasons of Poverty**



**Source:** *Waqf, perpetual charity and poverty alleviation*, 2002, pg. 136

### 5.2.2 *Waqf-Sukuk*

*Sukuk*, as one of the alternatives, can be used to finance the development of *waqf* to make them more affordable and sustainable. It doesn't only make connection between the non-profit sectors and profit making sectors, but also ensure the development of these sectors and increase efficiency of non-profit sector. *Waqf-Sukuk* helps to improve the abilities of the people live in the poorest segment by providing them health, physical

<sup>48</sup> Murat Cizakca, "Finance and economic development in Islam, historical perspective." *Economic Development and Islamic Finance* Ed. Zamir Iqbal and Abbas Mirakhor (Washington DC, The World Bank, 2013), pg. 135.

facilities and education opportunities. The successful samples of *Waqf-sukuk* system can be seen in Association of Farmer Groups and Awqaf New Zealand. Thanks to these projects, integration was ensured between financial institutions and *waqf* institutions. Moreover real sector and financial sector was also integrated by providing low cost funding to farmers. *Waqf-Sukuk*, by collaborating with micro/nano finance, can provide to finance very micro society without interest rate since based on qardhul hassan. Three main methods can be used in the microfinance *waqf* and *sukuk* collaboration.<sup>49</sup>

#### **5.2.2.1 Mudarabah Waqf-Sukuk**

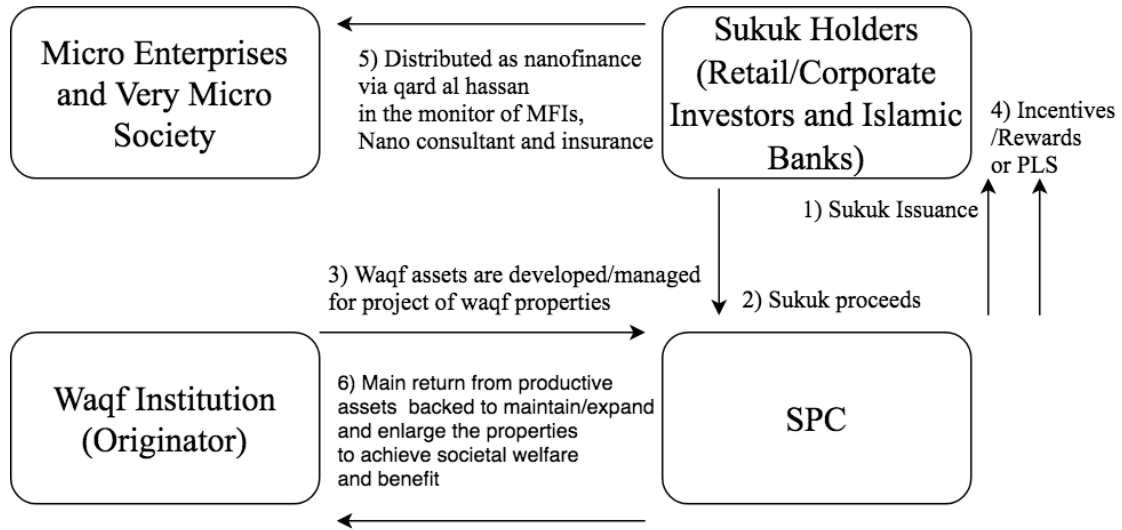
First of all is *Mudarabah Sukuk*. In *Mudarabah Waqf-Sukuk* system as underlying *waqf* asset is used by SPV and project is designed by this company in order to issue *mudharabah sukuk*. The fund of *sukuk* is used to manage this project. The profit gained from this project is disbursed to investors.<sup>50</sup> This process can be seen in the Figure 21.

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<sup>49</sup> Ahmad, Azri, S. bin Muhammad, and MA bin Kamaruzzaman. "Education development through *waqf*." *3rd International Conference on Islam and Higher Education*, Vol. 13 (2012): pg. 18; Musari, "Cooperative Sukuk", pg. 98-99, 101; Musari, "Nanofinance", pg. 73, 75, 83- 88; Khairunnisa Musari, "Redefining The Islamic Nanofinance and Its Institutional Strengthening: Lesson Learned from Asian Countries." (2016c), pg. 13; Musari, "*Waqf-Sukuk*", pg. 3-11.

<sup>50</sup> Musari, "Nanofinance", pg. 84.

**Figure 21**  
**The Structure of Mudharabah *Waqf-Sukuk***



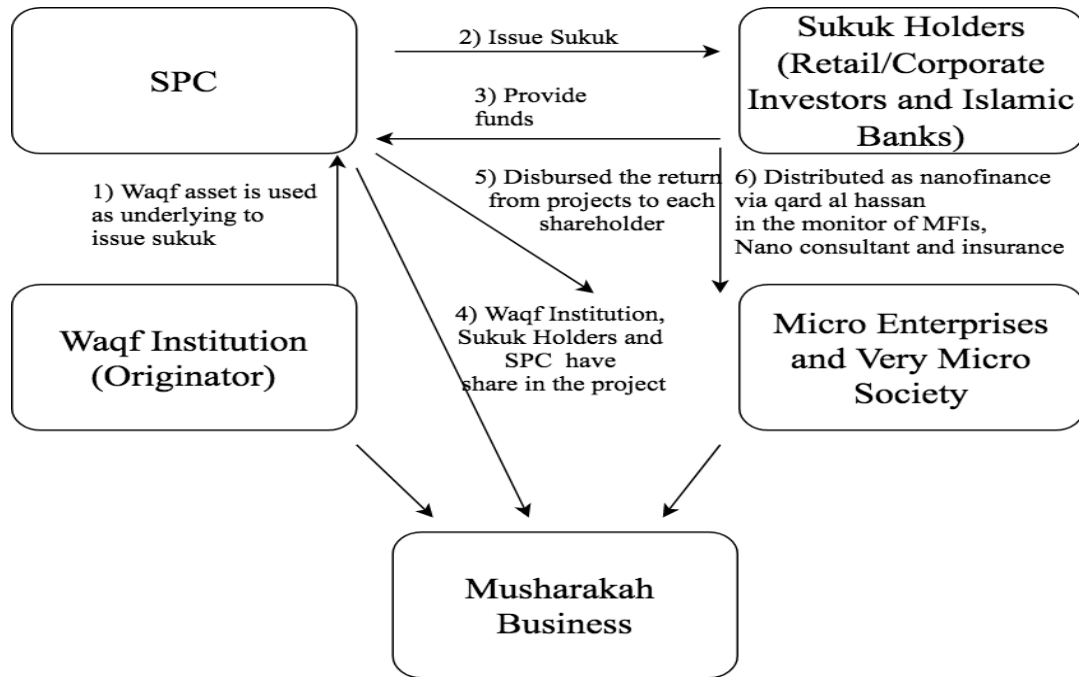
Source: Economic Sustainability For Islamic Nanofinance Through *Waqf-Sukuk* Linkage Program (Case Study In Indonesia), 2016a, pg. 84; *Waqf-Sukuk*, Enhancing The Islamic Finance For Economic Sustainability in Higher Education Institutions, 2016b, pg. 8.

### 5.2.2.2 *Musharakah Waqf-Sukuk*

In *Musharakah Waqf-Sukuk*, SPV used *waqf* asset as underlying for Islamic banks or retail/corporate investor as the supplier of fund. Then, created fund is used in development of project. SPV, The *waqf* institution, corporate/retail investor and Islamic banks have share in the project.<sup>51</sup> Then gained profit is disbursed to share holders. Figure 22 pictured this process.

<sup>51</sup> Musari, “Nanofinance”, pg. 85

**Figure 22**  
**The Structure of *Musharakah Waqf-Sukuk***



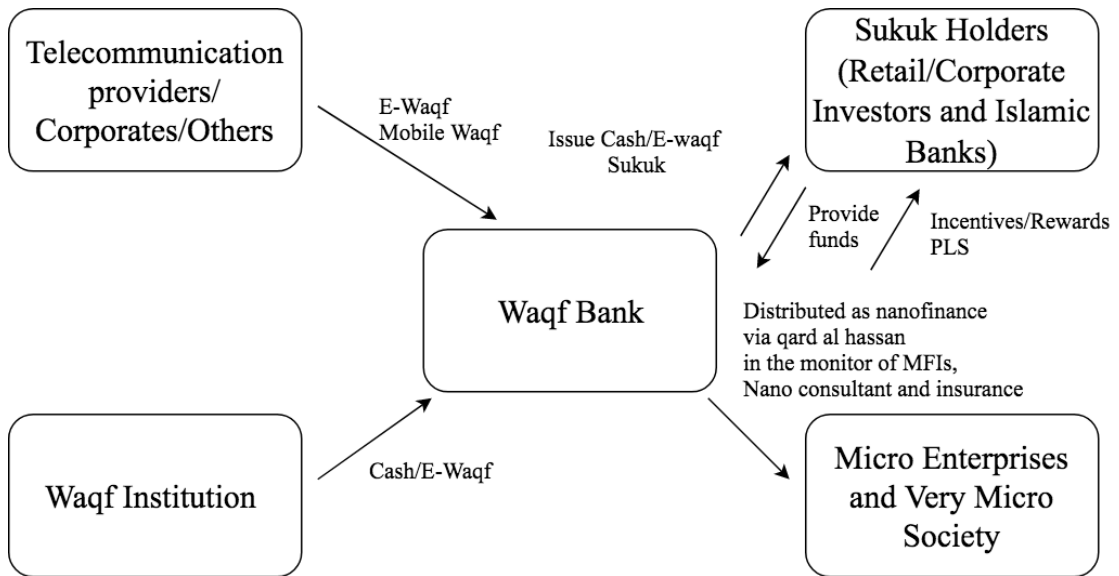
Source: Economic Sustainability For Islamic Nanofinance Through *Waqf-Sukuk* Linkage Program (Case Study In Indonesia), 2016, pg. 85; *Waqf-Sukuk*, Enhancing The Islamic Finance For Economic Sustainability in Higher Education Institutions , 2016b, pg. 9.

### 5.2.2.3 Cash/ E-waqf Sukuk

In the cash/ e-waqf-sukuk system the fund is aggregated from the investors via telecommunication provider (via mobile phones) or waqf institutions. By the time, fund is aggregated it is disseminated among very poor society to meet the emergency necessities of these people. This fund is lent to them based on benevolent loan (qard al hasan) principle. When some loans are repaid it is again lent to another. The cash flow continues perpetually, for losses compensations are provided fluctuations are managed. So the reserve fund is vital for this system. Since the cash is disbursed based on qard al hasan and service charges are in the minimum level. This system is very suitable to

spirit of nanofinance and provides more flexibility than other systems.<sup>52</sup> This structure is described in the Figure 23.

**Figure 23**  
**The Structure of Cash/e-Waqf Sukuk**



Source: *Waqf-Sukuk*, Enhancing The Islamic Finance For Economic Sustainability in Higher Education Institutions , 2016b, pg. 10.

<sup>52</sup> Musari, "Nanofinance", pg. 86.

## 6. CHALLENGES IN SUKUK MARKET

The main challenges in *sukuk* market are noncompliance with Islamic Law and international financial standards. According to Muhammad Taqi Usmani, reputable Islamic scholar, %85 of issued *sukuk* is not compliant with Islamic Law.<sup>53</sup> To overcome the challenges, *sukuk* instrument must be compliant with both Islamic law and international financial standards. To be compliant with Islamic law; mainly *sukuk* must not try to be similar with conventional bonds and then asset-backed system must be used rather than asset-based. Moreover, guarantee of return, transfer of ownership, pricing and tradability issues must be fixed. To be complaint with international financial standards; liquidity, lack of common accounting standard and underdevelopment in Islamic Capital Market problems must be fixed.

### 6.1 Similarity between *Sukuk* and Conventional Bond

The main challenge in *sukuk* market is whether *sukuk* is really an original, different and alternative financing instrument or only replication of conventional bond of western financial system. There is a continuous discussion among Islamic scholars about whether *Sukuk* is an emulation of conventional bond or not. On the one hand, many scholars and institutions like Listing Rules and the Offers of Securities Regulations assert that there is no distinct and significant difference between *sukuk* and conventional bonds and *sukuk* is mimicry of conventional bond and in similar substances despite the forms are different. The main similarities are buying undertaking in equity-based forms, overdue payment penalties and possession status in asset-based operations. Another common features are proceeding as security products that can be predicted and has floating or fixed profit levels, ensuring a risk deduction advantage to create investment diversification, especially when opting for fixed income portfolios, being rated by international rating agencies and tradability in secondary markets. Since, *Sukuk*

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<sup>53</sup> Sayd Farook and Redha Al Ansari, "Sukuk—Unlocking the Potential for Economic Development." *Islamic Capital Markets and Products: Managing Capital and Liquidity Requirements Under Basel III* ed. Simon Archer, and Rifaat Ahmed Abdel Karim (Chichester: John Wiley and Sons, 2018), pg. 59.

inventors aim to create similar structure with the conventional bond, performance of these financial instruments show parallelism. Standard and Poor's drew attention the narrowing difference between conventional bond and *sukuk* in its report in the year 2015 in terms of financial perspective and thanks to this similarity *sukuk* is very popular in the western financial system. Based on these similarities, *sukuk* instruments are generally referred as Islamic Bond in the markets. This reality has been considered by AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions) this institution has begun to take steps to decrease similarity between conventional bond and *sukuk*.<sup>54</sup>

On the other hand, it is claimed that *sukuk* is different from conventional bond by scholars. There are lots of differences, which are mentioned by scholars. Fundamentally, it is "asset-backed security"<sup>55</sup> and it gives its investor an undivided proportion of possession in the underlying project/asset and warranty to acquire return from this project/asset. But, conventional bonds represent merely debt compulsion to

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<sup>54</sup> Nourah Aleshaikh, "A Critical Analysis of Asset-Backed Sukuk from Sharia Perspective and Observed Risk Mitigation Process in Sukuk Structure: A Case Study in Saudi Arabia." (Phd Thesis, Durham University, 2016), pg. 105; Chaker Aloui, Shawkat Hammoudeh, and Hela ben Hamida. "Global factors driving structural changes in the co-movement between sharia stocks and sukuk in the Gulf Cooperation Council countries." *The North American Journal of Economics and Finance* Vol. 31 (2015): pg. 314; Alshamrani. "Sukuk issuance in Saudi Arabia.", pg. 308; Mohammad Elian and Tai Young Taft, "Stock Market Reaction to Debt-Based Securities: Empirical Evidence." *Frontiers in Finance and Economics* Vol. 11 No. 2 (2014): pg. 51; Hassan Scott Odierno, "Investments in Takaful", pg. 123; Mustafa Mohd Hanefah, Akihiro Noguchi, and Muhamad Muda. "Sukuk: Global Issues and Challenges." *Journal of Legal, Ethical and Regulatory Issues* Vol. 16, no. 1 (2013): pg. 112; Ibrahim, Mansor H. "Issues in Islamic banking and finance: Islamic banks, Shari'ah-compliant investment and sukuk." *Pacific-Basin Finance Journal* Vol. 34 (2015): pg. 190; Mohamad, Salah, Mokhtar, Alwi and Faigah, "Islamic Finance as a New Source of Infrastructure Financing.", pg. 8; Syed Faiq Najeed, Obiyathulla Bacha, and Mansur Masih, "Does a held-to-maturity strategy impede effective portfolio diversification for Islamic bond (sukuk) portfolios? A multi-scale continuous wavelet correlation analysis." *Emerging Markets Finance and Trade* Vol. 53, no. 10 (2017): pg. 2385; Jhordy Kashoogie Nazar, "Regulatory and financial implications of sukuk's legal challenges for sustainable sukuk development in islamic capital market." *Ethics, Governance and Regulation in Islamic Finance* Ed. Hatem A. El-Karanshawy, Azmi Omar, Tariqullah Khan, Salman Syed Ali, Hylmun Izhar, Wijdan Tariq, Karim Ginena, and Bahnaz Al Quradaghi Vol. 4 (2015): pg. 137; Hotman Tohir Pohan, "Sukuk in Indonesia: a case study issuance of corporate Sukuk in capital market of Indonesia." *Islamic Economic and Finance Trisakti International Business School Jakarta* (Phd Thesis, Trisakti International Business School, 2011), pg. 21; Houcem Smaoui and Mohsin Khawaja, "The determinants of Sukuk market development." *Emerging Markets Finance and Trade* Vol. 53, no. 7 (2017): pg. 1507; Ahmet Ulusoy and Mehmet Ela. "Lack of Standardization in Sukuk Market." *Journal of Islamic Economics, Banking and Finance*, Vol 13, No. 1 (2017): pg. 161; Hans Visser, "Islamic finance: aims, claims and the realities of the market place." Arab Financial Forum, (2012): pg. 34

<sup>55</sup> Ayman H. Abdel-Khaleq and Christopher F. Richardson, "New horizons for Islamic securities: emerging trends in sukuk offerings." *Chicago Journal of International Law* Vol. 7 No.2 (2006): pg. 409.



pay *riba* to investor from issuer. Maturity of *sukuk* is based on underlying asset however; maturity of conventional bond is based on financial agreement whose objective is only earning money from money. *Sukuk* certificates are arranged as permissible according to Islamic Law (*Shariah*), but conventional bond is not related with Islamic Law. In *Sukuk* there is no guaranteed return and only expected profits are revealed but the return of conventional bond is fixed which is *riba*. *Sukuk* prices are determined by market and based on the market value of underlying asset but price of conventional bonds are determined according to creditworthiness of issuer and not based on any asset. Underlying asset of *sukuk* could not be related with pork-related business, tobacco, gambling and *riba*, which are haram (banned) in *Shariah* (Islamic Law). There is not underlying asset in conventional bond and *riba* (interest) is the foundational basis of this instrument<sup>56</sup> Differences between *sukuk* and conventional bond are summarized in the Figure 24.

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<sup>56</sup> Nanaeva, "Sukuk and bonds", pg.10; Al-Sayed, "Sukuk risk", pg. 70; Farook and Ansari, "Sukuk for Development", pg. 49; Sharif M. Abu Karsh, "Social Responsibility by Islamic Banks in Palestine." *International Journal of Business and Social Science* Vol. 7 No.6 (2016): pg. 105; Kholid, Muhamad, Raditya Sukmana, and Kamal Abdul Kareem Hassan. "Waqf through sukuk al-intifa'a: A proposed generic model." (2009): pg. 4; Omar, Abduh and Sukmana, "An Overview of Sukuk", pg. 80-81; Sweder Van Wijnbergen and Sajjad Zaheer. "Sukuk defaults: On distress resolution in Islamic Finance." Tinbergen Institute Discussion Paper, No. 13-087/VI/ DSF57 (2013): pg. 6; Vishwanath and Azmi. "Islamic bonds.", pg. 61.

**Figure 24**  
**Differences between *Sukuk* and Conventional Bonds**

<b>Sukuk</b>	<b>Bonds</b>
Possession right on underlying assets	Merely represents debt obligation
Maturity of sukuk based on underlying asset	Maturity is based on financial arrangement
In accordance with Islamic Law(Shariah)	Conventional bond is not related with Shariah
Prices are based on market value of underlying asset	Prices based on creditworthiness of issuer
Includes risk sharing	No risk sharing
No guaranteed profit only expected profit	Return of bonds are fixed which are riba(interest)

Source: *Sukuk Securities: New Ways of Debt Contracting* , 2014, pg. 18, Be Modified

## **6.2 Asset-based or Asset-backed**

Second main challenge in *sukuk* market is whether *sukuk* is designed on asset-based or asset-backed structure. First of them is asset based *sukuk*. In this method, real sale is not present. Only from juridical side, transfer of assets to SPV from the obligor and the profits are realized, which are disseminated to *sukuk* investors, are not gained directly from the underlying asset. Moreover, on underlying assets *sukuk* investors couldn't have recourse and these assets are only written on the balance sheet of beneficiary and the beneficiary has only the beneficial possession of these assets so, the *sukuk* investor also don't have the possession claims on the underlying assets and cannot sell these assets to others. The only assurance is the purchase commitment of SPV, which is given by the obligor, and the trustworthiness of the obligor. There is only a commitment in words which means wa'd in Arabic language. Due to the fact that asset based *sukuk* have these characteristics, this type of *sukuk* has high risk and defined as the financial

instrument which is not trustworthy. On the other hand, asset-backed *sukuk* is differentiated much from asset-based *sukuk*. In this method there is real transfer of the assets and the obligor can gain again the underlying assets from SPV. If default is occurred, *sukuk* investors have determined warranty of possession and can use these assets. These assets are not taken a part in the financial statement of the obligor and revocation to the obligor is impossible. However, although the asset backed *sukuk* has lower risk and in conformity with objectives of Islamic Law (*Maqasid al Shariah*), asset based *sukuk* is more popular in global *sukuk* market since the invention of the *sukuk* instrument. The first sovereign *sukuk* of the Malaysian government was the asset-based *sukuk* in 2002. The reasons of this high demand are the lower costs of transactions and the guarantee of the return. In asset backed *sukuk* there is no specific profit promise, there is only PLS (profit-loss sharing) from the project, which is funded by *sukuk*. The high-risk profile of the asset-based *sukuk* is demonstrated in 2007-2008 global financial crises. In these years all of asset-based *sukuk* securities couldn't give back the principals and the profits.<sup>57</sup> Differences between asset-based and asset-backed *sukuk* are summarized in the Figure 25.

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<sup>57</sup> Obiyathulla Ismath Bacha and Abbas Mirakhor. "Sukuk and Sukuk Markets" *Islamic capital markets: A comparative approach*. (Singapore: John Wiley and Sons, 2013): pg. 195-196; Mohammad Omar Farooq and Mohammed Salim, "Conceptualization of the Real Economy and Islamic Finance: Transformation Beyond the Asset-Link Rhetoric." (2017), pg. 2; Locke and Foo. "The impact of Islamic Debt", pg. 56; Rafisah Mat Radzi, and Mervyn K. Lewis. "Religion and the clash of "ideals" and "realities" in business: The case of Islamic bonds (sukuk)." *Thunderbird International Business Review* Vol. 57, no. 4 (2015): pg. 296-297; Muhamed Zulkhibri, "A synthesis of theoretical and empirical research on sukuk." *Borsa Istanbul Review* Vol. 15, no. 4 (2015): pg. 243-244.

**Figure 25**  
**Differences between Asset-based and Asset-backed *Sukuk***

	Asset-Backed <i>Sukuk</i>	Asset-Based <i>Sukuk</i>
Issuer	SPV	SPV
Obligor	SPV	Originator
Process	Securitisation of underlying assets	Securitisation of rights to cash flows from underlying assets
Characterisation	Based on ownership of underlying assets	Based on rights to cash flows
Sources of payment	The income generated by the underlying assets owned by the investors	The income generated by the underlying assets still legally owned by the originator as obligor
<i>Sukuk</i> holder's ownership	Legal ownership with right to dispose of underlying assets	Beneficial ownership with no right to dispose of underlying assets
Recourse	<i>Sukuk</i> holders have no recourse to the originator (recourse only to underlying assets)	<i>Sukuk</i> holders have recourse only to the obligor (originator) if there is a shortfall in payments or other default

Source: *Sukuk—Unlocking the Potential for Economic Development*, 2018, pg. 59

## 6.3 Compliance with Islamic Law

### 6.3.1 Guarantee of Return

One of the challenges in *Sukuk* Market is guarantee or promise of return. Promise of return is one of the main integral parts of *riba* so this is haram in Islam. Only expected profit can be revealed and profit is gained in accordance with performance of related project. Guarantee of return can be realized with different ways. Firstly recovering shortfalls by providing loans when gained profit can not reach to expected profit. In this method, there is a sale linked to credit and this is banned in Islam with the sayings of Prophet (pbuh). He said that a sale and a credit are not permissible. Only creating a reserve account to absorb future risks is permissible. Redeeming capital of *Sukuk* investors at face value instead of market value and purchase guarantees in order to expand credit size are another problems.<sup>58</sup>

<sup>58</sup> Hanefah, Noguchi and Muda. "Sukuk: Global Issues and Challenges.", pg. 112-113; Farook and Ansari, "Sukuk for Development", pg. 59-60.

### 6.3.2 Transfer of Ownership

Another problem in *sukuk* market is transfer of ownership. One doubtful issue in transfer of ownership is, sale of assets from originator to SPV for temporary period. According some scholars this is not a true sale and not compliant with the IFRS and discussed in IASB (International Accounting Standard Boards). Other issue is about SPV. Must SPV be independent entity or part of originator company? If SPV is part of originator then, asset value of this entity must be calculated to show fair value at the end of period in compliance with AAOIFI and IFRS and this entity must take part in the group accounts. If SPV is independent then, again the transferred assets must be calculated at fair value in conformity with Islamic Law. Furthermore, since one more than transaction in one financial arrangement is not allowed, sale-leaseback is banned in Islam. SPV is required for this reason as a third party. However in *ijarah sukuk*, when *sukuk* is matured purchase undertaking of the rented asset at nominal value is allowed.

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### 6.3.3 Pricing and Valuation

The main problem in pricing issue is the lack of distinct valuation model and Islamic benchmark rate for *sukuk* securities. Instead of this, western benchmark rates like LIBOR (London Interbank Offered Rates), US Treasuries, mid-swaps, EURIBOR (Euro Interbank Offered Rate) are used to calculate value of them. Since these are *riba*-based mechanisms, pricing of *sukuk* securities are not desirable for the Islamic Law. Using these benchmarks cause that changes in interest rates affect *sukuk* pricing. Increasing interest rates make *sukuk* more costly for issuers. Nevertheless, since return rates are risen, demand for *sukuk* increases, liquidity drops and prices rise. Since *sukuk* prices are

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<sup>59</sup> Dodik Siswanto, "Sharia accounting standard for sukuk (Islamic bond) accounting in Indonesia." *Journal of Islamic Accounting and Business Research* 9, no. 3 (2018): pg. 436-437, 439-440; Hanefah, Noguchi and Muda. "Sukuk: Global Issues and Challenges.", pg. 116; Farook and Ansari, "Sukuk for Development", pg. 59-60.

affected from interest rates, prices may not represent real prices. So, in order to create real prices, *sukuk* must have independent pricing mechanism.<sup>60</sup>

### **6.3.4 Tradability**

According to AAOIFI, to be tradable *sukuk* investors must have all the obligations and rights of possession on related assets. These assets may be in form of usufructs, services or tangible assets. The possession of related assets must not be shown as belong to manager or seller. Moreover, *sukuk* can not be issued based on debts of receivables and non-financial assets like *salam*, *murabaha* and *Istisna* must not be more than %50 of underlying assets.<sup>61</sup>

## **6.4 Compliance with International Financial Standards**

### **6.4.1 Liquidity**

Sufficient liquidity is so crucial to prevent future financial risks. Low number of investors, buy and hold behave low supply and high demand *sukuk* issuances cause liquidity problem in *sukuk* market. Although there are non-interest sensitive investors in *sukuk* market, most of the investors are sharia-complaint investors and the number of them is low. It causes lack of market depth and lack of great number of issuances and supply cannot reach the demand, oversubscription and low liquidity comes true. Figure 26 shows that demand to *sukuk* certificates always has been higher than supply and will remain higher in the future. Furthermore, %70 of *sukuk* investors doesn't sell their certificates till maturity and secondary market remains weak and illiquidity occurs.<sup>62</sup>

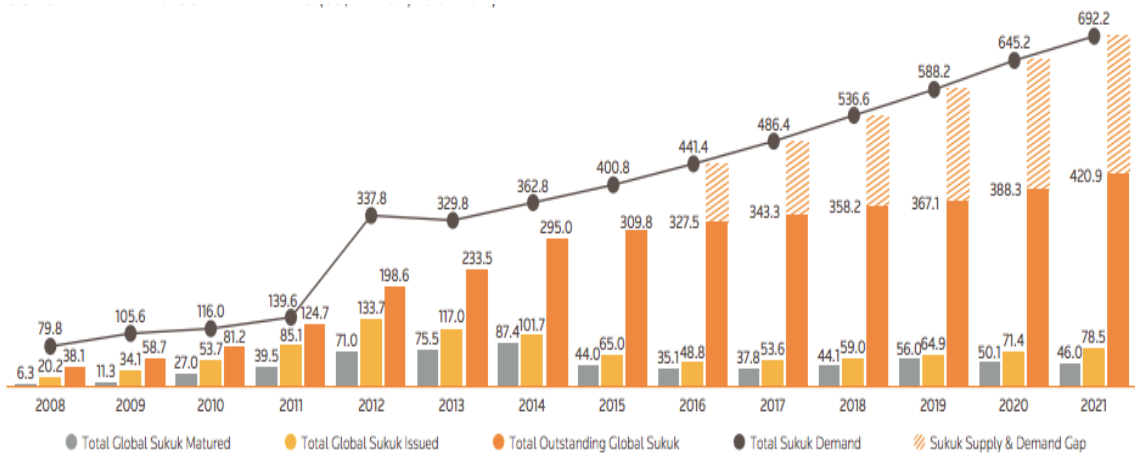
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<sup>60</sup> Siswantoro, "Sukuk (Islamic bond) accounting in Indonesia.", pg. 436; Mohammed Sawkat Hossain, Md Hamid Uddin, and Sarkar Humayun Kabir, "Sukuk as a Financial Asset: A Review." *Academy of Accounting and Financial Studies Journal* Vol. 22 (2018): pg. 13; Hanefah, Noguchi and Muda. "Sukuk: Global Issues and Challenges.", pg. 113-115; Farook and Ansari, "Sukuk for Development", pg. 50, 60, 65.

<sup>61</sup> Farook and Ansari, "Sukuk for Development", pg. 55, 60, 284.

<sup>62</sup> Essia Ries Ahmed, Md Aminul Islam, and Tariq Tawfeeq Yousif Alabdullah, "Islamic Sukuk: pricing mechanism and rating." *Journal of Asian Scientific Research* Vol. 4, no. 11 (2014): pg. 644; Hossain,

**Figure 26**  
**Demand and Supply Levels of *Sukuk* between 2008-2021**



Source: “*Sukuk Perceptions and Forecast Study. ‘Poised for Growth’*”, 2017, pg. 75.

#### 6.4.2 Lack of Common Accounting Standard

Lack of common accounting standard is one of the biggest challenges in Islamic financial system. AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions) was established in Bahrain in the year 1990 in order to bring standardization to IFIs (Islamic Financial Institutions). Lots of countries adopted this accounting treatment. However, when IFRS (International Financial Reporting Standards) was established in 2000 many countries gave up AAOIFI and adopted IFRS. IFRS based on western *riba*-based accounting standard and have not special part for Islamic banking so is not compliant with Islamic Law. Indonesia created its own accounting standard based on AAOIFI. Nowadays, many Islamic banks in different countries use different accounting treatments. Countries, which have Islamic banks, must begin to use common accounting standard as soon as possible otherwise credibility

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Uddin and Kabir, “*Sukuk as a Financial Asset*”, pg. 9; Farook and Ansari, “*Sukuk for Development*”, pg. 50, 53, 65-67.

of Islamic financial instruments may drop and enhancing of *sukuk* market may be limited.<sup>63</sup>

#### **6.4.3 Rudimentary Capital Markets and Insufficient Academic Literature**

Rudimentary Islamic capital markets and insufficient academic literature is another weak side of *sukuk* instrument. Because, if we compare *sukuk* with conventional financial instruments, it can be seen that *sukuk* is highly new financial instrument and at early stage of its development. *Sukuk* has no abundant historical data and academic studies and institutions are limited. Pricing valuation model and distinct Islamic financial benchmark could not be developed. Even, there is no single authority on accounting standards.<sup>64</sup>

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<sup>63</sup> Siswantoro, “Sukuk (Islamic bond) accounting in Indonesia.”, pg. 435, 437, 438-439, 447; Hossain, Uddin and Kabir, “Sukuk as a Financial Asset”, pg. 11.

<sup>64</sup> Hossain, Uddin and Kabir, “Sukuk as a Financial Asset”, pg. 9-10; Obiyathulla Ismath Bacha and Abbas Mirakhor. “Islamic Capital Markets and Development” *Economic development and Islamic finance*. Ed. Zamir Iqbal and Abbas Mirakhor .Washington DC: World Bank Publications, 2013, pg. 268.



## 7. CONCLUSION

There is no doubt that the world has a great need for a new and alternative economic order. Islamic Economics began with the claim of offering an alternative economic system and still follows this goal. Islamic Finance and IBFIs are the practical face of IE. *Sukuk* instrument is one of the most important financing instruments in Islamic Finance and like IE, *sukuk* instrument is also claimed to be one of the alternative financing instruments. However, current implementation of *sukuk* instrument is neither completely in compliance with Islamic Law nor international financial standards. Furthermore, it is far from the ideals of IE which are determined by *Maqasid al Shariah* (The Objectives of Islamic Law), therefore, *sukuk* instrument can not be an alternative financing instrument unless it meets the mentioned requirements. To be an alternative-financing instrument, firstly it must be in compliant with Islamic Law and international financial standards. Then, it must follow the spirit of *Maqasid al-Shariah*. For this, firstly, resembling effort to conventional bond must be given up. Secondly, asset-backed *sukuk* must be used instead of asset-based *sukuk*. Thirdly, the main partnership methods like *Musharakah* and *Mudarabah* must be preferred more in *sukuk* issuance. Fourthly, *sukuk* must be utilised for financing the socio-economic development with the instruments like SRI *Sukuk*, *waqf-sukuk* and microfinance collaborations more. Fifthly, *sukuk* must be employed to finance infrastructure investments more. Savings in the countries must finance the investments. However, in the current financial system extraordinary amounts of money are flowed far from real sector. Since *Sukuk* instrument is claimed to be an alternative financing instrument, it must follow the spirit of IE and must be used to finance real sector instead of flowing in financial system. There are some *sukuk* instruments, which follow the spirit of IE, and especially these instruments are mentioned in the thesis. For instance, there are samples of *Musharakah* and *Mudarabah Sukuk* and *sukuk* has been used for financing infrastructure investments in some countries and there are some social projects, which are funded by *sukuk*. However, the ideal projects, which are funded by ideal *sukuk* instruments, are low and number of ideal *sukuk* structures must be increased.

For this thesis quite number of articles was examined however, the form of this thesis has lots of deficiencies and subjective ideas were used. Researchers can make research on the question of can *sukuk* be transformed to unit of currency.



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<b>Çalıştığı Kurum/lar</b>	<b>Başlama - Ayrılma Yılı</b>	<b>Çalışılan Kurumun Adı</b>
1.		
2.		
3.		
<b>Üye Olduğu Bilimsel ve Mesleki Kuruluşlar</b>		
<b>Katıldığı Proje ve Toplantılar</b>		
<b>Yayımlar:</b>		
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