

**Sukuk's Role in Infrastructure Financing Projects:  
Case of Malaysian DanaInfra Sukuk**

دور الصكوك في تمويل مشاريع البنية التحتية: حالة صكوك "دانا إنفرا" الماليزية

**Dr. Ahmed MEDANI<sup>1</sup> . Dr. Hakim BERRADIA<sup>2</sup>**

1 Hassiba Benbouali University of Chlef, Algeria.a.medani@univ-chlef.dz

2 Jouf University, K.S.A.hmberradia@ju.edu.sa

Received:19/05/2019

Accepted: 01/06/2019

Published:01/06/2019

**Abstract:**

While continued improvement in sukuk market, governments or sovereign bodies are expected to continue in promoting sukuk issuance and encouraging issuers to use Sukuk to finance infrastructure projects, and Malaysia is one of the first countries to develop the infrastructure industry by using Sukuk, and it has a leading global experience in this field. Wherefore, This research paper discusses the role of sukuk in infrastructure financing whith referring to the Malaysian experience as a successful global experiment it can be followed by many Arab and western countries.

**Keywords:** Sukuk, Infrastructure ; Financing ; DanaInfra Sukuk

**Jel Classification Codes :** G23; H54

ملخص:

في ظل استمرار التحسن في سوق الصكوك، يُتوقع أن تستمر الحكومات أو الهيئات السيادية في دفع إصدارات الصكوك وتشجيع الشركات المصدرة للصكوك المستخدمة في تمويل مشاريع البنية

التحتية، وتأتي ماليزيا في طليعة الدول التي قامت بتطوير صناعة البنى التحتية باستخدام الصكوك الإسلامية، ولها تجربة رائدة في هذا المجال. لذلك تسعى هذه الورقة البحثية إلى توضيح دور الصكوك الإسلامية في تمويل مشاريع البنية التحتية بالإشارة إلى التجربة الماليزية كتجربة عالمية ناجحة يمكن الإقتداء بها من طرف عديد الدول العربية والغربية.

كلمات مفتاحية: الصكوك؛ البنية التحتية؛ التمويل؛ صكوك دانا إفرا.

تصنيف JEL : H54؛G23 .

Corresponding author: Full name, e-mail: [a.medani@univ-chlef.dz](mailto:a.medani@univ-chlef.dz) .

## 1. INTRODUCTION :

The infrastructure development is one of the most important elements in achieving national development goals. With the availability of infrastructure and other public facilities, basic human needs, both economically and socially, can be met properly.

The 10th Malaysia Plan (2011–2015) continues the emphasis of prior plans on infrastructure investment. New initiatives include a facilitation fund intended to catalyze private investment in strategic areas, and a shifting of more of the risks from PPPs to the private sector through competitive bidding on toll highway and IPP projects. Building physical infrastructure, which includes a focus on transportation, rail development, maritime infrastructure, and airport development.

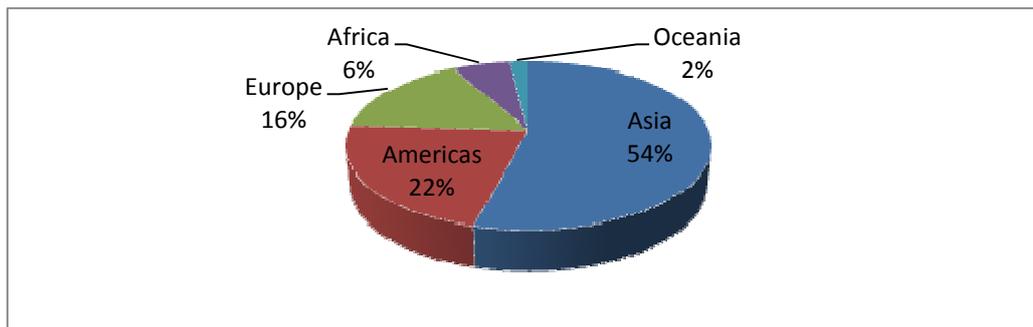
The aim of the paper is to explore the role of funding infrastructure in Malaysia through Sukuk. The methodology consists of estimating infrastructure funding requirements in Malaysia, understanding development and status of Islamic finance in global context, exploring basics of Islamic banking system

along with its various financial instruments especially Sukuks as well as identifying challenges and the way forward, with a case study of DanaInfra Sukuk.

## 2. Overview of the Infrastructure Industry :

The World Bank estimated total global value of infrastructure investments at USD17 trillion in 2013 (Nik Mohamed Din, 2015, 02), while he estimate global infrastructure investment needs to be \$94 trillion between 2016 and 2040. To meet this investment need, the world will need to increase the proportion of GDP it dedicates to infrastructure to 3.5%, compared to the 3% expected under current trends (PwC and Oxford Economics, 2017, 03) (See figure N°01).

**Fig. 1. Size of Global Infrastructure Market by Region (2016-2040)**



**Source :** Prepared by the researcher based on: PwC and Oxford Economics, Global Infrastructure Outlook, July 2017, p : 3-4.

The global infrastructure market has been performing well in 2015, and the market statistics, according to the 2016 Preqin Global Infrastructure Report - Sample Pages, were as shown in the following table:

**Table 1. Key Stats about global Infrastructure industry in 2015**

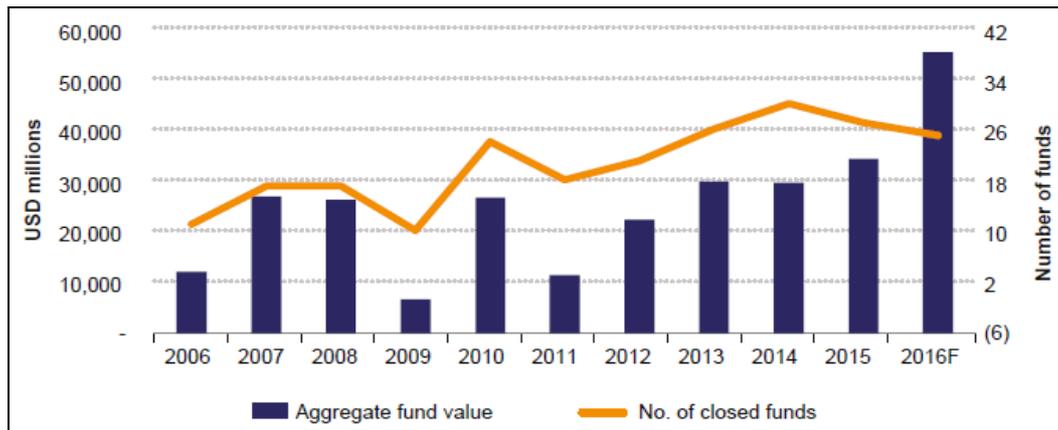
<b>Infrastructure Highlights</b>
<ul style="list-style-type: none"> <li>• \$349bn : Estimated aggregate deal value of the 661 infrastructure deals completed globally in 2015.</li> <li>• \$22bn : Total capital distributions in H1 2015. Momentum continues</li> </ul>

<p>from the record distributions seen in 2014.</p> <ul style="list-style-type: none"> <li>• 46 : Number of unlisted infrastructure funds that reached a final close in 2015, securing an aggregate \$36bn.</li> <li>• £18bn : Value of the largest deal completed in 2015, the partnership to construct Hinkley Point C Nuclear Power Station.</li> </ul>
<p><b>Investor Satisfaction</b></p>
<ul style="list-style-type: none"> <li>• 76% : Proportion of investors that feel infrastructure investments have met or exceeded their expectations.</li> <li>• 56% : Proportion of surveyed investors that have a positive perception of infrastructure, four-times the proportion that have a negative perception (14%).</li> </ul>
<p><b>Capital Concentration</b></p>
<ul style="list-style-type: none"> <li>• 52% : Proportion of total capital raised in 2015 secured by the six largest funds to close.</li> <li>• \$858mn : Average size of an unlisted infrastructure fund closed in 2015, a record high.</li> </ul>
<p><b>Competition for Assets</b></p>
<ul style="list-style-type: none"> <li>• \$108bn : Amount of dry powder held by infrastructure firms, an all-time high.</li> <li>• 52% : Proportion of surveyed fund managers stating that finding attractive investment opportunities is their biggest challenge over 2016.</li> </ul>
<p><b>Deal Flow</b></p>
<ul style="list-style-type: none"> <li>• \$528mn : Average deal value increased to an all-time high in 2015.</li> <li>• 295 : The renewable energy sector had the highest number of deals in 2015.</li> </ul>

Source : The 2016 Preqin Global Infrastructure Report - Sample Pages, New York, p : 07.

In the decade since the Global Financial Crisis, more than US\$200bn (see figure 02) has been raised by investment funds to deploy long term capital into infrastructure investments. It is estimated that at least the same amount again has been allocated to infrastructure by organisations seeking to invest directly rather than through investment funds. Typically, these organisations will be major pension, insurance and sovereign wealth funds; all of whom have needs for long-term investments.

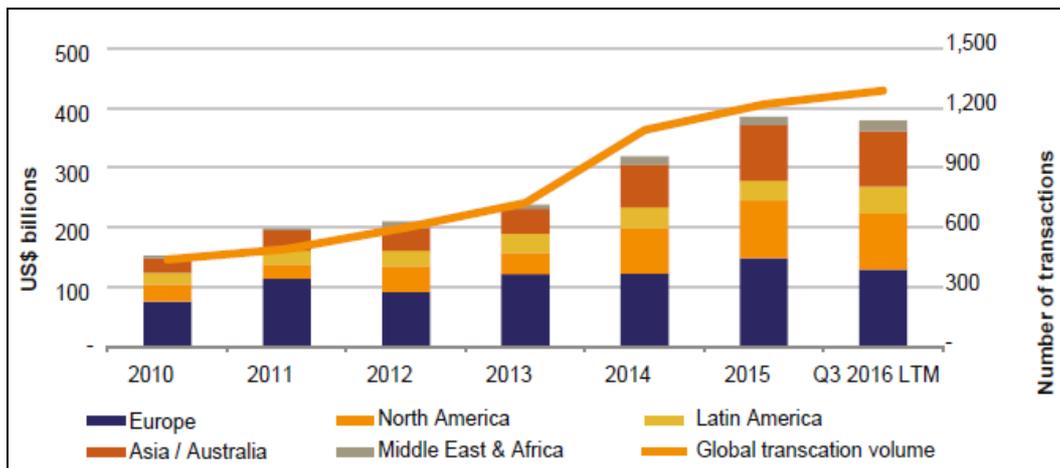
**Fig .2. Global unlisted infrastructure fundraising (2006-2016)**



Source : PwC and GIIA (2017). «Global infrastructure investment : The role of private capital in the delivery of essential assets and services ». P : 10.

The creation of these specialist vehicles and teams has, unsurprisingly, led to a sharp rise in the volume and value of infrastructure transactions over the last decade (see figure 3), and a significant rise in asset valuations<sup>13</sup>, as acquirers have accepted lower returns on their investments.

**Fig.3. Global infrastructure transaction activity (2006-2016)**



Source : PwC and GIIA. Op.cit. P : 10.

A McKinsey study in June 2016 estimated that USD3.3 trillion needs to be invested each year to 2030 in order to support current growth rates. A 2011 OECD study also concluded that "increased private sector investment in strategic transport infrastructure will be essential" (PwC and GIIA. 2017, 09).

### 3. Sukuk market overview and the need to issue them :

#### 3.1. Size of the Islamic financial industry globally :

The global Islamic financial services industry reached an overall total value of USD1.88 trillion as of 2015 YTD (see Table 02), weathering a series of economic challenges ranging from prolonged low energy prices and downwardly revised economic growth outlook, to geopolitical conflicts, exchange rate depreciations and an assets sell-off spree in emerging markets. There was a marked change from the double-digit growth rates of recent years. In comparison to values reported in the previous IFSB Islamic Financial Services Industry (IFSI) Stability Report 2015, by sector, the global *sukūk* outstanding (based on par value at issuance) has declined by 1.4% to USD290.6 billion, while Islamic funds' assets have contracted by 6.3% to USD71.3 billion. In contrast, the *takāful* sector is estimated to have expanded by 8.4% to USD23.2 billion, while the dominant

Islamic banking sector has grown moderately at 1.4% to USD1.5 trillion (IFSB, 2016, 07).

**Table.2. Breakdown of Islamic Finance Segments by Region**  
(USD billion, 2015)

<b>Region</b>	<b>Banking Assets</b>	<b><i>Sukūk</i> Outstanding</b>	<b>Islamic Funds' Assets</b>	<b><i>Takāful</i> Contributions</b>
<b>Asia</b>	209.3	<b>174.7</b>	23.2	5.2
<b>GCC</b>	598.8	<b>103.7</b>	31.2	10.4
<b>MENA (exc. GCC)</b>	607.5	<b>9.4</b>	0.3	7.1
<b>Sub-Saharan Africa</b>	24.0	<b>0.7</b>	1.4	0.5
<b>Others</b>	56.9	<b>2.1</b>	15.2	–
<b>Total</b>	1496.5	<b>290.6</b>	71.3	23.2

**Source :** Islamic Financial Services Board, Islamic Financial Services Industry (2016). «**Stability Report**». Bank Negara Malaysia, Kuala Lumpur, Malaysia, p : 07.

### 3.2. Performance of the sukuk industry :

Of the total volume of Global Sukuk outstanding from a country perspective, 93% is represented by just 5 countries, Malaysia 57%, Saudi Arabia 17%, UAE 10%, Indonesia 6% & Qatar 4%. Right behind them are Turkey 2%, Bahrain Hong Kong with 1% each (IIFM, 2016, 43). Point out, the Malaysian Short Term Ringgit denominated Sukuk although, have dropped considerably; however, it is interesting to note that Malaysian global sovereign & quasi-

sovereign issuances of over one year tenor have actually increased from USD8.1 billion in 2014 to USD14.3 billion in 2015. As far as Malaysian corporate sector issuances are concerned there were 238 corporate issuances amounting to USD11.57bio in 2015 as against 211 issuances amounting to USD9.96 billion in 2014 (Ambrose, 2015, website).

However, the global sukuk market witnessed a rebound in 2016 after three consecutive years of decline, with Malaysia continuing to be the main driver according to the Malaysia International Islamic Financial Centre (MIFC) (Capital markets of Malaysia, 2017, website).

### 3.3. Why the need to sukuk issuance :

The massive global infrastructure requirements create financing opportunities for Islamic finance and at the forefront we find the sukuk. The following figure summarizes the importance of the need for sukuk in financing infrastructure and others :

**Table.3. Financing opportunities for sukuk**

	<b>Why SUKUK ?</b>
<b>Nature of sukuk Transactions</b>	<ul style="list-style-type: none"> <li>• Promote good business practice - avoid interest, uncertainties, overleveraging and speculation, backed by real economic activities.</li> <li>• Gaining prominence as an alternative source of funding for large scale &amp; long-term infrastructure projects.</li> <li>• Greater governance and transparency that promotes ethical and fairness.</li> </ul>
<b>Investor Base</b>	<ul style="list-style-type: none"> <li>• Tapping wider investor base - Islamic and conventional investors.</li> </ul>
<b>Financing Cost</b>	<ul style="list-style-type: none"> <li>• Competitive pricing vis-à-vis bond – strong demand creates better pricing.</li> </ul>
<b>Tax Incentive</b>	<ul style="list-style-type: none"> <li>• Special tax incentive in Malaysia to promote sukuk.</li> </ul>

Source : Plus Malaysia Berha. (2016, May 17). «Sukuk for infrastructure – Malaysia Experience ». Malaysia, p : 06.

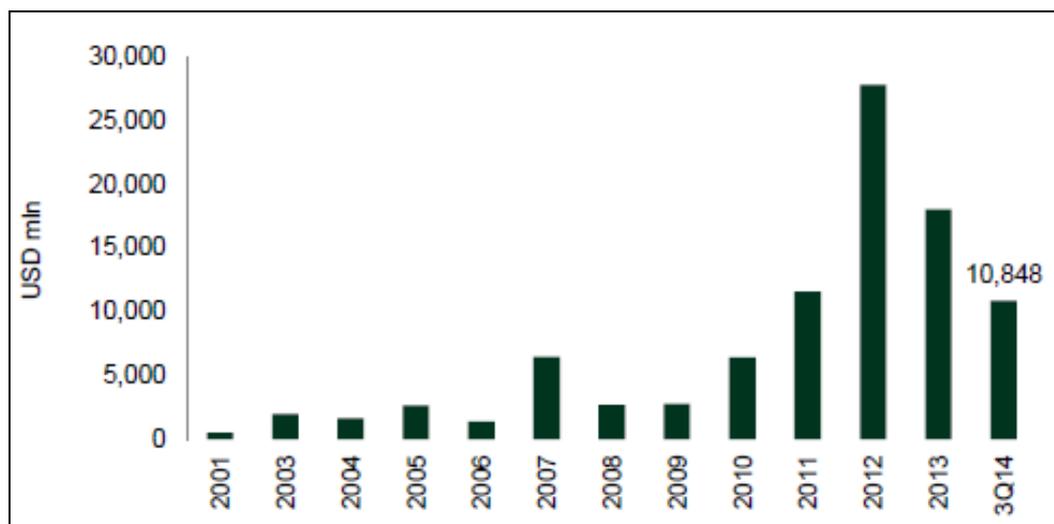
#### 4. Sukuk for Infrastructure Financing :

##### 4.1. The reality of the infrastructure Sukuk market :

Sukuk has played a pivotal role in infrastructure financing for both public and private projects. Overall, the sukuk market is expected to reach greater heights. Therefore, the infrastructure sukuk market witnessed developments in terms of volume, shares of exporting countries and future opportunities available. The summary of this is in the following:

- USD73.1 billion infrastructure sukuk have been issued by more than 10 different countries between 2002 and 3Q2015 (Nik Mohamed Din, 2015, 04).

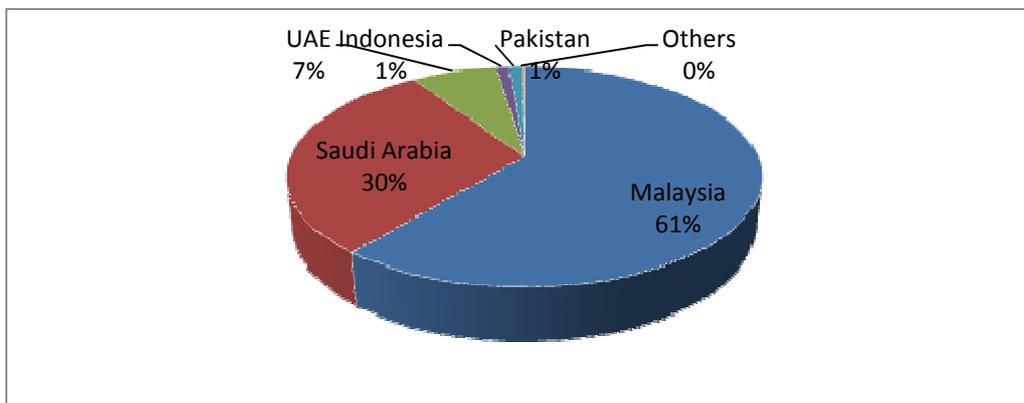
**Fig.4. Infrastructure Sukuk issuances (USD mln per year)**



Source: SOHAIL JAFFER (2015, November 18). «Infrastructure sukuk, FWU Global Takaful Solutions ». P: 06.

- Infrastructure sukuk have increased from USD20.8 billion in (2009-2011) to USD73.1 billion in (2012-3Q2015) (Nik Mohamed Din, 2015, 04).
- Infrastructure sukuk market dominated by issuances from Malaysia (61%), followed by Saudi Arabia (30%) and the UAE (7%) (As shown in the figure below).

**Fig.5. Infra Sukuk issued by domicile of issuer (2012-3Q2015)**



**The source :** Nik Mohamed Din Nik Musa, op.cit, p : 04.

- Malaysia's Economic Transformation Programme (ETP) will accelerate spending plans to meet its economic and socio-economic targets by 2020.
- GCC infrastructure and real estate projects are forecasted to reach almost USD2 trillion by 2020.
- Infrastructure sukuk have increased from USD20.8 billion in (2009-2011) to USD73.1 billion in (2012-3Q2015).

#### **4.2. Types of sukuk used in infrastructure projects financing :**

Sukuk (Islamic bonds) are well suited to infrastructure financing, as illustrated by their extensive use in project finance in Malaysia. The sharing of risk between project sponsors and investors and the creation of tangible assets that generate revenue align well with the principles of sharia (Islamic law) financing. Sukuk can also be combined with conventional financing options in project structures.

Three main Islamic instruments have been used for infrastructure projects. Musharakah sukuk share the profits and losses of the infrastructure project between the investors and issuers, while sukuk based on ijarah (rental) and murabahah (profit) are more similar to conventional bonds as the rental and profit rates are fixed. The ijarah structure can be used for the brownfield refinancing of an existing project as its structure is similar to that of a conventional lease (Asian Development Bank, 2015, 06).

Sukuk can also be used for greenfield financing. The istisna structure allows an asset to be sold before it has been built, with the purchase price paid in installments during the construction phase. This can be combined with an ijarah, allowing investors to receive lease prepayments, and thus a return, during the construction phase.

Recent project sukuk in Malaysia include the 2014 Tenaga Project 3A thermal plant (with sukuk composing three-quarters of the total project financing package), Tanjung Bin Energy, and TNB Northern Energy. Sukuk have also been used for toll road and rapid transit construction.

### **5. Malaysian experience in financing infrastructure with Sukuk :**

#### **5.1. Sukuk market performance in Malaysia :**

Malaysian Sukuk market is among the most structured in the field (El Mosaid & Boutti, 2014, 226). In the sukuk market, Malaysia retained its position

as the leading destination for issuances, with a sizeable share of 53% or USD34.8 billion of global new sukuk issuances in 2015 (Bank Negara Malaysia, 2015, 68). In fact, Malaysia is the global leader in the sukuk market, accounting for 66% of global sukuk issuance and 57% of global sukuk outstanding in 2014 (Asian Development Bank, 2016, 01). Malaysia's share of global sukuk outstanding declined slightly to 54.9% in 1H2015 (1H2014: 57.4%), reflecting both lower issuances by Malaysia, as well as higher issuances from other jurisdictions including Indonesia and Hong Kong (see figure 06).

**Fig.6. Global Sukuk outstanding (2003-1H2015)**



The source : Nik Mohamed Din Nik Musa, op.cit, p : 12.

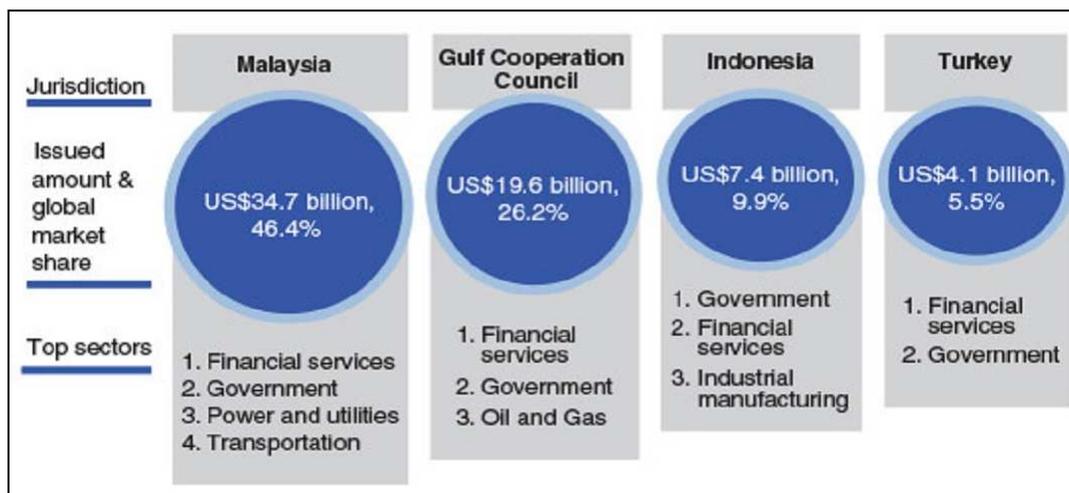
Malaysia maintained its pole position in the global sukuk arena as at end-2016, with 41.1% of total sukuk issuance (compared with 48% as at end-2015).

In a statement, despite a slight decline and the weaker ringgit, sukuk originated from Malaysia still summed up to USD29.9 billion as at end-2016 (USD30.4 billion as at end-2015). Greater sukuk issuance in non-core markets also augmented the global sukuk base to USD72.9 billion at year-end (USD63.4 billion as at end-2015) – with issues from Turkey (USD5 billion), Pakistan (USD4.8 billion) and Bangladesh (USD1.1 billion) featuring prominently. A total

of USD18.2 billion of global sukuk was issued in the fourth quarter of 2016 (4Q16), bringing the full-year issuance to USD72.9 billion as at end-December 2016. Meanwhile, in the latest issue of RAM's Sukuk Snapshot, RAM Ratings highlighted that a total of RM29.9 billion of domestic sukuk was issued in 4Q16, leading to an issuance value of RM129.4 billion for the full year. The financial services and infrastructure & utilities sectors remained the chief driving forces of the better showing, which surpassed RAM's full-year projection of RM100 billion to RM120 billion for the local-currency market. The value of outstanding sukuk had also increased to RM661.9 billion as at end-2016 (RM608.5 billion as at end-2015), accounting for 56.3% of the overall Malaysian market's outstanding debt securities (BorneoPost online, 2017, website).

In 2016, the major sukuk issuers after Malaysia were GCC countries with a 26.2% market share, Indonesia (9.9%) and Turkey (5.5%) (see figure 07).

**Fig.7. Top Sukuk markets in 2016**



Source : <http://www.capitalmarketsmalaysia.com/malaysia-leads-global-sukuk-market-rebound/>  
(visited : 19/08/2018).

## 5.2. Infrastructure Sukuk in Malaysia :

Local currency bonds, including project bonds and sukuk, are widely used in Malaysia for infrastructure finance, most commonly for power generation and toll roads. In addition, a number of conglomerates with well-established infrastructure businesses issue bonds and sukuk for general corporate purposes. Similarly, several government-controlled companies that are directly involved as owners and operators of infrastructure assets, or indirectly as significant investors in infrastructure projects, also tap the bond and sukuk markets for general financing needs. More than one-third of the largest corporate issuers are infrastructure related, with half of these being state-owned entities (see table 04).

The largest issuer after the government is PLUS Malaysia (PLUS), jointly owned by the UEM Group, an investment holding company wholly owned by Khazanah Nasional, the government-owned investment holding company, and the EPF. PLUS acquired highway concessions through privatization to become the largest tollway operator in Malaysia. The acquisitions were financed through sukuk issuance in 2012, comprising RM11.0 billion in government-guaranteed and RM19.6 billion in AAA-rated Sukuk.

**Table.4. Infrastructure-Related Issuers among Top 30 Corporate**

<b>Issuer</b>	<b>State-Owned</b>	<b>Amount (RM billion)</b>	<b>Amount (USD billion)</b>
<b>PLUS Malaysia</b>	Yes	30.6	9.3
<b>Pengurusan Air</b>	Yes	11.6	3.6
<b>Danainfra Nasional</b>	Yes	6.5	2.0
<b>Senai Desaru Expressway</b>	No	5.6	1.7
<b>Sarawak Energy</b>	Yes	5.5	1.7
<b>Celcom Transmission</b>	No	5.0	1.5

<b>1Malaysia Development</b>	Yes	5.0	1.5
<b>KL International Airport</b>	Yes	4.9	1.5
<b>Manjung Island Energy</b>	No	4.9	1.5
<b>Tanjung Bin Power</b>	No	4.0	1.2
<b>Jimah Energy Ventures</b>	No	4.0	1.2
<b>Total</b>		<b>97.0</b>	<b>29.5</b>

Source : Asian Development Bank (2015). «Local currency bonds and infrastructure finance in ASEAN+3». Op.cit. P : 96.

### 5.3. Practical model case : DanaInfra Nasional Berhad Sukuk

#### a. DanaInfra's profile :

The establishment of DanaInfra Nasional Berhad (“DanaInfra”) was pursuant to the Economic Council’s decision on 14 June 2010 after an in-depth consideration for the need to have an Infrastructure Financing Entity (“IFE”) to advise and undertake funding for the proposed Mass Rapid Transit project (MRT Project). The main objectives of the IFE are to (DanaInfra Nasional Berhad, 2017, website):

- Rating star blank Separate fund raising activity from infrastructure construction;
- Rating star blank Develop the most cost competitive, efficient and sustainable financing models;
- Rating star blank Maintain Government’s fiscal position through the most competitive financing and timely disbursement of funds.

Consequently, DanaInfra was established on 3 March 2011 with the main purpose of undertaking the funding of infrastructure projects assigned by the GoM. DanaInfra has an authorised share capital of RM100 million consisting of 100 million shares of RM1.00 each of which RM10 million consisting of 10 million

ordinary shares of RM1.00 each is issued and fully paid-up. All the issued and paid-up capital of DanaInfra, save for one (1) ordinary share owned by the Federal Lands Commissioner are owned by the Minister of Finance, Incorporated (DanaInfra Nasional Berhad, 2014, 12).

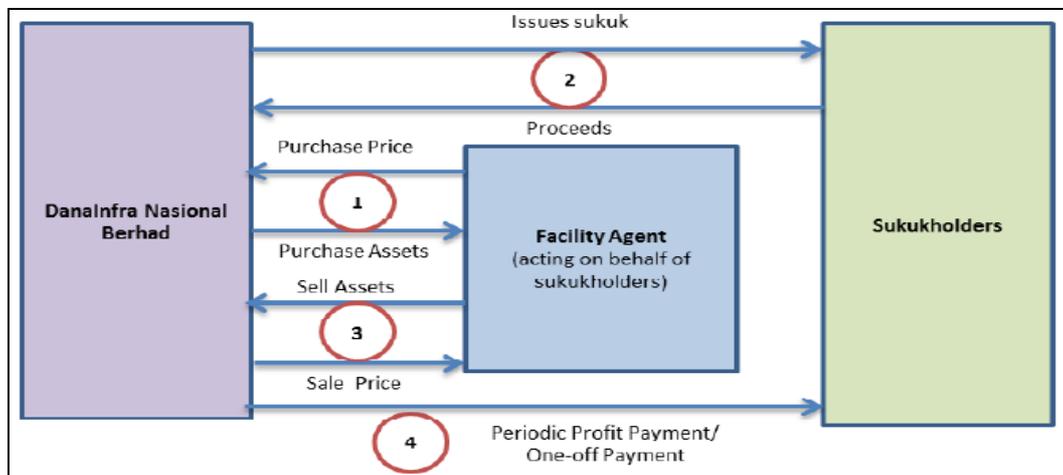
**b. Klang Valley MRT Project (MRT Project) :**

Klang Valley MRT Project (“MRT Project”) is a proposed three-line Mass Rapid Transit system in Klang Valley/ Kuala Lumpur. It is identified as the newest addition to the urban rail system to the Klang Valley. Under the regional Greater Kuala Lumpur / Klang Valley – Land Public Transport Master Plan, the MRT system is one of the key railway systems which will become the back-bone of the regional public transport system. The first line of this project is the Sungai Buloh – Kajang Line (“SBK Line”), which stretches 51 kilometres with 31 stations. The Government gave the approval for MRT Line 2 to proceed and is currently finalising a preferred alignment. The alignment and implementation of MRT Line 3 will be determined in accordance with the Greater Kuala Lumpur / Klang Valley (“GKLKV”) Land Public Transport Master Plan (“LPTMP”). The aforementioned 3 new MRT lines under the Urban Rail Development Plan (“URDP”) will expand the existing coverage of rail based system by KTM Komuters, Light Rail Transit (“LRT”), Monorail and the Express Rail Link (“ERL”). Currently, Klang Valley has a shortage of rail-based public transport coverage compared with most public transport-oriented cities. It has less than 20 kilometres of rail per million population. Public transport-oriented cities such as Singapore, Hong Kong and London have more than 40 kilometres of rail per million population. With the MRT, it will boost the rail-based public transport coverage in Klang Valley significantly and thereby alleviate traffic congestion by increasing the number of people using public transport. The MRT will enable easier connectivity between populated residential districts, business centres,

commercial centres and key employment areas in the Klang Valley. Additionally, the MRT will increase commercial activities. With improved connectivity in the Klang Valley, the MRT will draw more commuters to the city centre business districts as it will be integrated with commercial activities. The underground stations will also have good linkages with shopping centres (DanaInfra Nasional Berhad, 2014, 12).

This company issued three sukuk issuances to finance Mass Rapid Transit projects, the first issuance was on 03/03/2011, while the last issuance was on 21/07/2014. The salient terms and conditions of last DanaInfra Retail Sukuk issuance are summarised as follows:

**Fig.8. Structure of DanaInfra Retail Sukuk**



**Source :** COMCEC, Infrastructure Financing through Islamic Finance in the Islamic Countries, Ankara, TURKEY, March 2019, p : 106.

**c. DanaInfra Retail Sukuk issuance description :**

This company issued three sukuk issuances to finance Mass Rapid Transit projects, the first issuance was on 03/03/2011, while the last issuance was on 21/07/2014.

The complete set of the principal terms and conditions of DanaInfra Retail Sukuk are available at : [www.danainfra.com.my](http://www.danainfra.com.my). The salient terms and conditions of last DanaInfra Retail Sukuk issuance are summarised as follows:

**Table.4. Description of last DanaInfra Retail Sukuk issuance**

	
	<b>Description</b>
<b>Issuer</b>	DanaInfra Nasional Berhad
<b>Guarantor</b>	GoM
<b>Offer size</b>	Up to RM100 million in nominal value
<b>Use of Proceeds</b>	To finance the capital expenditure and operating expenses in relation to the development of the MRT Project
<b>Face value</b>	RM100 per unit of DanaInfra Retail Sukuk
<b>Maturity Date</b>	Seventh (7 th) anniversary of the Issue Date
<b>Profit Payment Frequency</b>	Semi-annual
<b>First coupon / profit date payment</b>	6 months from the Issue Date
<b>Coupon / Profit Rate</b>	4.23% per annum
<b>Listing</b>	Bursa Malaysia under the 'Loans and Bonds' Board
<b>Minimum Amount</b>	Minimum subscription of 10 units or RM1,000

<b>How to Buy ?</b>	Via application forms or Internet Banking or Automated Teller Machine (“ATM”) of the Participating Financial Institutions
---------------------	---

Source : DanaInfra Nasional Berhad (2014, July 21). «Retail Sukuk (Knowledge pack) ». P : 15.

## 6. CONCLUSION :

Infrastructure plays a key role in promoting and sustaining rapid economic growth. In order for this role to be realized, unlocking the great potential of sukuk will be necessary to function as a bridge between infrastructure projects and funding needs.

Malaysia's use of sukuk products in infrastructure financing has helped to build critical infrastructure like railways and roads. The Minister explained that sukuk is becoming more relevant in infrastructure financing today because of its flexibility and underlying assets, adding that various sukuk forms and structures exist, thereby giving prospective users a range of options.

But several significant challenges would need to be overcome first, most importantly finding a legal structure that would be acceptable to governments, investors and the sukuk's Sharia boards. Infrastructure projects could eventually be a key source of sukuk issuance due to their asset based or asset-backed nature. But so far infrastructure sukuk have generally been relatively small and locally funded. Traditionally, infrastructure development has been financed and carried out by government or government linked bodies, or in some regions with private sector involvement through infrastructure project financing.

Finally, we believe several important trends will provide the necessary impetus for the development of infrastructure sukuk. These include growing government support for Islamic finance, increasing acceptance of sukuk and large investment and financing requirement in the GCC (Gulf Cooperation Council),

Turkey, Asia and other emerging markets projects. A transparent framework that investors, issuers and scholars are all comfortable with and which makes clear the rights of all the stakeholders should help attract the significantly wider investor base that would be needed for major infrastructure projects. As well as the G20's initiative, other bodies are also taking steps that could help. These include the Islamic Development Bank's and the Asian Development Bank's reported efforts to provide technical assistance and credit guarantees to member countries that want to fund infrastructure projects and the International Monetary Fund's creation of a working group to build expertise in sukuk.

### **Bibliography List :**

- [1] Nik Mohamed Din Nik Musa (2015), Role of Islamic finance in infrastructure financing : Financing Sources for Public-Private Partnerships (PPP) Sub-Regional Expert Group Meeting (EGM) for South-East Asian Countries, Bank Negara Malaysia, Kuala Lumpur, Malaysia.
- [2] PwC and Oxford Economics (2017), Global Infrastructure Outlook.
- [3] Preqin Global Infrastructure Report -2016) - Sample Pages, New York.
- [4] PwC and GIIA (2017), Global infrastructure investment : The role of private capital in the delivery of essential assets and services.
- [5] Plus Malaysia Berha. (2016), **Sukuk for infrastructure – Malaysia Experience**, Malaysia.
- [6] Islamic Financial Services Board (2016), Islamic Financial Services Industry, Stability Report, Bank Negara Malaysia, Kuala Lumpur, Malaysia.

- 
- [7] International Islamic Financial Market (IIFM) (2016), Sukuk report (A comprehensive study of the Global Sukuk Market), 5<sup>th</sup> Edition, Manama, Kingdom of Bahrain.
- [8] SOHAIL JAFFER (2015), Infrastructure sukuk, FWU Global Takaful Solutions.
- [9] Asian Development Bank (2015), Local currency bonds and infrastructure finance in ASEAN+3, Mandaluyong City, Philippines, Asian Development Bank.
- [10] Fadma El Mosaid & Rachid Boutti (2014), Sukuk and Bond Performance in Malaysia, International Journal of Economics and Finance, Canadian Center of Science and Education, Canada.
- [11] Bank Negara Malaysia (2015), The Financial Stability and Payment Systems Report 2015, Malaysia.
- [12] Asian Development Bank (2016), ASEAN+3 bond market guide 2016 Malaysia, Mandaluyong City, Philippines: Asian Development Bank.
- [13] COMCEC (2019), Infrastructure Financing through Islamic Finance in the Islamic Countries, Ankara, TURKEY.
- [14] DanaInfra Nasional Berhad (2014), Retail Sukuk (Knowledge pack).
- [15] Ambrose (2016), Size of Sukuk Market, IIFM, Islamic finance, website: <https://www.islamicfinance.com/2016/04/size-sukuk-market-2015-iifm/>(Visited : 15/08/2018)
- [16] Capital markets of Malaysia (2017), MALAYSIA LEADS GLOBAL SUKUK MARKET REBOUND, website :

<http://www.capitalmarketsmalaysia.com/malaysia-leads-global-sukuk-market-rebound/> (Visited: 18/08/2018).

- [17] BorneoPost online (2017), Malaysia remains global leader in sukuk market in 2016 - RAM Ratings, website: <http://www.theborneopost.com/2017/01/30/malaysia-remains-global-leader-in-sukuk-market-in-2016-ram-ratings/> (Visited : 19/08/2018).
- [18] DanaInfra Nasional Berhad (2017), About us, website : [http://www.danainfra.com.my/index.php?option=com\\_content&view=article&id=233&Itemid=304](http://www.danainfra.com.my/index.php?option=com_content&view=article&id=233&Itemid=304) (Visited : 22/08/2018).