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2021

Online at <https://mpra.ub.uni-muenchen.de/111048/>
MPRA Paper No. 111048, posted 13 Dec 2021 08:11 UTC

The Impact of Islamic Portfolio on Risk and Return

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Abstract

The purpose of this study is to investigate the comparative impact of conventional and Islamic bonds over returns. It provides useful insights to investors to diversify investment by lowering the risk to the optimum level. This study examines the impact of the conventional and Islamic portfolios on returns through simple OLS regression, suggesting that Sukuk returns are positive and significant. Simultaneously, conventional bonds show a negative trend, but in the long run, the returns are significant. It indicates that the market is volatile due to macroeconomic factors that can reduce risks through portfolio diversification. Thus, this research suggests that investment can be secured by taking a rational portfolio decision that confirms robustness. Therefore, it is a good opportunity for the investors to get high margins over the investment tenure.

Keywords: Financial Instruments, Portfolio Diversification, Islamic Finance, Sukuk, Conventional Bonds

I. Introduction

The financial markets worldwide have witnessed significant growth, and the expansion trends can also be seen in global markets over the last decades. The rise of information and monetary values has provided domestic and international investors vast opportunities to invest capital into diversified portfolios (Ahmad & Radzi, 2011). The demand for Muslim investors is more aligned towards financial products that are following the Shariah. It is an essential feature that differentiates the conventional market from the Islamic capital market. According to (Ariff & Safari, 2012), Islamic bonds are considered one of the top essential products in Islamic portfolios. Islamic bonds (Sukuk) are different from traditional bonds as they do not conflict with Islamic principles (Mohamad & Yusoff, 2008). The global capital market has put some restrictions on the short-term debt based on the intrinsic value associated with the money market (interest) because it may consist of uncertainty. It restricts liquid assets (risk-sharing forms) in the financial system and promotes the real sector. Therefore, the funds' placement under the Islamic Portfolio (Sukuk) can profoundly register the investors' assets and capital returns (Chapra, 2008). The Sukuk in the Islamic capital markets provides an excellent opportunity for the short, medium, and long-term placement of funds in the Shariah-compliant manner (Nisar, 2007).

Khoso, et al., (2016) determine that in comparing conventional bonds, the Sukuk mainly deals in broad categories as asset-based and asset-backed. The principal payments are based on the assets' value and their returns. Still, the difference is only the returns/payments backed with the assets' performance. Each Sukuk presents undivided ownership to each certificate holder in the trust of the asset. Subsequently, the asset is leased to get periodic payments from rentals over the Sukuk life (Islamic Finance Sukuk, 2015). Since the launch of Sukuk, the various government and corporate sectors have successfully launched bonds to raise funds. It involves large projects such as railways,

airports, roads, hospitals, etc., that generate the funds from tangible assets. Sukuk encourages investors to make transactions in real assets instead of conventional bonds. Tough, strict rules and Shariah principles adhere to transparency and manage risk. It also ensures the relative position of Sukuk in the capital finance market in substitute for conventional bonds (Lyandresy et al., 2015). One of the key advantages of Sukuk over traditional bonds is the relationship that exists in asset backing and certificates. Sukuk is backed by assets whose worth increased with asset value, while conventional bonds do not have these characteristics. A conventional bond is directly issued as debt whose value is directly associated with a fixed interest rate. Moreover, one essential difference between conventional bonds and Sukuk is the involvement of asset that works under Islamic laws. Simultaneously, conventional bonds do not comply with Islamic laws where the risk varies between them.

The following are the key differences defined: (Lee & Ullah, 2008)

- **Ownership of Asset:** The key difference is the ownership that debt holders do not own in a business or project. There is a debt obligation in the conventional bonds and partial ownership in the Sukuk for the investors.
- **Effects of Cost:** The conventional bondholders are not affected by the underlying assets, while the Sukuk holders are directly affected by the assets. Thus, the investors' returns may reduce the profits/income and be impacted by the cost.
- **Issue Price:** The assets' face value in conventional bonds is based on the credit issuer, while the Sukuk is related, is based on the assets' market value.
- **Investment Criteria:** The conventional bonds fulfill the local or federal legislation for a specific project or business, while the Sukuk must fulfill the Shariah-compliant.
- **Risk and Rewards of Investment:** In conventional bonds, investors receive interest payments on a monthly, quarterly, and yearly basis, while in Sukuk, the investors receive profits/losses based on the underlying assets.

IIFM (International Islamic Financial Market) is the global body that deals with Islamic Financial Services under the Shariah-compliant established to oversee the financial contracts and products. This body mainly deals with Sukuk, while ICMA (International Capital Market Association) deals with conventional bonds and provides new insights for investors. The organizations are integrated with sustainable environment works for social purposes and mandate investment. It covers all kinds of small, medium conventional, and Sukuk issuance for fulfilling investment needs. It is analyzed that the global Sukuk market was closed to 174.641 billion with a growth of 19.86% in 2020. Thus, market trends show a huge investment in Sukuk as compared to the conventional bonds market. McMillen (2012) examined the practical problems in the financial market to find reasonable solutions for investors to mobilize funds. The concept behind mobilizing funds is the substance from surplus funding to shortage funding areas. The fundamental concept of risk/return has now been entered in the Islamic Portfolio with the key difference of debt and equity. These two solutions are not identical due to the operating difference of its financing. Sukuk is solving this problem by providing an alternate investment opportunity under Shariah's compliance. The reliance on Sukuk has been raised due to its equity nature (Asset-based and asset-backed) investment. At the same time, conventional bonds move through interest rates (Khosro, et al., 2016). The Sukuk issuance is a complex process; it needs further development at the international level with the progression of Sukuk that stakeholders enjoy their investing efforts. It needs strengthening of Islamic Portfolio to attract multiple investors and issuers for economic development and financial stability. Still, a big gap exists between conventional and Islamic bonds due to their significant risk and return patterns. Following Shariah Complaint, the Islamic Portfolio can lead to potential and massive development among global capital markets (Demirer, Balcilar, & Cerci, 2016).

This study aims to analyze the impact of Islamic bonds on risk and return by comparing them with conventional bonds. Previously, the investment pattern has changed and promoted due to its high-performing returns. Also, it has provided the recommended source to investors. Hence, this study is

based on a comparative analysis of conventional and Islamic bonds and which source is more trusted and reliable for investment (Hesse, Jobst, & Solé, 2008). The study's significance falls in the Islamic Portfolio as it is the best tool for investing in the Sukuk substitute of conventional bonds (Maeda, 2009). Previous studies like modern portfolio and modern finance theory suggest that Islamic bonds are an investment asset while conventional ones are. By combining the Islamic bonds with conventional, the investors would exactly be able to know the returns and their fluctuations (Merton, 1969). Further, the study reveals that in the previous year, how much value was capitalized by the International Capital Market Association, corporate or financial institutions (Cakir & Raei, 2007). Moreover, the study includes that conventional bonds are directly associated with the debt while the Sukuk is based on the assets' market value. It reveals the accurate results of risk and returns for investment, enabling investors to choose the right Islamic Portfolio.

II. Literature Review

The literature clearly shows how previous studies supported Islamic bonds under the risk and return portfolio. There were numerous studies conducted on conventional bonds and Sukuk, but this study finds a comparative analysis. Following literature support to analyze that which portfolio is more preferable for investors.

Ayesha et al., (2020) studied that how investment in diversified banks benefits loan portfolios. It has been studied that it directly affects credit risk and is directly associated with economic welfare. (Kota & Senthilkumar, 2019) researched that diversified assets play an active role in effective investment decision-making. The more the diversified investment means controlling factors of risk and return. (Levišauskait, 2010) conducted a study on investment analysis and portfolio management. The study's empirical results show various ways to calculate the portfolios through income and risk or risk and return. Different theories support the study to measure market efficiency. (Pula, Berisha, & Ahmeti, 2012) evaluated the impact of portfolio diversification on risk, return, and performance. Using the various assets, the returns are measured through a correlation test. The study reveals portfolio diversifications' positive effect in reducing risk to increase the performance over investment assets from 2005 to 2009. (Hoang, Lean, & Wong, 2011) examined that stocks with bond have dominant value and shows real risk. At the same time, the stocks without bonds were not advantageous for portfolios. Thus, investors could increase their wealth by choosing the right portfolio.

II.I. Conventional Bonds

Chapra (2008) described conventional bonds are a financial instrument that government generally issues. According to nature, it is a debt instrument and generates two types of cash flows, interest rate payment and bonds amount payable at the maturity date. The bond coupon payment is fixed over the life of the instrument unless the market interest rate fluctuates. When the bond issuer faces losses, it must be required to pay the obligation periodically until the bond matures (Ahmad & Radzi, 2011). There are various risks associated with conventional bonds and associated investments. Depending on the interest rate, there are also credit, inflation, liquidity risks associated. According to FINRA, conventional bonds are an essential part of the Islamic portfolio because, during traditional times, investors consider it a good source of earning returns. Nowadays, the economies and corporate sectors move towards Islamic portfolios and issue bonds. The regulatory authorities play essential roles in companies that are focusing on Islamic bonds. Many reforms occurred in previous years in the global capital market. The investment trends have been shifted towards Islamic portfolios as people tend to invest in Islamic bonds to substitute conventional bonds (Lee & Ullah, 2008).

II.II. Islamic Bonds (Sukuk)

Ariff & Safari (2012) studied the Sukuk that was first introduced in Malaysia in 1983. The Sukuk structure is directly linked to the asset-based, where the profits are fixed to the financial institution

and investors. It gives the right to the owners that they can sell their securities in the capital market. Thus, the Sukuk issuer receives the funds from investors or the financial institutions, and profits are shared among these two parties (Adam & Thomas, 2004). (Bidabad, Hassan, Ali, & Allahyarifard, 2011) determined that how Sukuk works and generates profits. Generally, Sukuk is issued in the real sector, and its funding is based on the tangible assets through which profits are generated. Sukuk is considered equal to the conventional bonds in the Islamic Portfolio following the Shariah rules and regulations regarding operating assets (Saripudin, Mohamad, Razif, Abdullah, & Rahman, 2012). Further, bonds' characteristics include the assets' market value when investors repay a Sukuk face value. The rate of return can be predetermined at issuance as it describes the percentage of face value and ultimately shows the annual returns of bonds. The payment of bonds can be made monthly, quarterly, semi-annually, or annually (Ariff & Safari, 2012).

III.II. Comparison Between Conventional and Islamic Portfolio

According to (Islamic Financial Services, 2017), the core substance of the financial system is to solve the problems that currently exist in the markets, that is, the difference between conventional bonds and Sukuk to mobilize the funds in the right way. There are also ultimate differences between conventional and underlying Islamic bonds: risk and debt return. Differences can be identified that conventional bonds are debt-based instruments, and Sukuk is equity-based instruments (Ahmad & Radzi, 2011). In Islamic finance, the “Sukuk” refers to the real owner of the particular asset or pool of assets upon which the bonds are issued. The Sukuk can be issued on a tangible or intangible asset (Lee & Ullah, 2008). The main issue behind the Sukuk is the special purpose vehicle, but it is issued under the Shariah-compliant manner as government, financial institution, corporation, or insurance company. The Islamic Portfolio deals with various underlying Sukuk such as Modaraba, Murabaha, Wakala, etc. Global conventional bonds' monetary and capital market is a debt instrument where the Sukuk is an asset-based or asset-backed bond. The presence and issuance of Sukuk give new insight into budgetary security and provide an outlook to get financing to boost economic activity (Saripudin et al., 2012).

Jabeen (2007) studied that in the renowned world and the leading economies, the Islamic financial industry was developed in 1970, where new constitutions occurred. The financial institutions started proposing the Shariah-compliant portfolios and investment assets because of diversified investors' needs and developing economies. Though the Islamic portfolio concept has existed since the beginning of Islam, Islamic finance is still not fully formed (Saripudin et al., 2012). That is why the global Sukuk market was introduced to further deal with the complexities of Islamic Sharia that deals with Sukuk. Despite the rising trend of conventional portfolios, empirical studies on the Islamic Portfolio still need to be compared with the conventional portfolio—the market indices' effects in the same pattern on Islamic portfolios as its effects on conventional indices. The Islamic Portfolio is strongly related to the risk and return; therefore, volatility is the Islamic Portfolios' primary characteristic by analyzing the risk and return. This research focuses on an Islamic portfolio that compares conventional and Islamic bonds (Sukuk) (Abdel-Khaleq & Richardson, 2006).

Barqawi (2018) conducted a study to investigate the key products under the Islamic capital market, backed by Islamic assets while conventional bonds follow the debt model. The study reveals the comparative analysis of Sukuk and conventional bonds and contrasts the factors that affect prices. The asset pricing model was selected to prove the results and recommend that the Sukuk market was better than conventional bonds. The qualitative and quantitative approaches were used to explain the model fitness by developing the two suitable equations. The data has been gathered from Dow Jones for different regions to identify the average rate of return over conventional bonds and Sukuk. The Sukuk determines its price through asset capitalization, while conventional bonds are directly valued through interest rates. The study results indicate that under Shariah compliance, the risk is more controlled than conventional markets. Thus, it indicates that Sukuk has lower risks due to its principles of asset sharing than conventional bonds.

Rahmawati et al., (2020) studied the financial obligations of the stock market in the Indonesian economy, which is an integral part of the economy. The study evaluates the compliance under both the conventional and Shariah markets to see the impact on stock returns. For this purpose, the manufacturing sector is targeted for the period 2015-2017. The study reveals that the stock market reacts to its asset issuance while Sukuk affects more than conventional bonds over selected sector returns. Sherif & Erkol (2017) investigated the stock market by comparing the fixed-rate conventional bonds and Sukuk. The focus behind conducting the study was to check how the stock market reacts and affects shareholders' wealth with the issuance of these two types of bonds. The focused region was Malaysia, where event methodology was used through collecting the FTSE Malaysia index. Further, the data segregated between symmetric and asymmetric samples for pre-crisis, post-crisis, and overall 2000-2015. The analysis indicates insignificant results over the Malaysian stock market due to the use of fixed-rate bonds. Hence, it provides evidence of a robust market that differentiates bonds returns.

Aldhaferi (2017) evaluated the financial instruments which are similar to bonds under the Shariah-compliant. The study experienced the Sukuk market from its inception in 2002 to analyze investors' behavior. Both the conventional and Islamic bonds were exposed in financial markets to analyze the risks. Importantly, the value at risk approach was used to examine returns under the investment portfolio. It was suggested that diversification of conventional and Sukuk evidence persistent illiquidity. It improves risk and returns trade-off while reducing implications for the investors. Thus, it was beneficial for the investors to consider Islamic portfolios by minimizing risks with high returns.

III. Methodology

After reviewing previous studies, it has been identified that there is a gap in Shariah products that need to be integrated with the Islamic portfolio. Therefore, this section deals with the conceptual framework that how Islamic portfolios impact risk and return. This section elaborates on research theories as modern portfolio and finance theory supports study that how Islamic bonds are better than conventional bonds. In the recent era, investors need a diversified portfolio where they can invest and earn good margins. Therefore, Sukuk can be considered the best possible alternative to conventional bonds globally. Thus, investors can diversify their investment by selecting Shariah-compliant Islamic bonds (Mobin & Ahmad, 2014).

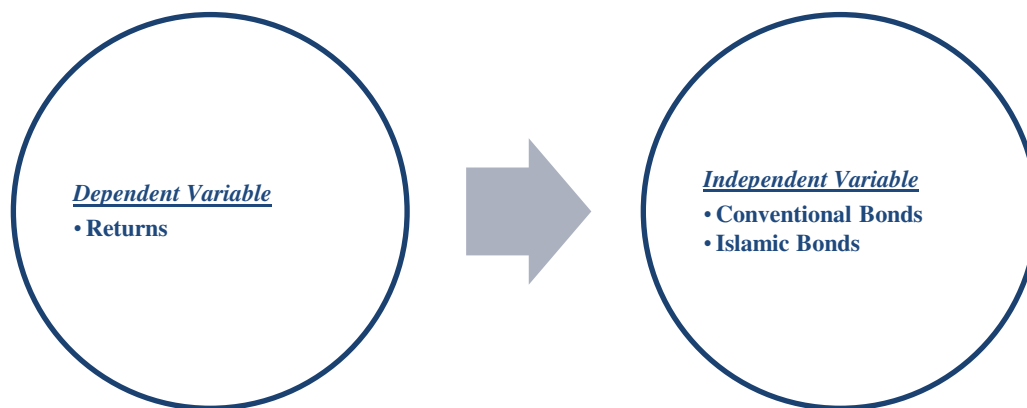
III.1. Research Theories

Markowitz (1959) has developed a theory called investment or portfolio theory. He introduced the concept of diversification to allocate an asset in an investment portfolio. The model directly links with risk and return where multiple Islamic and conventional portfolios carry different weightage. It deals with how investors can control unsystematic risk by diversifying their investment rather than investing only in the individual asset. (Merton, 1969) combined the consumption and optimal selection models to determine investment behaviors. The study further reveals that two or more investment assets are considered to be risk-averse. Various methods exist to measure the risk, such as the capital asset pricing model, but the market index is a useful tool to indicate the average risk and return. MPTs' provide perfect information and define a strategy that leads to high returns and relatively low risk. The landscape of modern investors indicates that they are risk-averse (Koumou, 2020).

Modern Finance theory is also an indicator of market capitalization where perfect market information affects investors' decisions. (Simkowitz, 1972) suggested that a perfect capital market impacts investment decisions, where investors increase their wealth through institutional wealth management. Numerous factors consist of risk and returns, i.e., economic and political conditions. (Omisore et al., 2012) suggested that in exchange for the traditional method, MPT provides techniques that construct the best Portfolio (Arize et al., 2019).

III.II. Econometric Model

This study follows a quantitative method under descriptive research that how the market value impacts return on comparative bonds. As per the empirical study of comparative research, the econometric model measures return for investors to provide better investment options (Pickard, 2013). The risk and return are directly correlated with the market capitalization (investment) of how unsystematic risk can be controlled. Conventional bonds and Sukuk directly correlate with interest rate and asset value, respectively, which is the more profitable asset. The following equation shows that market returns depend on the investment on which investors make decisions under the high returns and low-risk strategy (Worthington & Higgs, 2004).



The above framework shows that returns are dependent on the market value of bonds that either the increase or decrease of bonds investment impact returns under efficient market hypotheses or not. So, the dependent variable is market return, while explanatory variables are conventional and Islamic bonds.

where,

- RE – Returns,
- C.B. – Conventional Bonds
- IB – Islamic Bonds

The regression equation shows that returns are directly associated with conventional and Islamic bonds:

Following the functions forms of Ali (2011), Ali (2015), Ali (2018), Ali and Bibi (2017), Ali and Ahmad (2014), Ahmad and Ali (2016), Audi and Ali (2016), Ali and Audi (2016), Ali and Audi (2018), Ali and Rehman (2015), Audi and Ali (2017), Ali and Naeem (2017), Audi and Ali (2017), Ali and Zulfiqar (2018), Ali et al., (2016), Arshad and Ali (2016), Ashraf and Ali (2018) Haider and Ali (2015), Sajid and Ali (2018), Ali and Senturk (2019), Kassem et al, (2019), Ali and Bibi (2020), Sulehri and Ali (2020) and Audi et al., (2021), the model of this study become as:

- Functional Forms: $RE = F(\text{Conventional Bonds and Islamic Bonds})$
- Equation Form: $RE_t = \beta_0 + \beta_1 CB_t + \beta_2 IB_t + u_t$

Under the statistical approach, β_1 is the coefficient of conventional bonds, and β_2 is the coefficient of Islamic bonds. At the same time, β_0 determines the intercept of that how much investors earn a fixed return. It can be categorized as systematic risks, while both explanatory variables determine systematic risks. Subsequently, u_t indicates the error term captured by residuals of any unexplained variations (Ariff & Safari, 2012). According to the (Accounting and Auditing Organization for Islamic Financial Institutions, 2020), the Sukuk is the certificate representing undivided ownership of tangible assets over the specific project and unique activity investment. It is considered the finance provider for the Sukuk holder and investor, where returns are generated by sourcing the assets'. Simultaneously, (Bidabad et al., 2011), the debt instruments are based on domestic interest rates that dominate earnings. According to nature, it is a debt instrument and generates two types of

cash flows, interest rate payment and bonds amount payable at the maturity date. The bond coupon payment is fixed over the instruments' life unless the market interest rate fluctuates. (Hayat & Kraeussl, 2011) described the significant difference that makes Sukuk more essential than conventional bonds. The conventional bonds are interest-based, while the Sukuk are issued under two major asset-based and asset-backed categories. Here, the crucial questions are raised: conventional bonds are either equity or debt-financed answered above (Lintner, 1965).

The research is designed to measure the impact of Islamic bonds over conventional bonds that either give the profitable option. For this purpose, this study has measured the impact of conventional bonds over Sukuk. A simple regression equation is estimated under the Ordinary Least Square method that fulfills all assumptions. The data is collected from secondary sources for 2002-2020 to see the impact of Islamic portfolios over conventional bonds. Islamic bonds data is collected from IIFM (International Islamic Financial Market). In contrast, conventional bonds data is collected from ICMA (International Capital Market Association) as well as this source is used to collect market returns over the period. This study covers 19 years and the reason behind selecting this period is the inclusion of Islamic bonds in the investment portfolio that has opened the door for investors. Further, the data is converted into a stationary form to see the impact of conventional and Islamic bonds on the market returns (Shanmugam & Zahari, 2009).

IV. Analysis and Discussions

This section deals with the study results that either return significantly affects conventional and Islamic or not. OLS regression is tested on EViews' as returns are dependent variables while bond market values are explanatory variables. It is discussed above that conventional bonds return majorly based on the interest rate. Other risks are involved besides systematic risks, like credit, inflation, and liquidity risk. Subsequently, the Sukuk profitability is measured through the value of the asset on which it is based. Here, it is important to critically analyze the bonds independently to see the impact of promoting portfolio investment. With the inclusion of Sukuk, a large number of investors has been attracted because it provides a useful platform for investment (Simkowitz, 1972).

Dependent Variable: RE

Method: Least Squares

Sample (adjusted): 2005 2020

Included observations: 16 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.058566	0.031866	1.837881	0.0910
RE(-3)	0.513409	0.120018	4.277769	0.0011
CB	-1.16E-06	2.15E-07	-5.394593	0.0002
IB	1.99E-06	8.96E-07	2.222828	0.0462
R-squared	0.910429	Mean dependent var		0.093563
Adjusted R-squared	0.888036	S.D. dependent var		0.064577
S.E. of regression	0.021608	Akaike info criterion		-4.619181
Sum squared resid	0.005603	Schwarz criterion		-4.426034
Log-likelihood	40.95345	Hannan-Quinn criteria.		-4.609290
F-statistic	40.65717	Durbin-Watson stat		2.183856
Prob(F-statistic)	0.000001			

Based on the results, the study rejects null hypotheses in accepting alternate that returns significantly impact Islamic portfolios than conventional bonds. The following table shows that both Islamic and conventional bonds are significant under 1% and 5% p-value. In contrast, the conventional bonds coefficient is negative, which means the market is in-efficient for conventional bonds while Sukuks

shows positive results. Three-period lags of dependent variables have been taken for stationary returns. That is why the model has taken an adjusted sample of 2005-2020 from the 20 years of study. Now, the lagged returns indicate that it follows positive and significant results for the bonds market. Here, constant is also positive and significant, which provides further evidence for empirical analysis.

The statistical analysis of the econometric model indicates that the overall model is a good fit as it explains 88% of the variations that returns are directly dependent upon conventional and Islamic bonds. The F-statistics are also significant at a 1% p-value, and the model is selected at the lowest value of the Schwarz criterion. Moreover, the correlation test of Durbin-Watson ranges under acceptable criteria. Thus, it fulfills all assumptions of OLS and indicates that returns are directly associated with the investment. Further, this model is accepted to give policy about portfolio diversification of bonds.

The study investigates that Islamic diversification benefits Sukuk holders than equity investors (Demirer et al., 2016; Audi et al., 2021). It is known that in the emerging market, the Sukuk returns move differently due to its transmission of assets. The dynamic group of conventional and Islamic bonds provides a valuable source of investment. Under the framework of portfolio investment, this study indicates some implications in conventional bonds that might be the negative coefficient as it shows more volatile returns. As a combination of investment, it is a good source of investment not only for domestic bonds but also for international bonds. Some implications need to be adopted by both markets to remove the volatility. Thus, both types of bonds provide significant and positive sources of investment to secure returns. According to Adekunle et al., (2017), Sukuk provides a trusted source of investment as theoretically, and empirically it proves the viable option. Though Sukuk is a newly developed market, its fundamental concept of returns has gained momentum with its asymmetric returns. The study found a strong relationship between conventional and Islamic bonds even though they can also be diversified with other assets. The portfolio performance of this research is essential for the investors to get a diversified portfolio where risk can be reduced to the optimum level to enjoy secure returns. Over the years of investment, it provides an opportunity for re-investing cashflows as market value increases day-by-day.

This study concludes that Islamic bonds performance is satisfactory over 2002-2020 because of its inception in the proliferating market. Even after global crises, many countries' stock exchanges crash and even cannot stabilize returns. In these circumstances, the interest rates fluctuated globally and resulted in volatile returns where investors faced many losses. Thus, in this scenario, Islamic bonds were found a trusted source of investment to invest independently or diversify with other instruments. Hence, this research is useful for individuals and businesses to diversify their investment by creating an investment pool. In the coming years, Islamic bonds strengthen the market as more public and private companies are issuing Sukuk that exhibits more positive returns than conventional bonds. It demonstrates Shariahs' compliance rules and secures investors' returns in short and long periods (Hayat & Kraeusl, 2011).

V. Conclusions

The rise of economic growth and investment activities has raised opportunities for both international and domestic investors. There are multiple modes of investment available such as equity, stocks, bonds, options, etc., depending upon risk and return. But over the last decades, Islamic modes of financing have witnessed a broad expansion under the Shariah compliance. The emergence of Islamic finance allows investors to become part of the pre-dominant market through the diversification of their assets. Traditionally, conventional bonds are used to hedge the risk as it is considered risk free mode of investment. Now, Sukuks' is also considered a trusted source of investment that can be used to diversify the investment. Under portfolio diversification, both the conventional and Islamic bonds directly proportionate favorable returns. This study aims to determine the impact of Islamic portfolios on risk and return and whether this is a good option for

investors. For this, the market capitalization of bonds is analyzed to see the causal effect on returns. Global capitalization of bonds shows volatile results as conventional bonds are interest-based while an asset backs Sukuk. This study determines the comparative impact of conventional and Islamic bonds on returns over 19 years. It shows that the inclusion of Islamic bonds in a portfolio is a good option for investors to diversify investment. The significant and positive results of Sukuk support that investors can lower the risk and can earn higher margins. The market forces influence the conventional returns more, indicating an in-efficient market due to the effect on interest rates, but Sukuk assets generate more profitable returns. Thus, it concludes that Islamic financing is essential for investors to lower at optimum level. International and domestic investors can allocate investment in conventional and Islamic bonds as it gives significant returns. Further, this study opens the door for future research to analyze the impact of stocks, equity, options, commodity, and other assets. It would benefit corporate and individual investors to be fuelled by Sukuk or Islamic bonds that follow Sharia rules and satisfy investors to originate positive returns.

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APPENDICES

Descriptive Statistics

Particulars	IB	CB	RE
Mean	15259.11	50439.47	0.120526
Median	11852.00	45938.00	0.073100
Maximum	38476.00	117331.0	0.301000
Minimum	425.0000	191.0000	0.005900
Std. Dev.	13287.83	40044.73	0.088911
Skewness	0.468398	0.295006	0.633334
Kurtosis	1.773847	1.710413	2.282700
Jarque-Bera	1.884988	1.592159	1.677516
Probability	0.389655	0.451094	0.432247
Sum	289923.0	958350.0	2.290000
Sum Sq. Dev.	3.18E+09	2.89E+10	0.142293
Observations	19	19	19

Correlation Matrix

Covariance Analysis: Ordinary			
Sample: 2002 2020			
Included observations: 19			
Correlation t-statistics	RE	IB	CB
RE	1.000000 -----		
IB	-0.748273 -4.650669	1.000000 -----	
CB	-0.878703 -7.589497	0.773941 5.039092	1.000000 -----