Sukuk Pricing: Exploring the Opinions of Experts Regarding the Possibility of Substituting Interest Rate with GDP Growth and Dividend Yield in the Valuation Sukuk Pricing

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ABSTRACT

This paper seeks to explore the viewpoints of experts regarding the possibility of substituting interest rate with GDP growth rate for sukuk issued by the government, and dividend rate for sukuk issued by a corporation in the valuation of sukuk pricing as suggested by one of the most prominent scholars in Islamic finance, Professor Rodney Wilson. There have been ongoing debates and criticisms, particularly by majority Muslim scholars, regarding the use of interest rates in the calculation of sukuk pricing, the fact that interest, or rather known as riba', is strictly prohibited in Islam. For that matter, this paper aims to explore the perspectives of practitioners who are involved directly in the financial market, on whether the suggestion proposed by Professor Rodney Wilson in 2008 is practical or feasible to be implemented in the real financial world. Also, this paper aims to investigate whether the suggested rates are ideal for replacing the interest rate in the valuation of sukuk pricing. The methodology adopted was a semi-structured interview conducted with several selected practitioners who are the subject matter experts. These practitioners have been dealing with various financial instruments which include sukuk. The analysis from the finding showed that all respondents are skeptical to the novel idea of Professor Rodney Wilson, where each of them has their justifications on the reason that Professor Rodney Wilson's suggestions are not feasible to be implemented in the real world. The results and analyses obtained from the semi-structured interviews are crucial before further empirical tests are taking place in the later stage of the research. The outcomes of this study are also crucial for future research to confirm (or reject) the professional opinions regarding the proposal to substitute interest rrateswith the alternative rates in the valuation of sukuk pricing.

Keywords: Sukuk; Pricing; Benchmark; Interest Rate; GDP Growth Rate; Dividend Yield.

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INTRODUCTION

Islamic finance has developed tremendously in recent years. The viability of this industry as an alternative to investment can no longer be denied. Sukuk, which roughly translates to "certificates" – in essence, a Shari'ah-compliant investment instrument that can be either asset-based or asset-backed, or even hybrid (e.g. a combination of the two) - structured in compliance with the precepts of Shari'ah – is one of the major components that ccontributeto its success. To date, the global sukuk market has witnessed substantial growth, as shown in fFigure1, with annual issuances almost six times higher from United States Dollar (USD) 24.337 billion in 2008, to USD 145.702 billion in 2019. The steady issuance volume from 2015 to 2019 was mainly due to sukuk issuances from Asia, Gulf Cooperation Council (GCC) countries, Africa, and other jurisdictions, while Malaysia continues to dominate the sukuk market through share like Indonesia, United Arab Emirates (UAE), Saudi Arabia, and to some extent, Turkey. The success of the sukuk market is mostly attributed to its unique characteristics which mostly share some features of conventional bonds/securities, except that it is structured in parallel with Shari'ah principles which makes it an attractive source of capital, especially in the regions where Muslim investors are dominant such as Malaysia, Indonesia, Saudi Arabia, Kuwait, UAE, Bahrain, Qatar, Turkey and many others.

TOTAL GLOBAL SUKUK ISSUANCES (JANUARY 2001 - DECEMBER 2019)

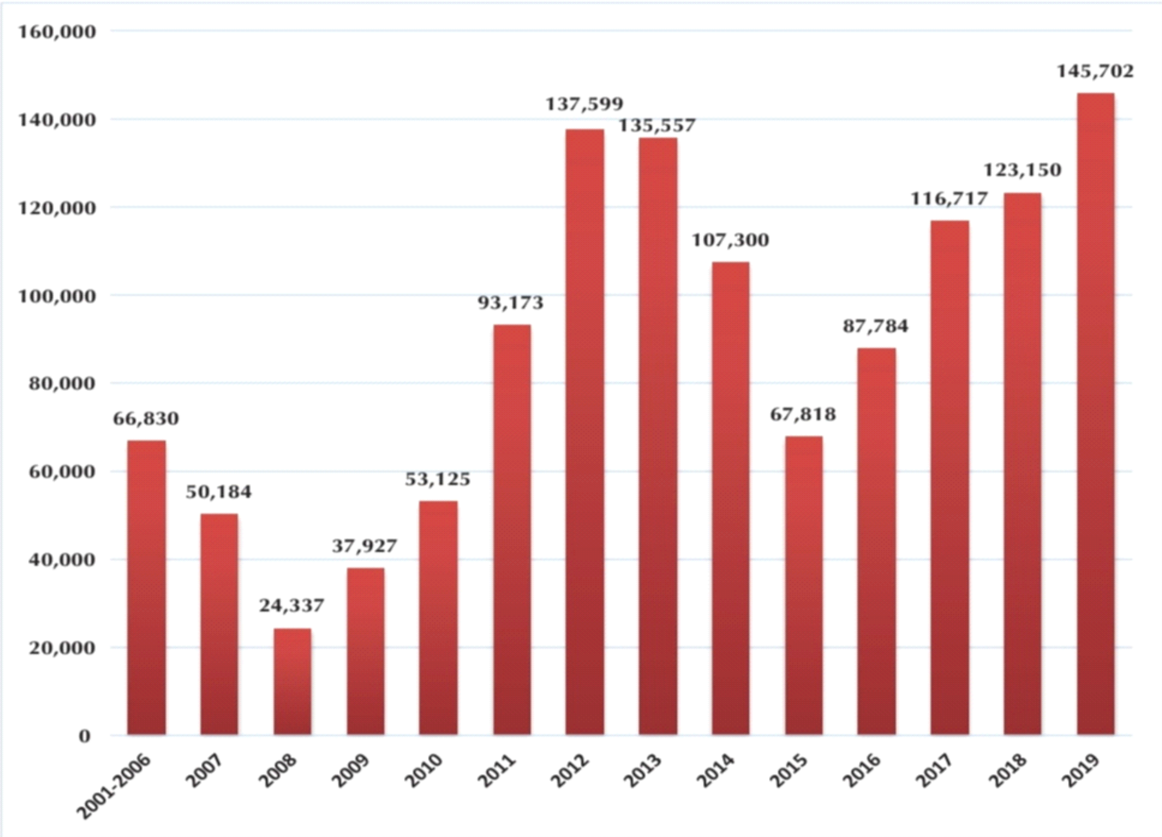

Figure 1: Annual Global Sukuk Issuances from January 2001-December 2018
Source: IIFM Sukuk Report (9th Edition)

Despite such remarkable achievements, sukuk is still in its infancy stage compared to its counterpart, which is the conventional bond that has been established in the industry for decades. For this reason, some features are lacking in sukuk that have eventually led to it imitating certain bond features; in the context of this discussion, it is referring to the pricing mechanism. As it is understandable that the pricing of conventional bonds are based on the prevailing market interest rate, sukuk is benchmarked against interest rate in the same way as conventional bond does, i.e. London Interbank Offer-Rate (LIBOR), or Euro Interbank Offer-Rate (EURIBOR), or in Malaysia's case, Kuala Lumpur Interbank Offer-Rate (KLIBOR), this fact reveals that sukuk is actually being pegged with *riba* (interest), and this is definitely questionable from the Shari'ah point of view since r*iba* is one of the most apparent prohibitions mentioned in the main source of Shari'ah, the Quran;

> *"Those who devour interest will not stand except as stands one whom the Evil One by his touch has driven to madness. That is because they say: "Trade is usury", but Allah has permitted trade and forbidden usury. Those who, after receiving direction from their Lord, desist, shall be pardoned for the past; their case is for Allah (to judge)…"* (Al-Baqarah: 275)

However, it is important to note that some scholars considered such practice to be acceptable, but is still, nevertheless, unfavourable to the eyes of Shari'ah. This is because the absence of an Islamic benchmark in the market leaves the industry no choice but to take the interest rate as an index to price sukuk issued in the market. Such tolerance stems from the fiqh method known as "al-Hajj Manzilah Dharurah", which means the practice is allowed because of the pressing need in the market to fulfill the need of investors, particularly in the secondary market for the instrument (sukuk) to correctly functioning. While there is no doubt that there has been ongoing research and efforts in order to develop Islamic pricing benchmark(s), the conventional market/interest rate is the only choice since the Islamic rate/benchmark is yet to happen. Besides, this group of scholars believes that the use of this benchmark does not taint the underlying Shari'ah contracts, as it is merely a reference to arrive at an agreed price. According to Usmani (2002):

> *"…merely using the interest rate as a benchmark for determining the profit of murabahah does not render the transaction as invalid, haram or prohibited, because the deal itself does not contain interest. The rate of interest has been used only as an indicator or as a benchmark."*

However, upon stating such a statement, he immediately emphasizes that Islamic banks and financial institutions should get rid of the practice as soon as possible, and, most importantly, develop their benchmark. The fact that Malaysia is the leader of the sukuk market in the world, this issue should be taken into severe consideration especially by the Shari'ah panels from both Bank Negara Malaysia (BNM) and the Security Commission (SC) of Malaysia, as Malaysia is shifting towards offering Shari'ah-based products instead of merely Shari'ah-compliant products in the foreseeable future (Ali and Adawiyah, 2013).

The crux of the paper is to discover the relevance of replacing the interest rate, sometimes known as the discount rate in the valuation of sukuk pricing, with Gross Domestic Product (GDP) Growth rate and Dividend rate, and this novel idea was suggested by Professor Rodney Wilson, one of the most influential scholars in Islamic Finance. However, one may ask: why these two rates? Why GDP Growth Rate and Dividend? These are the most central questions one may ask. For the most part, one must understand that Islamic Finance is based on real economic activities (Warde 2010; Chapra 2007; Maghrebi, Mirakhor and Iqbal 2016). The statement from Zaid Ibrahim and Co (2010) explains perfectly how the fundamental operation of Islamic finance, which reads:

> *"Shari'ah rules and principles require that an Islamic financial transaction be supported by an underlying economic activity, thus ensuring that there is a close link between financial and productive flows. This principle fundamentally reflects the basic banking function of providing financial services that adds value to the real economy. Financial flows in Islamic finance are therefore accompanied by the expansion of genuine productive activity. Under this arrangement it also avoids over-exposure to risks associated with excessive leverage"*

For this very reason, Professor Rodney Wilson came out with the idea to replace interest rate with GDP Growth rate for sukuk issued by the government (sovereign sukuk), and dividends for sukuk issued by corporations in the valuation of sukuk pricing. In short, GDP is an abbreviation of Gross Domestic Product, by which Investopedia (the world's leading source of financial content on the internet), defines it as 'the monetary value of all finished goods and services made within a country during a specific period'. Basically, it serves as a scorecard of a particular country's economic health. There are many variations of GDP measurement, which can be useful for many purposes, such as Nominal GDP, Purchasing Power Parity (PPP), Real GDP, and others. As for GDP Growth rate, it compares one year of a country's GDP to the previous year in order to measure how fast it is growing and is usually expressed as a percentage rate. This measure is popular for economic policymakers because GDP growth is thought to be closely connected to crucial policy targets such as inflation and unemployment rates.

On the other hand, the dividend is distributionions of a company's earnings to a class of its shareholders. The higher the companies' earnings, the higher the dividends being distributed to the shareholders. (Investopedia, last updated: July 2020), and vice versa. Therefore, since both alternative rates are the outcomes of the actual performances of a country (GDP Growth rate) and companies (dividend), the suggestion is to replace the forward rate, i.e. LIBOR with these mentioned rates.

BACKGROUND OF STUDY

Overview of Sukuk

Sukuk صكوك)), is the plural form of the Arabic word sakk صك)), which literally translates to "certificate" or "written documents". Technically, the word "certificate" denotes security, note, or paper which is featuring liquidity and tradability. There are a number of definitions given by the authority bodies that govern the operations and financial instruments of Islamic finance as shown in Table 1.

Table 1: Definitions of Sukuk from different authorities

No	Authority Body	Definition
01	Accounting and Auditing for Islamic Financial Institutions (AAOIFI)	*"(Sukuk is) certificates of equal value representing after closing subscription, receipt of the value of the certificates and putting it to use as planned, common title to shares and rights in tangibles assets, usufructs, and services, or equity of a given project or equity of a special investment activity."*
02	Islamic Financial Services Board (IFSB)	*"Sukuk… are certificates with each sakk representing a proportional undivided ownership right in tangible assets, or a pool of predominantly tangible assets, or a business venture. These assets may be in a specific project or investment activity in accordance with Sharia rules and principles."*
03	Security Commission of Malaysia (SC)	*"It (sukuk) refers to certificates of equal value which evidence undivided ownership or investment in the assets using Shariah principles and concepts endorsed by the Shariah Advisory Council, but shall not include any agreement for a financing/investment where the financier/investor an customer/investee are signatories to the agreement and where the financing /investment of money is in the ordinary course of business of the financier/investor, and any promissory note issued under the terms of such agreement."*
04	International Islamic Financial Market (IIFM)	*"Sukuk is defined as a commercial paper that provides an investor with ownership in an underlying asset."*

Current Practice of Sukuk Pricing

In Malaysia, the financial market is under the direct control of BNM and SC. In brief, the former regulates monetary policies and ensures financial stability in the country, while the latter is responsible for capital market matters such as derivatives and securities, including Islamic securities/sukuk. Accordingly, sukuk is under the control of SC. However, it should be noted that SC is only concerned with the regulatory part to ensure market harmony, and SC does not involve in assessing the market valuation or pricing mechanism employed by any particular financial instrument. Another body known as the Bond Pricing Agency of Malaysia (BPAM) is the sole provider of market-based bond information and responsible for evaluating bond pricing in Malaysia, including sukuk. BPAM provides assessments of bonds and sukuk issued by corporations after considering many factors, particularly their ratings from the Rating Agency of Malaysia (RAM) and Malaysian Rating Corporation (MARC) to guide investors in the market with their investment decisions.

Before pursuing the crux of the paper, it is best to have proper insights into the market practice of sukuk. To date, although sukuk has different categories such as debt-based and equity-based sukuk, the market operators are simply treating both bond and sukuk as bonds (Safari, Ariff &Shamser, 2013), except that sukuk is sometimes known as Islamic bonds or Islamic securities. This confusion arises not just by the way the current market operators are treating both bond and sukuk as a bond, but also by some features of sukuk that closely resemble conventional bonds. For example, both instruments utilize the use of "paper" to represent obligations (or ownership in the case of equity sukuk). Moreover, the payment method of sukuk mirrors the practice of conventional bonds, in which the principal/primary note is paid at maturity, and the interests/secondary notes are paid throughout the lifetime of the bond (see Figure 2). With such close resemblance, the conventional valuation formula for fixed payment bonds is used in the valuation of sukuk, where the secondary note in the Islamic structure acts as the fixed profit payment as agreed in the contract. Table 2 highlights several differences between sukuk and bonds.

Table 2: Sukuk and Bond Comparison
Source: Jamaldeen, 2012

	Sukuk	**Bond**
Definition	Sukuk are financial certificates representing beneficial ownership of real assets. It gives the investor proportional beneficial ownership in the asset on which *sukuk* are based.	Bonds are proof of debt and not a share of ownership in the asset. It is a debt obligation from the issuer to the bondholders.
Asset Ownership	*Sukuk* give the investor partial ownership in the asset on which the *sukuk* are based.	Bonds do not give the investor a share of ownership in the asset, project, business, or joint venture they support. They are debt obligation from the issuer to bondholders.
Relationship between Issuer and Investor	In *sukuk*, the issuer is not a borrower, but can be either: • A buyer in a sale contract (*Murabahah, Salam,* and *Istisna' sukuk*) • A lessee in a lease contract (*Ijarahsukuk*) • A partner in a partnership contract (*Musharakah, Mudharabah*)	Bonds are debt, whereby issuers are the borrowers from the investors (bondholders). Therefore, the relationship in selling and buying a bond is the debtor (issuer of the bond) and creditor (bondholders).
Investment Criteria	The asset on which *sukuk* are based must be *Shariah*-Compliant.	Bonds can be used to finance any asset, that complies with local legislation.
Issue Unit	Each *sukuk* represents a share of the underlying asset.	Each bond represents a share of the debt.
Issue Price	The face value of *sukuk* is based on the market value of the underlying asset.	The face value of a bond price is based on the issuer's credit worthiness (including its rating).
Investment Rewards and Risks	*Sukuk* holders receive a share of profits from the underlying asset (and accept a share of any loss incurred).	Bondholders receive regularly scheduled (and often fixed rate) interest payments for the life of the bond, and their principal is guaranteed to be returned at the bond's maturity date.
Effects of Cost	*Sukuk* holders are affected by costs related to the underlying asset. Higher costs may translate to lower investor profits and vice versa.	Bondholders generally are not affected by costs related to the asset, project, business, or joint venture they support. The performance of the underlying asset does not affect investor rewards.
Capital Guarantee	The capital is not guaranteed for *sukuk* holders. Upon maturity, *sukuk* is valued based on the market value, a prearranged figure (agreed upon by the two parties) or a fair value.	The bond principal amount is guaranteed and payable upon the maturity date.

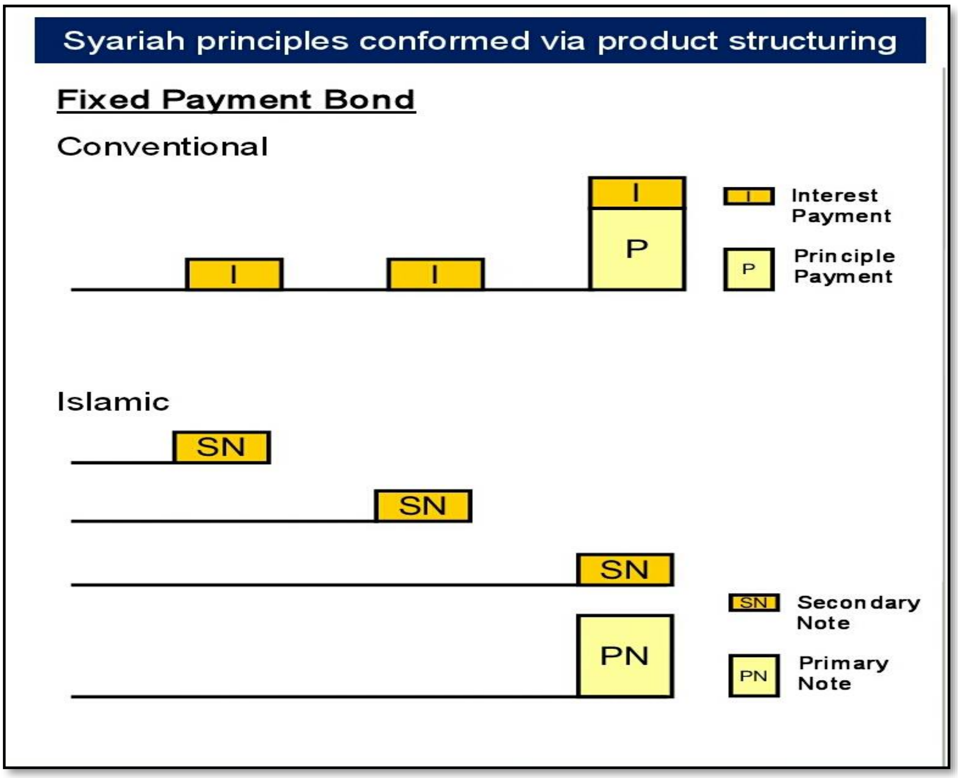

Figure 2: Identical Method of Payment for both Sukuk and Bonds
Source: Bond Pricing Agency Malaysia (BPAM), (n.d.)

As shown in Figure 2, the method of payment for both sukuk and bond does not differ from one another, although the terms used are different in the Islamic structure of sukuk. Sukuk holders will receive their secondary notes in the same way that bondholders receive their interest payment/coupon payment throughout the sukuk/bond maturity life, and the primary note will be fully paid at the maturity date, just as the principal is paid at the maturity date of the bond.

Issues in Sukuk Pricing

As stated at the beginning of this paper, sukuk is relatively new compared to conventional bonds. Hence, it is natural for the instrument to face challenges during its adaptation phase in the market; in this context, the concern is over its pricing matters. On one side, those who are in favour of the use of interest rate states that benchmarking interest rate in determining the markup of Islamic product is permissible, but not desired. Taqi Usmani, the Chairman of AAOIFI, argues that if all terms of Islamic financial contracts are validated, then merely the use of interest rate as benchmarking for the determination of markup or prices of the products, will not invalidate the entire financial contract (Usmani, 2002). DeLorenzo (2009) also provides the same argument, where he explicitly said:

> *"A benchmark is no more than a number, and therefore non-objectionable from a Shariah perspective. If it used to determine the rate of repayment on a loan, then it is the interest-bearing loan that will be haram (prohibited). LIBOR as a mere benchmark, has nothing to do with actual transaction, or more specifically with the creation of revenue or return,"*

Also, Jaman (2011) additionally added that using interest rate as a benchmark in pricing or valuing financial product is making more sense, especially when both Islamic and conventional banks run at a parallel pace, except that Islamic bank does not have their benchmark.

On the other side of the coin, those who strongly oppose the use of interest rates in benchmarking Islamic financial products, for the most part, are based on the crystal-clear prohibition of interest in the Quran as shown in the introductory part of this paper. Like the prohibitions of interest in the hadith, there are numerous *hadith* rejecting the practice of interest based on the detailed classifications of interest itself, but the general *hadith* on the prohibition of interest is as follows:

> *From Jabir (R.A.) narrated, that the Prophet (peace be upon him) cursed the receiver and the payer of interest, the one who records it, and the two witnesses to the transaction and said: "They are all alike (in guilt)."*

Also, apart from the clear prohibition of interest from the above *hadith*, the Prophet (peace and blessings be upon him) forbids Muslims to copy the practice of non-Muslims. This is evident from the occasion where he (the Prophet, peace and blessings be upon him) recommends Muslims to fast for two days on the day of Ashura, while Jews only fast for one day, only to differentiate the practice of Muslims and non-Muslims. This can be observed below:

> *Narrated by Ibnu 'Abbas (R.A.), who said: "The Prophet (peace and blessings be upon him) came to Madinah and saw the Jews fasting on the day of Ashura. He said, "What is this?" They said, "This is a good day, this is the day when Allah save the Children of Israel from their enemy, and Musa fasted on this day." He (the Prophet, peace and blessings be upon him) said, "We are closer to Musa than you."*

While the Jews only fast on the 10th of Muharram, the Prophet (peace and blessings be upon him) recommends fasting not only on the day of Ashura itself (the 10th of Muharram) but also on the day before that (9th of Muharram), as the hadith goes "If I am still alive next year, I will certainly fast on the ninth (9th of Muharram)". This incident marks the importance of NOT following or imitating the practice of the non-Muslims, wherein the context of this discussion, Islamic banks should not be copying or benchmarking conventional banks in pricing its products (Jaman, 2011).

Many contemporary scholars at these days and ages, who oppose the use of the interest rate in pricing Islamic financial products, based on their reasonings and judgments not to benchmark interest for pricing or valuing Islamic financial products based on the primary source of the Sharia'h: the Quran and Sunnah/Hadith as presented above. Ghauri (2015) for example, emphasizes throughout his research that interest rates cannot be the benchmark for Islamic financial product pricing because interest does not represent real economic activities. In contrast, the very ground of Islamic finance is based on real economic activities. This matches Salman's (2014) view, which also argues that Islamic finance is supposedly linked to the real economy, and must be based on real transactions. For that reason, the cost-benefit analysis should be determined by real economic activity through trading or production, and the demand-supply force in the market should determine the price.

The legal maxims of "Al-Kharaj Bi Dhaman" and "Al Ghnum Bil Ghurm" imply that the profit rate of any financing should be determined based on real effort, liability and risk of the project or venture. The implication of the two legal maxims is that a fixed rate of return is not acceptable since one party will bear the cost of interest and risk typically involved in trading activities regardless of any condition, although the business is not as good as it should be.

From a financial perspective, this issue is still being discussed by many contemporary researchers, scholars, and even practitioners up to these recent days. Based on the latest update from the market (Latif, 2020), the possibility to end the use of LIBOR is by the end of 2021, with RiRisk-Freeate (RFR) being the new rate to replace LIBOR. The new rate is said to be different from LIBOR in many ways, for instance, LIBOR is a "forward-looking" term rate that is fixed and publicly available at the start of each calculation period, while RFR is an overnight rate, and currently, at this stage, the market consensus is that a term rate can only be produced on a "backward-looking" basis, meaning the rate of RFR would be determined on the basis of historical data at the end of the calculation period. This is not a surprise for the market itself to shift away from LIBOR, especially when Islamic finance is gradually securing and strengthening its position in the industry. Uddin, Kabir, Hassan, Hossain, and Liu (2020) also highlight specifically why sukuk needs a different pricing model than the existing conventional bonds. In their research, they discuss more than the ground foundation of sukuk being the shariah-compliant version of the bond, but rather, different risks that sukuk inherently has but not bond, and the fact that sukuk itself being a particular type of asset or instrument which lies in between debt (bond) and equity (Mudharabah or Musharakah partnership), therefore to equate the risk of sukuk to bond, does not reflect the actual value of sukuk.

For the most part, it is also noteworthy to point out here, that there are several attempts to initiate an Islamic pricing benchmark as an attempt to diverge from the interest rate in the market. Among the notable ones was by a group of scholars from the Shariah Research Academy for Islamic Finance (ISRA) in 2010. This group of researchers proposes two models of benchmark calculation for Islamic benchmarks. First, it is the Capital Asset Pricing Model (CAPM) that links the market risk of a project or business to its required rate of return, which is, based on the simple factors that are market risk and the average rate of return of a particular business. However, this model appears to have some shortcomings, mostly because the result is unstable and impractical. Therefore, an extension model to CAPM called Arbitrage Pricing Theory (APT) was proposed that includes several other factors such as inflation, industrial production, exchange rate, and changes in oil prices. Both of the proposed models are free from interest and within the Shariah parameter (Omar, Noor, Meera, Manap, Majid, Zain, Sarif, Sukmana, and Bashir, 2010).

However, this suggestion is doomed to fail as it was rejected by practitioners, especially bankers. This is because the implementation of different policy rates between conventional and Islamic banking would lead to an imbalance between Islamic banking and conventional banking. For instance, if the profit rate of Islamic banking is higher, customers or investors would flock to Islamic banking, and the same goes toe other way around - customers or investors would switch to conventional banking if the rate is more promising than what Islamic bank has to offer. This is precisely what has been highlighted by Dr. Aznan Hasan, one of the well-known Shariah financial advisors in Malaysia when he was asked about the possibility of having an Islamic pricing benchmark in Malaysia (Sing, 2009). Furthermore, the proposed benchmark is quite costly to derive, as there will be different benchmark pricing rates for different industries. This is because the Islamic benchmark must be tied to real economic activity, and the profitability rate is depending on the performance of the underlying assets (Jaafar, 2018).

These continuous efforts proved that the issue regarding the absence of Islamic benchmarks in Islamic financial institutions remains unsolved, and still ongoing until these days and ages. Therefore, for this reason, the researcher intended to test Wilson’s (2008) proposal that any alternative benchmark should be based on real rather than monetary indicators as a means of overcoming this problem. Specifically, he suggested that macroeconomic indicators could be used for sovereign sukuk and company performance indicators for corporate sukuk because of the following reasons:

- Sovereign sukuk pricing should be based on real macroeconomic variables such as Gross Domestic Product (GDP) growth rather than interest benchmark, because when GDP growth is high, government tax revenue usually increases more rapidly, especially in countries with income or sales taxes. This would enable the government to pay higher returns to investors in their sovereign sukuk. Conversely, when GDP growth is lower, government revenue would be lower, implying a reduced capacity to service debt and pay sukuk holders. In other words, sukuk holders would be taking on the same risk (Tariq, 2004). By sharing risks with governments and reducing their obligations in times of difficulty, the risk of default would be reduced. This might enable sovereign sukuk based on GDP benchmarks to be more favourably rated than the present sukuk.

- Corporate sukuk should be benchmarked against an indicator relating to the performance of companies being financed because share prices would be an inappropriate indicator, as this would blur the distinction between sukuk and equity investments. However, the use of a dividend or a profit indicator would be entirely appropriate, which could be the basis of a new type of sukuk based on the Musharakah partnership structure.

It is worth mentioning that there has been an attempt to realize the suggestion of Wilson by Rahman, Duasa, Kassim, and Zainudin (2017) where they attempted to offer alternative yield in the pricing of sovereign sukuk with macroeconomic variables, in which one of them is the GDP growth rate. However, the result has shown that tagging GDP growth rate to the pricing of sovereign sukuk is not feasible since other macroeconomic variables such as inflation and money supply are more significant to the movement of sovereign sukuk yield in the country. Although the result from the analysis without any doubt, gives a sneak peek of the relevance of GDP growth rate being the substitute for LIBOR, the methodology adopted was different than what the researcher intended to do.

For that reason, the researcher will continue to test the relevance of the GDP growth rate, as suggested by Professor Rodney Wilson (2008). Before that, the researcher conducted a semi-structured interview with selected practitioners who are experts in this matter as they are dealing with various financial instruments in the industry, including sukuk, to look into their opinions on whether or not Wilson’s suggestion is practical to be implemented in the industry.

METHOD

As the paper requires qualitative paradigms, the design/methodology of the paper is based on triangulation, a strategy that helps mixed-method researchers combine qualitative approaches. Triangulation utilises multiple data collection techniques, such as the combination of interviews, government data, extensive literature reviews, document analyses, and observation to explore the issue being raised (Kalof, Dan, and Dietz, 2008). In this case, a multi-faceted perspective would contribute to a richer and more complete understanding of particular issues.

In this paper, the researcher adopts a semi-structured interview to gather the information desired. This method is indeed a great way to guide the conversation and keep the respondents on topic. It also allows for open-ended responses from participants for more in-depth information. More importantly, this method also allows qualitative data to be compared with previous and future data, which is very crucial since the researcher has several different respondents to compare the findings from each one of them. Additionally, an extensive literature review is also embraced in this study, which is central in order to highlighting the issues being raised, as well as in crafting the semi-structured interview questions to direct the respondents toward the generation of the anticipated outcomes.

RESEARCH SITE

In this work, the research sites vary according to the respondents' locations. Since the research employs a semi-structured interview, the interviews took place at three different places (Table 3).

Table 3: Research Sites of Semi-Structured Interviews

No	Respondent Code	Research Site
01	E1	Bond Pricing Agency of Malaysia, N0-17-8 & 19-8, The Boulevard, Mid Valley City, Lingkaran Syed Putra, 59200 Kuala Lumpur, Malaysia
02	E2	RHB Banking Group Asset Management, Level 10, Tower 1, RHB Centre, Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia
03	E3	Universiti Teknologi Petronas (UTP), Level 2, Postgraduate Lounge, Department of Humanities and Social Sciences, Bandar Seri Iskandar, 31750 Tronoh, Perak, Malaysia

For the first two interviews, the researcher went to the respondents' places to gather information from the semi-structured interviews. As for the third respondent, since the respondent is working outside of the country, the researcher was unable to be present at his place like the previous respondents. Therefore, the researcher conducted the interview via online technology, i.e. Skype from the researcher's site at Universiti Teknologi Petronas (UTP).

SAMPLING

Qualitative research experts argue that there is no straightforward answer to the question of 'how many', and that sample size is contingent on several factors relating to epistemological, methodological, and practical issues (Baker and Edwards, 2012). Samples in qualitative research tend to be small in order to support the depth of case-oriented analysis that is fundamental to this mode of inquiry (Sandelowski, 1996). Additionally, qualitative samples are purposive where it is selected under their capacity to provide rich-texture information relevant to the phenomenon under investigation. As a result, purposive sampling, sometimes referred to as judgment sampling, selects information-rich cases as opposed to probability sampling employed in quantitative research (Patton, 1990). Indeed, research demonstrates the greater efficiency of judgment sampling compared to random sampling in qualitative studies (Rijnsoever, 2017), supporting related assertions long put forward by qualitative methodologists.

In view of the fact that the research is purely qualitative, the sample of the study is based on the concept of judgment sampling or purposive sampling, which means the samples are the selected respondents who have expertise on the subject being investigated (Sekaran, 2003). There are three samples selected, with all three of them being practitioners, which is a group of people that involve directly in the financial market, particularly in sukuk market, albeit each of them holds different roles/positions. The researcher assigned codes for each respondent. The profiles of the respondents are shown in Table 4. The researcher has gotten consent from all three respondents to reveal their identities for the research.

Table 4: Profiles of Respondents

No	Interviewee/Respondent	Position	Code	Remarks
01	Mr. Meor Amri Bin Meor Ayob	Chief Executive Officer (CEO) of Bond Pricing Agency of Malaysia (BPAM)	E1	Personal interview conducted on the 17th of January 2018, from 5.00 pm to 7.30 pm
02	Mr. Yazit Bin Yusoff	Head of Islamic Capital Market Department of RHB Banking Group Malaysia	E2	Personal interview conducted on the 23rd of February 2018, from 11.35 am to 12.45 pm
03	Mr. Mohamed Iqbal	Chief Treasury Officer (CTO) of Warba Bank, Kuwait	E3	Virtual interview conducted on the 15th of March 2018, from 8.20 pm to 10.35 pm (Malaysian time)

BPAM is the only provider of market-based bond (and sukuk) information and evaluated bond (and sukuk) pricing in Malaysia, and as the sole body that deals with both bond and sukuk valuation/pricing, it is definitely crucial to have their perspective regarding this matter. For that reason, the first respondent to correspond to the interview questions was the CEO of BPAM, Mr. Meor Amri Meor Ayob. For the past 12 years, Mr. Ayob has been the Chief Executive Officer (CEO) of BPAM and has progressively developed BPAM's core business to become the principal source of valuation and data reference on the Malaysian Sukuk and Bond Market. He continued to reinforce BPAM's position as a specialist in valuation and ensured BPAM continued providing world-class data in keeping Malaysia's leading position in the global sukuk market.

Apart from BPAM, another perspective that is essential to the analysis is undoubtedly a respondent who represents the local market players. For that matter, the researcher managed to undertake an interview with Mr. Yazit Yusuff, the Head of the Islamic Capital Market Department for RHB Banking Group. Mr. Yazit has been involved in Islamic Treasury and Capital Markets for more than 20 years. With his vast experience in foreign exchange, the money market, fixed income, and corporate treasury, there is no doubt that Mr. Yazit is a qualified respondent to speak for the local sukuk market in Malaysia.

Another important outlook regarding sukuk pricing, which is crucial to the research is a respondent that represents the international sukuk market. This is the reason that the researcher was adamant about including the perspective of Mr. Mohamed Iqbal, a Chief Treasury Officer of Warba Bank, Kuwait, even though the interview was conducted in a virtual world, or to be exact, through the Internet. Despite the distance issue, Mr. Iqbal managed to answer the interview questions through Skype. Mr. Iqbal has a long experience for over 29 years in the banking and finance industry, as he has served in a number of major positions such as General Manager, at Malaysia's Employees Provident Fund in 2004, Chief Officer in Kuwait Finance House (KFH) Malaysia *Berhad*, Chief Treasury and International Business Officer, and as the Bank's Chief Transformation Officer. He is now with *Warba Bank*, Kuwait, and holds the position of Chief Treasury Officer. Indeed, it is unquestionably that he fits the requirements to speak for the international sukuk market in this paper.

DATA COLLECTION

The data is collected through a Semi-Structured Interview with three different personnel to reflect their opinions regarding the possibility to implement Wilson's suggestion concerning substituting interest rates in the valuation of sukuk pricing with GDP Growth rate and Dividend Yield. This data collection method is adopted because questions can be prepared ahead of time, thus allows the interviewer/researcher to be prepared, and it also allows the respondents the freedom to express their views in their own terms. In short, a semi-structured interview can provide reliable and comparable qualitative data for further analysis.

DATA ANALYSIS

The researcher carefully crafted the interview questions for the respondents to obtain the desired outcomes. After the data was analysed thematically, the researcher identified 4 major unique themes, which include:

a) Differences and similarities in bond and sukuk in terms of their pricing
b) Factors affecting sukuk pricing
c) Technical aspects of sukuk pricing
d) The possibility to replace interest rate with GDP and dividend rates.

Table 5: Semi-Structured Interview Questions

Categorical Theme		Question(s)
Sukuk and Bond: Similarities and Differences in Pricing	01	In general, does *sukuk* pricing similar to bond pricing?
	02	What are the differences that only occur in *sukuk* pricing, but not in bond pricing?
	03	Does the same formula of bond valuation being applied to all *sukuk* structures in its (*sukuk*) valuation?
Factors Affecting Sukuk Pricing	04	What are the factors that affecting *sukuk* price?
	05	What are the factors that only affecting the price of *sukuk*, but not bond?
	06	Does the structure of *sukuk* affecting its price?
	07	Does additional features attached to *sukuk* affecting its price?
Technical Aspects of Sukuk Pricing	08	Does price the combined *sukuk* being calculated separately, or altogether?
	09	Does the information pertaining pricing of *sukuk* is accesible to investors?
Possibility of Replacing GDP and Dividend Rates in the calculation of Sukuk Pricing	10	Do you think it is possible to replace interest rate in the calculation of *sukuk* price, with GDP (sovereign *sukuk*) or Dividend rates (corporate *sukuk*)?

All the interview answers are recorded, and the researcher encrypted the verbal answers into words once the interviews have finished. This is to ensure that the findings and analyses can be easily compared from one respondent to another.

RESULTS

Based on the four themes discussed earlier, the results are as follows:

(a) Similarities and Differences in Bond and Sukuk Pricing

The respondents were asked about the similarities and differences between bond and sukuk pricing. In general, all thee (3) participants strongly agree that currently, sukuk is being priced the same way as conventional bonds being priced in the financial market. Below are some of the responses generated from the interviews:

Question 01: In general, does sukuk pricing similar to bond pricing?

> *"Regardless whether the instrument is Islamic (sukuk) or non-Islamic (conventional bond), what really matters in pricing is its cash flow. Identification of present value of an instrument in order to ensure smooth cash flow is extremely important for both sukuk and bond."* (E1)

> *"Are you talking about the approach to derive its (sukuk) pricing? If so, yes it is. We have the law of one reality, where investors are still investors, whether investors in sukuk, or investors in fixed-income (bond). Of course, when we have these set of investors, they tend to be looking for same risk profile,*

> *and they tend to look at higher yield. Triple A, double A, Islamic government securities, government bond, doesn't matter. They tend to choose for higher yield."* (E2)
>
> *"Yes, they (bond and sukuk) are considered similar instrument in the (financial) market, and both are being referenced to the same benchmark. No different between the two*" (E3)

On the matters pertaining to the differences that only occur in sukuk pricing but not in bond pricing, the respondents differed in opinions:

Question 02: What are the differences that only occur in sukuk pricing, but not in bond pricing?

> *"From the practical point of view, yes there is slight difference in sukuk pricing. Let say if you are someone from the Wallstreet, you would consider Malaysian sukuk has no value, because the option attached to it, most of the time, is not taken into consideration. So, it is basically undervalued."* (E1)
>
> *"I don't see any different between the two. Somehow how we derive, how we determine the pricing, they are the same. The question is rather, which market are you talking about, is it the primary or the secondary market? If you are talking about the latter (secondary market) of how sukuk is being bought and sold, there are nothing much different than how its counterpart (fixed-income instrument/bond) being priced. But when you are talking about primary market, sukuk has its own underlying Islamic contracts, as opposed to bond which is based on simple lending. So, there will be additional documentations that investors or issuers need to sign, i.e. Ijarah, Tawarruq, Murabahah, depending on the type of sukuk itself."* (E2)
>
> *"The way I see it, I would say its demand factor. Sukuks might be priced better in markets where there is a big pool of Sharia compliant investors like Malaysia, as compared to bond prices due to the wider range of investors."* (E3)

Finally, all the respondents confirmed that the formula for sukuk valuation is the same formula that bond or fixed-income instrument has been using. Based on these findings, it is conclusive that the approach to how the price of sukuk is being derived in the market is the same as conventional bonds. The differences mentioned by each respondent are trivial, and they do not change the fact that sukuk is being treated/priced the same way as a conventional bond by the market operator.

(b) Factors Affecting Sukuk Price

The respondents in the interviews were also asked about the factors that affect sukuk price. All participants (n=3) agreed that whatever factors affecting bond price in the market would give the same effects to sukuk price. Below are some interesting points highlighted by the respondents;

Question 04: What are the factors that affect sukuk price?

> *"You see (pointing at the graph at the screen projector), in November 2016, sukuk market in Malaysia dropped, and it took three months to recovered back to its normal pace. Do you know what happened at this time? (silent paused) President Trump being elected in the United States. Nowadays, because we live in the globalized market, not only the common factors like fluctuation of interest rates, inflation rates, and credit rating of a particular bond and sukuk affecting their prices, but external factors also can be an important force that affecting their prices in the market. Although sukuk has nothing to do with president Trump's election, still, it affecting their prices."* (E1)
>
> *"As I said before, regardless whether it is bond and sukuk, when a particular financial instrument goes into the secondary market, both bond and sukuk are being treated as a fixed-income instrument. So, within the same environment, the same factors would give the same effects to both instruments bond and sukuk. In order words, whatever factors influencing the price of bond, will influence the price of sukuk as well."* (E2)
>
> *"No, they are similar instrument in the market. These two are (considered) fixed-income instrument in the market, thus their prices are definitely influenced by the same factors."* (E3)

The respondents were also asked if there is a factor that could only be affecting the price of sukuk in the market, but will not give the same effect to bond. All three respondents have different standpoints, and here are some of the appealing answers given by each of the respondents:

Question 05: What are the factors that only affecting the price of sukuk, but not bond?

> *"I would say, its documentations. This is nothing to do with the mathematical formula or something, it is just that most investors, particularly foreign investors, are not comfortable with the Arabic terms in the contracts, and their ignorance somehow affecting the market share of sukuk, because they will not invest into something that they have no clue, thus they switch to conventional bond which they are more familiar with. Although, I would say, most of the time the two instruments offer the same yield with the same tenure in the market. Simply because of their unawareness regarding Islamic financial instruments."* (E1)

> "*Well, if you add extra features in a particular sukuk, of course the price would be different. At these days and ages, we have so many investors with sophisticated risk appetites, although some of them already familiar with investments in sukuk, they still want to protect their investments with added features like derivatives, options, and many more. But this is more on the risk management topic. Of course, you can't compare plain vanilla bonds with the enhanced sukuk features which equipped with options, derivatives, and so forth. Nowadays we have exchangeable sukuk, callable sukuk, perpetual sukuk, and many more, and they all add costs to the original sukuk price."* (E2)

> *"Shariah Risk is one unique risk which is only experienced by sukuk, and not bond, and I hope you are aware about this (giggled). When investors questioning its conformity to Shariah especially after its issuance, and let say, if it is discovered that the particular sukuk has breached the Shariah guidelines, then the particular issuer might have to pay penalty or fine. That's an added cost, isn't? But again, this is very unlikely to happen because there are group of Shariah scholars, at least in Malaysia, which monitor all the Islamic financial instruments in accordance with Shariah principle."* (E3)

Regarding the matter whether or not the structures of particular sukuk (Murabahah, Ijarah, Musharakah, Mudharabah, Tawarruq, and etc.) affecting their price, again, respondents viewed it from different angles:

Question 06: Does the structure of sukuk affect its price?

> *"If this is a general question, I would say, no it does not. However, from the perspective of different region of investors, the structures of Islamic products from Kuwait Finance House (KFH) for example, are preferable especially by the middle-east investors, although, fundamentally they are operating under the same principle and structure, for example, Musharakah (partnership) in Malaysia. Thus the price is higher compared to the Islamic Financial products offered in Malaysia due to the high demand and expectation in the market."* (E1)

> *"Well it is depending on the sukuk itself, if it is zero-coupon sukuk, then the price is unquestionably different than sukuk which are attached or referenced to fixed-rate coupon or floating/variable rate coupons, isn't? We are talking about the structure of the instrument itself, not the underlying Islamic contract (of sukuk)."* (E2)

> *"No. Structure of underlying Islamic contract does not affect the price of sukuk being bought and sold in the market."* (E3)

Finally, regarding whether or not the unique features added to sukuk would affect its price, all three respondents have the same opinion. According to them, the changes in the price of sukuk is not because the nature of being an Islamic instrument, but rather because of its nature of being a fixed-income instrument, just like when a conventional plain vanilla bond is added special features, this would affect its original price. Based from these findings, it is confirmed that the factors affecting the bond price will also be affecting sukuk price in the market because the two instruments are being treated as the same instrument (fixed-income instrument) by the market operator.

(c) Other Technical Aspects of Sukuk Pricing

There are also some technicalities concerning the practice of sukuk pricing that require clarifications from the experts. The fact that sukuk sometimes combined several Islamic contracts altogether in its operation, i.e. Musharakah Mutanaqisah (combining partnership, leasing, selling and buying contracts), Wakalah and Ijarah, or Wakalah and Murabahah, and so forth. Whether or not this information concerning how the price is being derived, accessible to investors, here are what the respondents responded:

Question 08: Does price of combined sukuk being calculated separately, or altogether?
Question 09: Does the information pertaining of sukuk is accessible to investors?

> *"If I could recall my explanation regarding the primary and secondary market, the composition of sukuk structure only appears at its initial stage, you know? Once it passes the primary market, the pricing will be the same like all other fixed-income instruments in the market. But let say, if any particular issuer wishes to import different features/contracts in its transaction, i.e. Wakalah, and Ijarah, then it will be calculated separately. Plus, all the relevant information pertaining to its pricing, structures, terms and conditions, background of the issuer/company, (and etc.), all of these information are accessible to investors in a document called Info-Memo (Information Memorandum) for local issuers, and Opulence Secular for foreign issuers. I hope I have made myself clear to your question."* (E2)

> *"The price is calculated altogether, and the information such as the coupon rate and price, not only accessible in the final prospectus but also in the balance sheet of annual reports of the issuers/obligors."* (E3)

While the first respondent (E1) has skipped the two questions (i.e. question number 8 and question number 9), the other two respondents have different and contradiction answers from one another. However, the difference might be due to the different markets where the two respondents were referring. For instance, E2 was referring to the current practice of local sukuk market in Malaysia, while E3 was referring to the international market, or more specifically, the sukuk market in Kuwait since he is currently working in Warba Bank, Kuwait. There are no right or wrong answers, as this is just a matter of different implementation in different regions.

(d) The Possibility to Replace Interest Rate with GDP and Dividend Rates in the Valuation of Sukuk Pricing

One of the main objectives of the research is to test whether or not it is practical to replace the interest rate with GDP and Dividend rates in the valuation of sukuk pricing. Although this objective requires an empirical test to derive its answers, the researcher took the opportunity to ask the respondents are without any doubt, the experts concerning the practicality of the suggestion, and here are some insightful thoughts from them:

Question 10: Do you think it is possible to replace interest rate in the calculation of sukuk price, with GDP (sovereign sukuk) or Dividend rates (corporate sukuk)?

> *"Although the suggestion made by Professor Wilson sounds brilliant, it may be questionable especially the fact that there is no single country in the world has ever did it before. In other words, is it a comparable practice? Because as far as I concern, none of the country in the world has implemented it. Plus, you have to understand that while higher GDP indicates a good economic state of a country, (if this idea was to be implemented) higher rates caused the value or price of sukuk to fall, because the reverse relationship between sukuk/bond price with its interest/discount rates. Similarly, to dividend rates, while higher dividend indicates an excellent performance to a company, using the rate will not correspond to the actual value of sukuk, because higher rates cause the price/value of sukuk to fall down, not reflecting the actual value of the sukuk. So, let me ask you again, do you think it is practical to be implemented?"* (E1)

> *"Look, I have no issue if the suggestion being implemented, but my only concerns is how to carry out such novel proposal with investors who already attached to the existing conventional MGS (Malaysian Government Security)? To put simply, I mean, how do you convince investors regarding these new rates, particularly to investors who are extremely committed to sovereign investments of the country? Also, regarding of use of corporate's dividend rate, another thing that bothers me is the definition of 'corporate' itself, because, there are so many industries that different*

> *corporations specialize, and each industry behave differently from one another. So, to say "corporation's dividend rate" might be too general, and it might not reflect the risks that a particular asset in sukuk might have to encounter. (Silent paused)..However, having said that, I am actually looking forward for the proposal to be implemented, in fact, I support 100% for the new changes to come in the foreseeable future."* (E2)
>
> *"There are 2 things that bother me about the proposal. On one hand, I would totally consider replacing interest rate with GDP is *irrelevant* (emphasized the point), or an inapt rate to substitute the rate that is currently being used in the calculation of sovereign sukuk pricing. On the other hand, dividend rate, it might be possible to replace the interest rate for sukuk issued by corporations. However, my concerns is about the timing for such suggestion to be implemented. Let say in Sukuk Mudarabah, at the time of issue, the expected coupon rate is already set, thus using dividend rates might be questionable whether dividend rate has to change each time (for example) sukuk Mudharabah is being issued by a particular company, where the dividend rates accordingly being determined during the Annual General Meeting (AGM) of a company. What if a company's performance fluctuates, does using the same dividend rate is fair? This is my concerns of regarding substituting the interest rate with dividend rate for the calculation of sukuk pricing issued by corporations."* (E3)

The interviews conducted can be summarised as follows:

Question 1: In general, does sukuk pricing similar to bond pricing?
E1, E2, E3: Yes

Question 2: What are the differences that only occurs in sukuk pricing but not in bond?
E1: No difference in general.
E2: Yes, Only in the primary market where Islamic instruments incur another cost of documentation.
E3: No difference in general, but the respondent discussed the difference in terms of demand factor: Sukuk might be well/better price in countries like Malaysia because of the wide range of Shariah-compliant investors.

Question 3: Does the formula apply to all different sukuk structures?
E1, E2, E3: Yes

Question 4: What are the factors that influence the price of sukuk? (bond: interest & inflation rates, credit rating)
E1, E2, E3: Whatever factors that affecting bonds will give the same effect to sukuk

Question 5: What are the OTHER things /factors that affect the price of sukuk? (legal cost, etc).
E1: Documentation. At least 11 (or more) documents need to be signed
E2: Structure of Sukuk – zero coupon, straight/plain vanilla, exchangeable, perpetual, callable, and etc.
E3: Shariah Risk – the risk of inability to conform with Shariah guidelines after Issuance.

Question 6: Does a different sukuk structure affects its price? (Yes or No)
E1: Yes –from the perspective of different regions of investors, because the structures of Islamic products from Kuwait Finance House (KFH) is much preferred by them, unlike the Malaysian Shariah-compliant investors.
E2: Yes – from the perspective of the structure of products in general, regardless whether it is Islamic or non-Islamic instrument e.g. Zero coupon, plain vanilla, exchangeable, perpetual, callable, and etc.
E3: No

Question 6a: (If YES) How does the structure affect its price?
E1: Demand/ Expectation of Marketplace
E2: Different structures incurred different cost

Question 7: Does the price of combined sukuk contracts (e.g. Mudarabah & Murabahah) being calculated separately, or altogether?
E1: (Skipped the question)
E2: Composition of sukuk structure only appears at the initial stage, but once it passes the primary market, the pricing will be the same as all other fixed-income instruments.
E3: Together

Question 8: Does other features attached to a specific sukuk (e.g. derivatives, put/call options, and etc.) affects its price?
E1, E2, E3: Yes, additional features attached will materially change the value/price of sukuk

Question 9: Does the calculation of price included in the contract of every sukuk structure, and does the information (pertaining to price) accessible to investors?
E1: Yes
E2: Yes, and it's called Info-Memo (Information Memorandum) - issued by local issuers which consist of all the relevant information investors need to know, including issuers'/companies' profiles, the anticipated projects, terms and conditions, pricing, and etc, the same document is called Opulence Secular if the issuer is non-local/the sukuk issued is non-Ringgit based.
E3: Yes, relevant information such as the coupon rate, pricing, and etc., are definitely accessible to investors whether in the final prospectus or in the balance sheet of annual reports of the issuers/obligors

Question 10: Do you think it is possible to replace the interest rate (LIBOR/KLIBOR) in the calculation of sukuk pricing with (i) GDP rate for sovereign sukuk? (ii) Dividend rates for corporate sukuk (e.g. dividend payout ratio)
E1: No - It's not comparable to any other country throughout the world. Reverse relationship of pricing and performance - while higher GDP indicates a good state of a country, higher rates caused the value or price of sukuk to fall because the reverse relationship between sukuk/ bond price with its interest/ discount rates. Similarly to dividend rates, while a higher dividend indicates an excellent performance to a company, using the rate will not correspond to the actual value of sukuk, because higher rates cause the price/value of sukuk to fall down, not reflecting the actual value of the sukuk.
E2: Yes & No. Yes – looking forward for changes. No – How to convince the existing investors to switch into this new method of pricing, while they (investors) are already attached/ committed to sovereign investment? Different industry behaves differently, the same dividend rates from two different companies might not reflect the actual risks that assets in sukuk might have to encounter
E3: No. While the dividend rate of a company is determined once in a year in an Annual General Meeting (AGM), it is absurd to use the same rate for every issuance of sukuk throughout the year. The rate which supposedly considers many factors including risks, the economic performance of a company, and etc.

DISCUSSION

The main objective of the interviews is to explore the opinions of experts regarding the possibilities of replacing interest rate with GDP Growth rate and Dividend Yield in the valuation of sukuk pricing suggested by Wilson in 2008, apart from discovering the current practice of sukuk pricing in Malaysia, whether it is similar with the practice of conventional bond pricing. From all the semi-interviews that had been conducted, all three practitioners did not see the suggestion from Wilson is practical to be implemented in the market for many reasons, each with their own professional views to refute the suggestion by Wilson. In other words, the suggestion of Wilson clearly received backlash from people of different roles in the market.

For the most part, it is noteworthy to enlighten the readers that in the valuation of bond (and sukuk) pricing, bond/sukuk price and interest rate are inversely related. When the interest rate is high, the price of bond/sukuk will fall, and vice-versa (Investopedia, October 2020). Based on this fact, respondent E1 questioned the reverse relationship between sukuk/bond price and discount/interest rate, if the suggestion is to be implemented, this can only cause the price of sukuk to fall further if the economy of the country blooms and this is totally contradicting what Wilson (2008) suggested before which read;

> *"…when GDP growth is high, government tax revenue usually increases more rapidly, especially in countries with income or sales taxes. This would enable the government to pay higher returns to investors in their sovereign sukuk. Conversely, when GDP growth is lower, government revenue would be lower, implying a reduced capacity to service debt and pay sukuk holders…"*

In fact, what respondent E1 questioned is exactly what Mishkin and Eakins (2009) had explained with regard to the negative relationship between interest rates and bond pricing, which reads;

> *"It is straightforward to show that the valuation of bond and the yield to maturity are negatively related. As the yield of maturity, rises, all the denominators in the bond pricing formula must necessarily rise. Hence the rise in the interest rate as measured by the yield to maturity means that the value and hence, the price of the bond must fall. Another way to explain why bond price falls when the interest rises is*

> *that a higher interest rate implies that the future coupon payments and final payment are worth less when discounted back to present, hence the price of the bond must be lower."*

Respondent E1 also argued that the dividend also does not reflect the actual value of the sukuk because of the reverse relationship between the price of the sukuk and the discount rates. While it is true that a higher dividend indicates more earnings to be distributed to the shareholders of the company, using the rate will not correspond to the actual value of sukuk. This is because the higher rates cause the price/value of sukuk to fall down, but not reflect the actual value of the sukuk due to the negative or reverse relationship between the price of sukuk and the discount rates.

Additionally, respondent E1 is also concerned about the comparability of the figures if the new rates are introduced since no country in the world has ever done it before. Therefore, there is no point of reference to tell whether the performance is doing well or otherwise. This opinion is in fact, tallies with the research conducted by Min, Lee, Nam, Park, and Nam in 2003 demonstrated that the bond performances of different countries can be compared using many macro-economic variables, depending on the economic state of the country. However, if the dividend rate is also one of the measuring tools of corporate bonds (and sukuk) performances, this would render the corporate bonds/sukuk issued by the country to be incomparable to other countries.

On the other hand, respondent E2 has no issue if the suggestion is implemented. However, his only concerns are how to carry out such a novel proposal with investors who are already attached to the existing national or local investments. To put things simply, he was questioning how one convinces investors regarding these new rates, particularly to investors who are incredibly committed to sovereign investments in the country. This is in line with Lizarazo (2013) who stated that the sovereign bond market mostly consists of risk-averse investors who are extremely cautious with sovereign bond spreads, especially in the emerging market. Also, regarding of use of the corporate's dividend rate, another thing that is troublesome to respondent E2 is the definition of 'corporate' itself, as there are so many industries that different corporations specialize, and each industry behaves differently from one another. Investopedia (April 2020) has defined the word corporation as:

> *"A corporation is a legal entity that is separate and distinct from its owners. Corporations enjoy most of the rights and responsibilities that individuals possess: they can enter contracts, loan and borrow money, sue and be sued, hire employees, own assets, and pay taxes. Some refer to it as a "legal person."*

Corporations may vary according to their industries, but companies that operate within the same industry, meaning from the same business sphere makes it possible and easy for comparison purpose, not only for investors concerning the investment opportunity but also for the authorities to rank which companies perform better within the same industry. The strategies, operations, business decisions, risks and rewards of corporations are different from one industry to another. Therefore, based on the professional judgement from respondent E2, it is too general to say "corporation's dividend rate", as it might not reflect the risks that a particular asset in sukuk might have to encounter. However, having said that respondent E2 is actually looking forward to the proposal being implemented. In fact, he supports 100% of the new changes to come in the foreseeable future.

Finally, the final respondent, E3, has two opinions about the possibilities of replacing interest rate with GDP Growth rate and Dividend in the valuation of sukuk pricing. On the one hand, respondent E3 totally considered the action of replacing the interest rate with the GDP Growth rate as irrelevant, or an inapt rate to substitute the rate that is currently being used in the calculation of sovereign sukuk pricing, but he did not provide further justification about it. On the other hand, he considered dividend rate might be possible to replace the interest rate for sukuk issued by corporations.

However, his concerns about the implementation of using dividend yield as a new rate to replace the discount rate in the valuation of sukuk pricing are about the timing for such a suggestion to be implemented. He gave an example of Sukuk Mudarabah, at the time of issue, the expected coupon rate is already set, thus using dividend rates might be questionable whether the dividend rate has to change each time (for example) sukuk Mudharabah is being issued by a particular company, where the dividend rates accordingly being determined during the Annual General Meeting (AGM) of a company which normally conducted once a year. What if a company's performance fluctuates, let's say, at the end of the year before the AGM takes place, and the company does not perform well? In this case, is it fair to use the same dividend rate? This is the concern the third respondent (E3) raised regarding substituting the interest rate with the dividend rate for the calculation of sukuk pricing issued by corporations.

The qualitative analysis is nevertheless essential especially to discover the opinions of experts particularly those who are directly involved in the financial market before continuing to the next stage of testing the proposal quantitatively in the later stage of the research.

CONCLUSION AND RECOMMENDATION

In conclusion, the suggestion to replace interest rate with GDP rate for sovereign sukuk, and dividend rate for corporate sukuk in the valuation/calculation of its pricing, received both support and criticism from people of different roles in the market. From the interviews conducted, all the respondents disagreed with the idea, despite it being suggested by one of the most prominent scholars in Islamic finance, Professor Rodney Wilson. Other than Rahman et. al. (2017) who had attempted to tag GDP growth rate in valuing (sovereign) sukuk, this proposal by Professor Rodney Wilson remained merely as a novel theoretical suggestion, since there is no single empirical test to establish a conclusion as whether or not the suggested rates are appropriate, or instead, whether they are feasible and practical to be implemented in the market.

For that reason, this qualitative analysis is extremely fundamental to reveal the experts' viewpoints concerning the new suggestion made by Professor Rodney Wilson, before continuing to the next stage of testing the proposal empirically in future research/analysis. One of the keynotes that differentiate Islamic finance from conventional finance is that the former does not consider interest to be acceptable, therefore agreeing to the conventional benchmark such as LIBOR, EURIBOR, KLIBOR and others to be incorporated in the valuation of Islamic instruments such as sukuk, is indirectly defeating the purpose of Islamic finance itself.

Therefore, this study has undoubtedly shown that the Islamic finance industry is in dire need of having its own pricing benchmark, which is as competitive as what the conventional rate offers in order to further thrive and flourish in the industry. However, among the challenges to realising the implementation are mostly the acceptance of market players, and whether the new rates would restore investors' confidence as pointed out by the respondents in the interviews. Besides, according to the well-known Malaysian Shariah advisor, Dr. Aznan Hasan, having dual rates within a country (Islamic and conventional) would lead to arbitrage, which eventually results in disruption or disarray of the banking system (Sing, 2009). For that reason, further empirical tests are necessary to prove not only the feasibility of the new rate to be implemented but also its competency to be able to perform side by side with the conventional rates in the country.

DECLARATION STATEMENT

The author* affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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CONFLICT OF INTEREST

The authors declare no self-interest in the study conducted.

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