International Journal of Industrial Management (IJIM)
ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

THE ROLE OF ECONOMIC AND FINANCIAL FACTORS IN ENHANCING SUKUK MARKET CROSS-SECTIONAL STUDY

Mohamed Khudari
Finance and Economics Department, College of Business Management and Accounting, Universiti Tenaga Nasional, 26700 Muadzam Shah, Pahang, Malaysia.
khudari@uniten.edu.my

ABSTRACT

The aim of this study is to investigate the influence of macroeconomic factors and financial factors the construction of sovereign, corporate and international *Sukuk* in the most *Sukuk* issuer's countries over the period 2011-2015. Based on the partial least square (PLS) analysis was used to evaluate the relationship among the constructs of the research model. The results indicate that there is no evidence that macroeconomic factors affect sovereign and corporate *Sukuk,* while there is a clear evidence that macroeconomic factors affect international *Sukuk*. While there is a clear evidence that financial factors play a significant role in enhancing the development of *Sukuk* types (sovereign, corporate and international).

Keywords*: Sukuk* Market, Sovereign *Sukuk*, Corporate *Sukuk*, International *Sukuk*, Partial Least Square (PLS)

INTRODUCTION

The development of Islamic financing simultaneously represents an expansion of the global financial system. Whereas recent innovations in Islamic finance have changed the dynamics of the Islamic finance industry. Specially in the area of bonds and securities the use of *Sukuk* or Islamic securities have become increasingly popular in the last few years, both as a means of raising government finance through sovereign issues, and as a way of companies obtaining funding through the offer of corporate *Sukuk*.

The word *Sukuk* comes from the plural of the Arabic word *sakk*, or bonds or securities structured according to *Shari'ah* principles, which prohibit Islamic issuers and investors from investing in conventional securities. *Sukuk* are also called Islamic bonds or Islamic investment certificates, which structure securitized leases (*Ijarah*) and other Islamic financing contracts, such as *Murabahah* (sale with mark-up), *Musharakah* (a combination of equity contribution and proportional profit and loss sharing on the basis of partnership), and

International Journal of Industrial Management (IJIM)
ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

Mudarabah (partnership between one person who contributed to the capital and another who provides managerial skills) (Obaidullah, 2007).

Sukuk has developed as one of the most significant mechanisms for raising finance in the international capital markets through Islamically acceptable structures. The issuance of *Sukuk* was in response to the demands of issuers and investors in Muslim countries as an alternative mode for their financing and investment needs that complies with the *Shari'ah* requirements.

The *sukuk* market is seen as a way to channel the world's growing pool of *Shari'ah*-compliant capital to be used to promote sustainable and equitable economic development. Multinational corporations, sovereign bodies, state corporations and financial institutions use international *Sukuk* issuance as an alternative to syndicated financing, as shown in Figure 1.

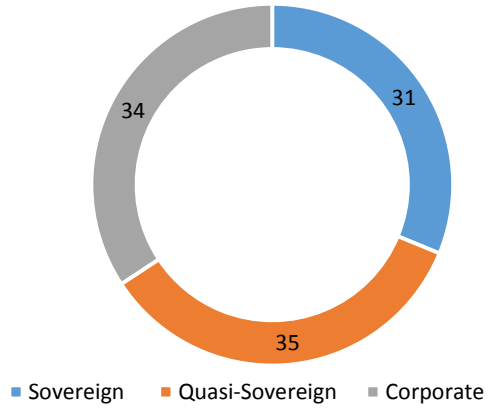

Figure 1: The International Sukuk Issuances by Issuers Status (Jan 2013- Dec 2014)
Source: IIFM *Sukuk* database

In 2013, the issuing of global *Sukuk* has increased to reach more than USD 138 billion, while in 2015 the issuing of global *Sukuk* has decreased to reach around USD 60 billion. Figure 2 shows the global *Sukuk* issuances distributed by issuer status during the period of (Jan 2013-Dec 2014). It's clear that sovereign *Sukuk* formed 66% of total global *Sukuk*, whereas the sovereign *Sukuk* issuances might lead to two benefits: first, providing funding for the Government's borrowing requirement, and secondly, giving readier access to liquidity for the growing number of Islamic banks that operate in this country. Although *sukuk* markets are still in a formative stage, they have developed at a significant pace. If corporate *sukuk* are issued regularly, coupled with an initiative to develop a secondary market and harmonize a regulatory framework, *sukuk* markets will mature (Zulkhibri, 2015).

International Journal of Industrial Management (IJIM)
ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

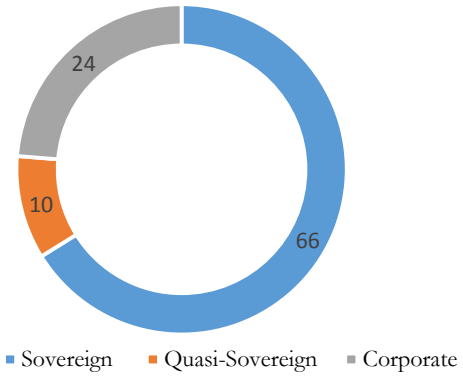

Figure 2: The Global *Sukuk* Issuances by Issuers Status (Jan 2013- Dec 2014)
Source: IIFM *Sukuk* database

The major issuers of Islamic finance tools were the Asian countries. In addition, Asia was the major regional engine of growth for the *Sukuk* market, which accounted for 63.9% of issuance and Malaysia alone was the source of approximately 54% of the number of worldwide issues amounted to approximately 48% of *Sukuk* issued in Malaysian ringgit (Damak et al., 2010).

The *Sukuk* market has struggled in the past couple of years due to the global economic uncertainty which has caused the dearth of new players. According to this statement, this study attempts to identify what factors (macroeconomic and financial) that affect *Sukuk* issuance, therefore this study tries to analyze the influence of macroeconomic factors and financial factors the construction of sovereign, corporate and international *Sukuk* in the most *Sukuk* issuer's countries. The scope of this study covers seven *Sukuk* issuer's countries namely: Bahrain, Indonesia, Malaysia, Qatar, Saudi Arabia, Turkey and United Arab Emirates observed over the period 2011-2015.

LITERATURE REVIEW

There is much research on the issuance of *Sukuk* and the development of economic sectors using *Sukuk* (Saad & Haniff, 2013) but not too many studies available on the relationship between *Sukuk* and economic growth. However, the empirical studies that have been conducted so far have mainly examined the types of *Sukuk* instruments and consumer and investor perceptions of *Sukuk* with respect to economic development. In the short term, *Sukuk* are driven by their own dynamics. The evidence argues that, because *Sukuk* issuance Granger-causes GDP, policy makers should introduce policies to modernize the functional aspects of Islamic capital market (Ahmad et al., 2012) to include *Sukuk*. Furthermore,

ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

because global markets in many Muslim countries are largely untapped, *Sukuk* have a competitive advantage for international institutional investors.

The link between Islamic finance and corporate finance is always an interesting topic in *Sukuk* literature. Most studies point to the fact that investors react positively to announcement of Islamic debt issuances (Ibrahim & Minai, 2009). These findings are attributed to a larger investor base for Islamic debt securities relative to that of conventional debt, which creates cost advantages, lowering the cost of capital. The literature also sees an important role for the government to support the development of *Sukuk* market and to find alternative financing for economic development. Specifically, the role for governments in Muslim countries regarding financing the budget by mobilizing resource using domestic *Sukuk*. However, exposure to exchange rates increases the risks for sovereign issuers of *Sukuk*, particularly those denominated in nondomestic currency.

Said and Grassa (2013) investigate similar issues on the determinants of *Sukuk* market development in ten countries. The results show macroeconomic factors—GDP per capita, Muslim population, economic size, and trade openness as well as regulatory quality—have a positive impact on the development of a *Sukuk* market. However, the amount of *Sukuk* issued has declined considerably in recent years, and the financial crisis has negatively affected the development of the *Sukuk* market. At the same time, conventional bond markets contribute positively to the development of the *Sukuk* market. It appears that the conventional bond market and the *Sukuk* market are complements rather than substitutes.

RESEARCH METHOD

The study employs aggregate data of *Sukuk* issuance in seven countries namely: Bahrain, Indonesia, Malaysia, Qatar, Saudi Arabia, Turkey and United Arab Emirates for the period 2011-2015. Data *Sukuk* sourced from the International Islamic Financial Market (IIFM), while data of macroeconomic and financial factors sourced form the World Bank database. The researcher examines the effect of macroeconomic and financial conditions on three types of *Sukuk* issuances (sovereign, corporate and international) at the aggregate level as shown in Figure 3.

International Journal of Industrial Management (IJIM)
ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

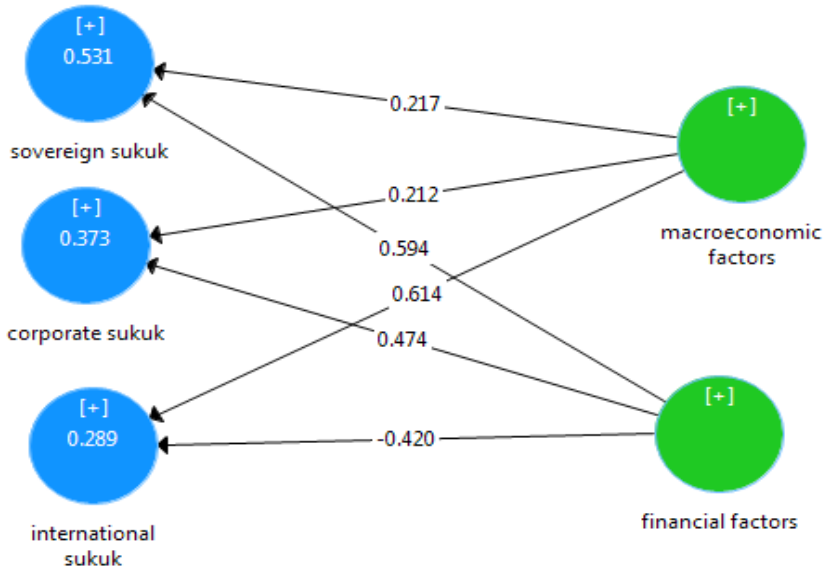

Figure 3: Research Framework.

SmartPLS 3.0 software was used to evaluate the relationships among the constructs of the research model by conducting partial least square (PLS) analysis.

Past research concerning the effects of macroeconomic factors on *Sukuk* market development while in this study, the analysis will be concern on the effects of both macroeconomic and financial factors on issuance of sovereign, corporate and international *Sukuk*; hence, based on previous literature, the following hypotheses have been developed:

Hypothesis 1 (H1): Financial factors affect the issuance of corporate *Sukuk.*
Hypothesis 2 (H2): Financial factors affect the issuance of international *Sukuk.*
Hypothesis 3 (H3): Financial factors affect the issuance of sovereign *Sukuk.*
Hypothesis 4 (H4): Macroeconomic factors affect the issuance of corporate *Sukuk.*
Hypothesis 5 (H5): Macroeconomic factors affect the issuance of international *Sukuk.*
Hypothesis 6 (H6): Macroeconomic factors affect the issuance of sovereign *Sukuk.*

RESULTS

A cross-sectional data of seven countries during 2011-2015 were used from 18 variables (15 independent variables and 3 dependent variables).

International Journal of Industrial Management (IJIM)
ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

The loadings of construct variables are illustrated in Table 1, it shows that variables with loadings less than 0.40 are excluded from the model. While the loadings represent the correlation, the expected positive relationships between macroeconomic factors (exports, FDI outflow, savings, oil rents and fuel exports) and *Sukuk* issuances (sovereign, corporate and international). While it clears that the inflation has strong negative relationship with *Sukuk* issuances (-0.896). Although this study conducts with secondary data, it could be acceptable to show the AVE value as a measurement model. The AVE value of the each construct is generated using SmartPLS algorithm function where all AVE values are greater than 0.5. Based on the results the tests on the measurement model are satisfactory.

Table 1: Measurement Model

Construct		Items	Loading	AVE
Macroeconomic factors				0.502
	m1	Exports of Goods and services (% of GDP)	0.880	
	m2	Foreign direct investment, net inflows (% of GDP)	---*	
	m3	Foreign direct investment, net outflows (% of GDP)	0.651	
	m4	Gross capital formation (% of GDP)	---	
	m5	Gross savings (% of GDP)	0.634	
	m6	Inflation, consumer prices (annual %)	-0.896	
	m7	Oil rents (% of GDP)	0.508	
	m8	Fuel Exports (% of GDP)	0.593	
Financial factors				0.549
	f1	Bank capital to total assets (%)	-0.576	
	f2	Corporate bond issuance volume to GDP (%)	0.898	
	f3	Outstanding total international debt securities / GDP (%)	---	
	f4	Stock market capitalization to GDP (%)	0.936	
	f5	Stock market total value traded to GDP (%)	---	
	f6	Stock market turnover ratio (%)	-0.423	
	f7	Syndicated loan issuance volume to GDP (%)	---	

*--- loading less than 0.40 were excluded from the model. AVE = average variance extracted

The validity of the structural model is assessed using the coefficient of determination (R^2) and path coefficients. The Variance inflation factors (VIF) uses to describe how much multicollinearity (correlation between predictors) exists in a regression analysis. The results show that there are no multicollinearity whereas the value of VIF (1.357) are less than 4. The beta value indicates the amount of variance in the dependent variables that is explained by the independent variables. Thus, a larger R^2 value increases the predictive ability of the structural model. In this study, f^2 is more sufficient in secondary data. The SmartPLS algorithm function is used to obtain the R^2 and f^2values, while the SmartPLS bootstrapping function is used to generate the t-statistics values. For this study, the bootstrapping function generated 500 samples from 35 cases. The results of the structural model are presented in Figure 3.

Based on the results are shown in Table 2, the relationship between the financial factors → corporate *Sukuk* (β=0.474, $p<0.01$) were positive related to corporate *Sukuk* issuance with

International Journal of Industrial Management (IJIM)
ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

an f^2 of 0.264 indicating that 26.4% of the variance in corporate *Sukuk* can be explained by financial factors. Hence, H1 is supported. Financial factors → international *Sukuk* (β=-0.240, p<0.01) were negative related to international *Sukuk* issuance with an $f^2$of 0.182 indicating that 18.2% of the variance in international *Sukuk* can be explained by financial factors. Hence, H2 is supported. Financial factors → sovereign *Sukuk* (β=0.594, p<0.05) were positive related to sovereign *Sukuk* issuance with an $f^2$of 0.554 indicating that 55.4% of the variance in sovereign *Sukuk* can be explained by financial factors. Hence, H3 is supported. According to the relationship between macroeconomic factors and *Sukuk,* the results show that there are insignificant relationships between macroeconomic factors and both sovereign *Sukuk and* corporate *Sukuk* whereas H4 and H6 were not supported, while the relationship between the macroeconomic factors → international *Sukuk* (β=0.614, p<0.01) were positive related to international *Sukuk* issuance with an $f^2$of 0.391 indicating that 39.1% of the variance in international *Sukuk* can be explained by macroeconomic factors. Hence, H5 is supported.

Table 2: Path Coefficient

Hypothesis	Relationship	Standardized β	f^2	*SE*	*VIF*	*T* value	Decision
Hypothesis 1	Financial factors -> corporate *Sukuk*	0.474	0.264	0.196	1.357	2.418**	Supported
Hypothesis 2	Financial factors -> international *Sukuk*	-0.42	0.182	0.187	1.357	2.245**	Supported
Hypothesis 3	Financial factors -> sovereign *Sukuk*	0.594	0.554	0.186	1.357	3.195*	Supported
Hypothesis 4	Macroeconomic factors -> corporate *Sukuk*	0.212	0.053	0.194	1.357	1.091	Not supported
Hypothesis 5	Macroeconomic factors -> international *Sukuk*	0.614	0.391	0.253	1.357	2.426**	Supported
Hypothesis 6	Macroeconomic factors -> sovereign *Sukuk*	0.217	0.074	0.158	1.357	1.367	Not supported

*p<0.05, **p<0.01.

CONCLUSION

Past researches showed that macroeconomic factors influence the development of some structures of *Sukuk* (i.e. *Ijara*, *Murabaha*, *Musharaka*) (Said & Grassa, 2013), and other research investigates the effects of macroeconomic fundamentals on emerging market sovereign credit spreads (Hilscher & Nosbusch, 2010), while this study tries to investigate the determinates of *Sukuk* types like sovereign, corporate and international *Sukuk*, the main

findings that there is no evidence that macroeconomic factors affect sovereign and corporate *Sukuk*, while there is a clear evidence that macroeconomic factors affect international *Sukuk*.

The following macroeconomic factors paly significant role which determine the development of international *Sukuk* issuance are: (i) openness of an economy which is measured as the ratio of exports to GDP. (ii) Foreign Direct Investment net outflows to GDP. It refers to direct investment equity flows in an economy. Direct investment is a category of cross-border investment, it is the sum of equity capital, reinvestment of earnings, and other capital. (iii) Gross saving to GPD which probably plays an important role to develop *Sukuk* market. (iv) Inflation: the negative effects of inflation on *Sukuk* refers to the macroeconomic instability, whereas a stable economic environment is favourable to the development of *Sukuk* market. (v) Oil revenues represent both the oil rents and fuel exports which have positive effects on international *Sukuk* issuance.

Moreover, the main findings according to the effects of financial factors on *Sukuk* market, the results show that there is an evidence that financial factors play a significant role in enhancing the development of *Sukuk* types (e.g. sovereign, corporate and international).

REFERENCES

Ahmad, N., Daud, S. N., & Kefelia, Z. (2012). Economic forces and the *sukuk* market. *Procedia: Social and Behavioral Sciences*, 65, 127–133.

Damak, M., Esters, C., & Maheshwari, R. (2010). The Sukuk market is likely to show steady growth in 2010. Islamic Finance Outlook. Standard & Poor's New York, 13-18.

Hilscher, J. & Nosbusch, Y. (2010). Determinants of sovereign risk: Macroeconomic fundamentals and the pricing of sovereign debt, *Review of Finance*, 14 (2), 235-262.

Ibrahim, Y., & Minai, M. S. (2009). Islamic bonds and the wealth effects: evidence from Malaysia. *Investment Management and Financial Innovations*, 6(1), 184–191.

Obaidullah, M. (2007). Securitization in Islam. In M. K. Hassan, & M. K. Lewis (Eds.). Handbook of Islamic banking (pp. 191–199). Cheltenham: Edward Elgar

Ringle, C. M., Wende, S., & Becker, J. M. (2015). "SmartPLS 3." Retrieved from http://www.smartpls.com.

Saad, M. N. & Haniff, N. M. (2013). A Delve Into Performance of *Sukuk* (Islamic Bonds) And Conventional Bonds Issued By PLCS in Malaysia. *European Journal of Accounting Auditing and Finance Research*, 1(4), 83–94.

ISSN (Print): 2289-9286; e-ISSN: 0127-564x; Volume 3, June 2017

Said, A. & Grassa, R. (2013). The determinants of *sukuk* market development: does macroeconomic factors influence the construction of certain structure of *sukuk? Journal of Applied Finance and Banking*, 3(5), 251–267.

Zulkhibri, M. (2015). A Synthesis of Theoretical and Empirical Research on Sukuk. *Borsa Istanbul Review,* 15(4), 237-248.