“Capital structure of sharia companies: The role of sukuk, bonds, and sukuk volume on the speed of adjustment”

AUTHORS	Euis Bandawaty Sunaryo Yayan Hendayana Gama Ramadani Rakasiwi Muhammad Rafik

ARTICLE INFO	Euis Bandawaty, Sunaryo, Yayan Hendayana, Gama Ramadani Rakasiwi and Muhammad Rafik (2026). Capital structure of sharia companies: The role of sukuk, bonds, and sukuk volume on the speed of adjustment. *Investment Management and Financial Innovations*, *23*(3), 97–108. doi:10.21511/imfi.23(3).2026.08
DOI	http://dx.doi.org/10.21511/imfi.23(3).2026.08
RELEASED ON	Wednesday, 22 July 2026
RECEIVED ON	Sunday, 28 September 2025
ACCEPTED ON	Thursday, 02 July 2026

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JOURNAL	"Investment Management and Financial Innovations"
ISSN PRINT	1810-4967
ISSN ONLINE	1812-9358
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
42	0	4

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BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine

www.businessperspectives.org

Euis Bandawaty (Indonesia), **Sunaryo** (Indonesia), **Yayan Hendayana** (Indonesia), **Gama Ramadani Rakasiwi** (Indonesia), **Muhammad Rafik** (Indonesia)

CAPITAL STRUCTURE OF SHARIA COMPANIES: THE ROLE OF SUKUK, BONDS, AND SUKUK VOLUME ON THE SPEED OF ADJUSTMENT

Abstract

This study aims to examine the strategic role of sukuk and bonds as primary sources of financing and the differences in their characteristics in influencing corporate adjustment behavior. The subjects were 187 companies included in the Indonesian Islamic Stock Index (ISSI) for the 2010–2023 period. The methodology used is a partial adjustment model with a dynamic panel approach, which formulates speed of adjustment (SOA) as a function of debt instruments, accompanied by subsample analysis and robustness tests using alternative leverage definitions and bootstrapping. Sukuk-issuing companies have the highest average leverage, both in terms of book (0.530) and market (0.567). The average SOA of Islamic companies is moderate (book SOA = 0.267; market SOA = 0.364). Bonds consistently accelerate adjustment towards optimal capital structure in both book and market leverage. In contrast, sukuk issuers exhibited a high book-based SOA (0.948), but this was not statistically supported due to sample limitations. This finding extends the literature by confirming that SOA is not simply a fixed value, but rather a function of the financing instrument used. Theoretically, this study develops trade-off theory and pecking order theory by incorporating the dimension of sharia instruments. Practically, the results suggest that bonds are currently more effective as a compliance mechanism. Meanwhile, sukuk require strengthening of market infrastructure. From a policy perspective, this study emphasizes the urgency of developing a sukuk market to achieve credibility equivalent to bonds at the global level.

Keywords sukuk, bonds, dynamic capital structure, speed of adjustment, sharia capital market

JEL Classification G32, G15, G20

Type of the article: Research Article

Received on: 28th of September, 2025
Accepted on: 2nd of July, 2026
Published on: 22nd of July, 2026

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Euis Bandawaty, Dr., Lecturer, Master of Management Department, Faculty of Economics and Business, Universitas Islam As-Syafiiyah [As-SyafiiyahIslamic University], Indonesia. (Corresponding Author)

Sunaryo, Dr., Lecturer, Master of Management Department, Faculty of Economics and Business, Universitas Islam As-Syafiiyah [As-Syafiiyah Islamic University], Indonesia.

Yayan Hendayana, Dr., Lecturer, Faculty of Economics and Business, Universitas Bhayangkara Jakarta Raya [Bhayangkara University of Jakarta Raya], Indonesia.

Gama Ramadani Rakasiwi, Student, Faculty of Economics and Business, Universitas Islam As-Syafiiyah [As-Syafiiyah Islamic University], Indonesia.

Muhammad Rafik, Student, Faculty of Economics and Business, Universitas Islam As-Syafiiyah [As-Syafiiyah Islamic University], Indonesia.

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Conflict of interest statement:
Author(s) reported no conflict of interest

INTRODUCTION

Sharia investment is a popular choice among investors since it can benefit both sides (Jihadi et al., 2021). According to the Indonesia Stock Exchange (IDX), the Indonesian Islamic capital market is among the world's largest (Jihadi et al., 2021). The Islamic financial industry has grown rapidly worldwide (Ledhem, 2022). However, Islamic Financial Institutions (IFIs) struggle with a volatile, uncertain, complex, and ambiguous (VUCA) environment (Hudaefi et al., 2023). Firms must be able to manage capital structure to achieve business success (Abdullah & Tursoy, 2021). In capital structures, Islamic financial instruments are still uncommon. Sharia-compliant businesses must still keep their debt levels low (Pujiastuti et al., 2022). Speed of adjustment (SOA) is an important indicator for assessing how efficiently a company responds to deviations from its target capital structure (Flannery & Hankins, 2013).

Sukuk, Bonds, and Sukuk Volume accelerate the speed of adjustment (Jiang et al., 2021; Mohamed et al., 2015). Meanwhile, sukuk-issuing companies had a higher adjustment speed than bond users (Mohamed et al., 2015). On the other hand, evidence from the market in the

Middle East indicates that sharia compliance actually slows down capital adjustment due to limited instruments and market liquidity (Alnori & Alqahtani, 2019). Not all studies show that structural capital influences financial performance. Jessika and Yohana (2024) showed that structural capital does not have a positive effect on financial performance. Most previous studies have focused on static determinants of capital structure or calculated SOA without examining how specific financing instruments affect the speed of adjustment.

1. LITERATURE REVIEW AND HYPOTHESES

Sharia firms are more stringent when it comes to selecting their financing option in terms of capital structure. However, the regulation does not apply to conventional businesses (Pujiastuti et al., 2022). Since it affects the company's capacity to meet the demands of its stakeholders, a company's capital structure is crucial (Yildirim et al., 2018). The determination of capital structure decisions is significantly influenced by sharia compliance (Alnori & Alqahtani, 2019). Overall, sharia compliance not only distinguishes Islamic firms from conventional businesses but also plays a pivotal role in shaping their capital structure decisions and, ultimately, their ability to sustain stakeholder trust and long-term financial stability

The capital structure of a firm refers to the combination of debt and equity used for operations and expansion. If the company still experiences a shortage of equity financing, it should consider attracting external sources of financing, in particular debt (Zubaid et al., 2022). Capital structure is a good predictor that can help categorize Islamic banks (Miranti & Oktaviana, 2022). The trade-off theory and the pecking order theory are the two primary theories that have historically dominated the study of capital structure, a major topic in corporate finance (Choi et al., 2024). The trade-off theory by Modigliani and Miller (1958) implies that businesses should use debt to leverage their capital structure until the marginal costs and benefits are equal. Numerous empirical studies into different firm-specific factors that influence this ideal equilibrium, such as profitability, liquidity, investment possibilities, and more, have been prompted by this notion. The pecking order theory by Myers (1977) promotes a financial hierarchy where businesses favor internal funding over external debt and debt over equity, both of which are impacted by information asymmetry. Cook and Tang (2010) demonstrated that businesses typically modify their capital structures more quickly in thriving economic climates than in less thriving ones. In summary, understanding capital structure via the perspectives of trade-off and pecking order theories gives a complete framework for assessing how organizations, particularly Islamic banks, choose their financing options in response to internal and external economic factors.

Capital structure describes the comparison between foreign and equity capital used to finance operations and assets and maximize company value. According to Su and Zheng (2025), the time needed for a business to adjust its deviating capital structure to its target capital structure is known as the speed of capital structure adjustment. Capital structure components include long-term debt, common capital stock, preferred capital stock, capital surplus, and accumulated retained earnings (Arif & Mai, 2020). The size of a corporation is one of the capital structure variables, as it affects profitability and growth potential. It delivers consistent results in terms of capital structure. However, this is dependent on the capital theory in question (Yildirim et al., 2018). The security of the investment was one of the many benefits that made investing in state retail Sukuk appealing. The distinction between Sukuk and bonds emphasizes that Sukuk are certificates of equal value that indicate an ownership proportion of an issued asset, whereas bonds are regarded as long-term debt instruments that are issued by governments and corporations (Solihat et al., 2020). The state retail Sukuk are appealing due to their investment security and Shariah compliance, setting them apart from conventional bonds with their asset-based ownership structure and adherence to Islamic financial principles, even though corporate size influences capital structure decisions based on the underlying capital theory.

The corporate finance literature has long highlighted the debate over optimal capital structure.

http://dx.doi.org/10.21511/imfi.23(3).2026.08

Within the framework of static trade-off theory, firms are assumed to balance the tax benefits of debt against the bankruptcy costs that increase with higher leverage (Modigliani & Miller, 1963). However, empirical evidence shows that companies do not immediately adjust leverage toward the optimal target. Instead, adjustments are made gradually due to adjustment costs, limited market access, and asymmetric information. This gave rise to the dynamic trade-off theory, where the adjustment process is measured by the Speed of Adjustment (SOA). SOA is a quantitative measure that measures how quickly a company moves toward its optimal capital structure after a deviation (Flannery & Hankins, 2013). In summary, the Speed of Adjustment (SOA) measures a company's ability to quickly adjust to a deviation and achieve an optimal capital structure.

Traditionally, the literature assumes that SOA is homogeneous and can be represented as a fixed scalar coefficient in a Partial Adjustment Model (PAM). However, recent scientific research refutes this view. Jiang et al. (2021) and Canarella and Miller (2019) emphasize that the speed of adjustment is heterogeneous. It depends on a company's internal factors and a country's institutional conditions. Rawal et al. 2025) show that fundamental country risks, including political stability, regulatory quality, and market efficiency, significantly influence SOA. Countries with lower risks exhibit a faster rate of adjustment. These results indicate that SOA should no longer be treated as a constant but rather as a function of various relevant determinants.

The adjustment patterns of companies with zero leverage are very different from those of companies with high leverage. Morais et al. (2022) found that firms with zero leverage have very different adjustment patterns than highly leveraged firms. In the Indonesian context, Nosita (2018) estimates that Indonesian non-financial firms take an average of 2.45 years to return to target leverage, but variation across firms is high. These results emphasize the need for a new approach that views SOA as a function influenced by both the specific characteristics of the firm and its financing instruments. Financing instruments are a potential determinant that has not been widely studied in relation to SOA. Conventional bonds are considered more liquid and have relatively low issuance costs, with a well-established secondary market. Therefore, they can function as a mechanism to accelerate capital structure adjustments (Jiang et al., 2021). In contrast, sukuk, as a Sharia-compliant instrument, present greater complexity due to the ownership of specific Sharia-compliant assets and contracts. Several studies have shown that sukuk often face higher issuance costs and limited secondary market liquidity (Basyariah et al., 2021). Ahmad et al. (2021) added that the development of the sukuk market is greatly influenced by macroeconomic stability and institutional quality, so that in countries with less developed financial markets, the effectiveness of sukuk as a capital rebalancing instrument is still limited. The growth of the sukuk market has a favorable impact on Islamic banks' financial stability (Ledhem, 2022) and economic growth (Amijaya et al., 2024). This shows that the speed of capital structure adjustment (SOA) is influenced by a company's specific characteristics and the financing instruments used.

A comprehensive literature review emphasized that sukuk research focuses primarily on structure, legal aspects, and their impact on firm value. However, their relationship to capital structure dynamics and SOA remains sparse. Even in Indonesia, despite being known as one of the largest green sukuk markets in the world, research on the relationship between sukuk and the speed of capital structure adjustment is scarce. This indicates a significant gap in the literature. Literature on sukuk generally still focuses on aspects of issuance and market performance (Uluyol, 2023). In the context of Islamic markets, capital structure takes on an additional dimension. Islamic companies not only pursue profits but must also comply with Islamic principles (Ahmed & Elsayed, 2019), including the prohibition of usury, the obligation to run a halal business, and a maximum debt-to-asset ratio (DAR) limit of 45% as stipulated in the OJK Sharia Guidelines and AAOIFI standards. Bandawaty et al. (2024) found that sharia compliance and DAR restrictions accelerated SOA compared to non-sharia firms. This is in contrast to the findings (Alnori & Alqahtani, 2019). In Malaysia, Islamic companies actually adjusted more slowly. This contradiction indicates the influence of Islamic financing instruments on the speed of adjustment, which is not yet fully under-

stood. Therefore, sukuk and bonds are Islamic financing sources that are thought to accelerate the adjustment speed of Islamic companies.

Therefore, this study aims to examine the role of sukuk, bonds, and sukuk volume on the speed of adjustment.

2. METHOD

This study is based on panel data of sharia-compliant companies listed in the Indonesian Sharia Stock Index (ISSI) for the period 2010–2023. The ISSI was chosen because it covers public companies that comply with sharia principles as stipulated by the Financial Services Authority (OJK), making it relevant as an empirical laboratory for examining the dynamics of sharia-compliant capital structures.

The initial sample consisted of 187 companies, with an unbalanced panel data set due to the inclusion and exclusion of companies from the index and limited annual reporting. The most striking fact from the data is the low participation rate in sukuk issuance. Only eight companies issued corporate sukuk, with a total of 32 annual observations. Conversely, the number of bond issuers is relatively large, although still a minority compared to the overall population. This fact highlights an important paradox. Although Indonesia is recognized as one of the largest sukuk markets in the world, sukuk have not yet become a dominant financing instrument at the corporate level.

This study uses two measures of leverage as dependent variables, namely book leverage (total debt to total assets) and market leverage (total debt to total debt and equity market capitalization). (Yildirim et al., 2018). The use of these two measures is consistent with previous literature (Jiang et al., 2021) which emphasizes that accounting perspectives and market perspectives can produce different adjustment dynamics. The key variables are financing instruments, namely SUKUK financing (the proportion of sukuk to total debt), VOLSUKUK (the proportion of sukuk to equity), BONDS (the proportion of bonds to total debt), and VOLUNTEER (the proportion of bonds to equity). Control variables include profitability (Return on Assets), growth opportunities (GROWTH), and company size (SIZE), which in the literature have been consistently shown to influence leverage targets and the speed of adjustment (Flannery & Hankins, 2013).

The empirical model departs from the conventional Partial Adjustment Model (PAM) where actual leverage adjusts to target leverage in stages:

$$LEV_{i,t} = (1-\lambda) LEV_{i,t-1} + \lambda LEV^{*}_{i,t} + \varepsilon_{i,t} \qquad (1)$$

with the reformulation that λ is a function of the financing instrument, the estimated empirical equation for the integrated dynamic capital structure is:

$$\begin{aligned} LEV_{i,t} &= \gamma_0 + \gamma_1 LEV_{i,t-1} \\ &+ \gamma_2 LEV_{i,t-1} X\, SUKUK \\ &+ \gamma_3 LEV_{i,t-1} X\, VOLUME\, SUKUK \\ &+ \gamma_4 LEV_{i,t-1} X\, OBLIGASI \\ &+ \gamma_5 LEV_{i,t-1} X\, VOLUME\, OBLIGASI \\ &+ \gamma_6 PROFIT + \gamma_7 SIZE + \gamma_8 GROWTH \end{aligned} \qquad (2)$$

Here, it represents the baseline SOA, while capturing the role of financing instruments in modulating the speed of adjustment $\gamma_1 \gamma_2 - \gamma_5$

Methodologically, this study initially used the Generalized Method of Moments (GMM) as the primary estimator. GMM was chosen for two reasons: first, the model contains lagged variables as predictors, so Ordinary Least Squares (OLS) or Fixed Effects (FE) would produce biased estimates (Nickell bias). Second, GMM is effective in addressing the potential endogeneity inherent in financial variables (Arellano & Bond, 1991). However, when applied to research data, the GMM estimation results revealed validity weaknesses. The Hansen test indicated over-identification issues, while the limited number of observations for the sukuk issuer group (only 32 firm-years) poses a serious risk of instrument proliferation. This implies that using GMM in the Indonesian sukuk sample cannot produce credible results.

Facing these limitations, the researchers took strategic steps to address the research problem formulation. First, baseline estimation was conducted

http://dx.doi.org/10.21511/imfi.23(3).2026.08

on the entire sample of companies, reflecting the average adjustment speed without considering the role of financing instruments. Second, the study then divided the sample into subsamples consisting of sukuk issuers, bond issuers, and non-issuers. This approach not only overcomes the limitations of GMM estimation validity but also provides analytical depth by highlighting heterogeneity across company groups. Thus, even though GMM fails to produce valid results on small subsamples, the subsampling strategy allows for exploration that remains valid and rich in empirical meaning.

To ensure the robustness of the results, this study conducts a series of robustness tests: (i) estimation with book leverage and market leverage, (ii) subsample analysis by instrument group, (iii) alternative definitions of sukuk and bond volumes (proportion to debt and equity), (iv) use of clustered standard errors at the firm level to address heteroscedasticity and serial correlation, and (v) bootstrapping on sukuk groups with limited observations. This triangulation approach enhances the credibility of the results and strengthens the study's contribution to the literature.

3. RESULTS

Table 1 presents the main characteristics of Islamic companies in the research sample, based on financing groups: sukuk issuers, bond issuers, and companies without either instrument. The descriptive results show a very clear pattern of differences in capital structure across groups. First, sukuk-issuing companies have the highest average leverage, both in terms of book (0.530) and market (0.567). This indicates that sukuk-issuing companies tend to use a greater proportion of debt than other groups. Bandawaty et al. (2024) that islamic companies have higher debt than non-Islamic companies. Interestingly, despite high leverage, profitability (ROA) is relatively low (around 1.2%). This pattern can be interpreted as indicating that companies choosing sukuk are not the most operationally efficient, but rather large companies with high financing needs seeking alternative financing in accordance with Islamic principles.

Second, bond-issuing companies exhibit distinct characteristics. They have high book leverage (0.510) but relatively lower market leverage (0.433). Their profitability is actually the highest among the entire group (around 5.5%). This indicates that companies with better performance tend to choose bonds as a financing instrument. This is in line with literature emphasizing that companies with strong fundamentals have easier access to the bond market because they can obtain good credit ratings and attract investors (Jiang et al., 2021).

Third, companies without sukuk or bonds had the lowest leverage (0.446) and were relatively small compared to the other two groups. This confirms that companies that do not access the debt market tend to rely on internal financing or bank loans, thus limiting their leverage capacity. This fact is consistent with the prediction of the pecking order theory that small and less profitable companies prefer internal financing.

The ANOVA test showed that the difference in leverage between groups was significant at the 1% level, confirming the finding that capital structures are not homogeneous among Islamic companies. Furthermore, company size also showed

Table 1. Comparison of company characteristics

Variables	Sukuk	Bond	NON	All	F statistic	p-value
Book leverage	0.530	0.510	0.446	0.451	11,638	0.000
Market Leverage	0.567	0.433	0.445	0.446	4,778	0.008
ROA	0.012	0.055	0.046	0.046	2,830	0.059
Growth	−6,425	0.410	−0.726	−0.731	0.069	0.934
Size	29,904	30,378	28,873	28,984	79,222	0.000
Sukuk Intensity	0.085	0.000	0.011	0.016	50,746	0.000
Bond Intensity	0.000	0.186	0.018	0.075	133,144	0.000
Sukuk Volume	0.079	0.000	0.014	0.018	60,526	0.000
Volume Bonds	0.000	0.228	0.039	0.102	60,535	0.000

Note: Data processed with RStudio *** p < 0.01, ** p < 0.05, * p < 0.10.

significant differences. Sukuk and bond issuers were larger than non-issuers, confirming that only large companies could access the debt capital market. Table 1 provides an initial overview, showing that companies financing sukuk are characterized by high leverage and low profitability. Bond-financing companies are characterized by high profitability and moderate leverage, while non-issuers are characterized by low leverage and small company size. This pattern confirms the substantial heterogeneity in capital structure behavior in the Indonesian sharia market. This provides baseline information for further analysis regarding the speed of capital structure adjustment.

Table 2 presents the estimation results of the basic partial adjustment model for all Islamic companies in the sample, regardless of financing instrument. These results serve as a benchmark for understanding the average behavior of capital structures in the Indonesian Islamic market.

Table 2. Base model results for all firms

Variables	Leverage Book	Market Leverage
Lagging Leverage	0.733 (0.013)***	0.636 (0.015)***
ROA	−0.283 (0.017)***	−0.335 (0.027)***
Growth	−0.000 (0.000)	−0.000 (0.000)
Size	0.024 (0.004)***	0.062 (0.006)***
R^2 (inside)	0.6166	0.4867
SOA	0.267	**0.364**
Half-life	2.23 years	1.53 years

Note: Data were processed with RStudio. Standard errors are in parentheses. *** p < 0.001, ** p < 0.01, * p < 0.05.

First, estimates show that the speed of adjustment (SOA) differs between book-based and market-based leverage. For book leverage, the SOA is recorded at 0.267, meaning the average company takes approximately 2.23 years to correct half the deviation from target leverage. Meanwhile, for market leverage, the SOA is higher at 0.364, with a half-life of approximately 1.53 years. This finding indicates that companies adjust their capital structure more quickly from a market perspective than from an accounting perspective.

This interpretation is in line with global literature (Flannery & Hankins, 2013), which found that capital markets provide a stronger signal to management regarding the need to adjust leverage. Consequently, the speed of adjustment, as measured by market leverage, tends to be higher. In other words, stock prices, as a reflection of investor expectations, accelerate corporate financial discipline, while accounting data provides a slower reflection.

Second, the control variables provide results consistent with capital structure theory. Profitability (ROA) has a significant negative effect on leverage, supporting the pecking order theory (Myers & Majluf, 1984). More profitable companies tend to use internal funds rather than increasing debt. Firm size (SIZE) has a significant positive effect, indicating that larger companies have greater access to debt markets and maintain higher leverage. Meanwhile, growth opportunities (GROWTH) are insignificant, indicating that growth prospects in the Indonesian sharia market have not consistently translated into external financing strategies, unlike findings in developed markets.

Table 2 illustrates that Islamic companies in Indonesia are indeed adjusting their capital structures toward their targets. However, the pace is relatively slow, especially from an accounting perspective. The difference between book and market leverage underscores the importance of examining the dynamics in more detail based on the type of financing instrument analyzed in Tables 3 and 4.

Table 3 presents partial adjustment model estimates for a subsample of firms based on financing instruments, with book leverage as a measure of capital structure. These results confirm that the speed of capital structure adjustment is highly heterogeneous across groups and demonstrate the role of financing instruments in modulating these dynamics.

The group of sukuk-issuing companies exhibited a very high SOA of 0.948, with a half-life of only around 0.33 years. Theoretically, this figure indicates that the companies almost completely corrected their leverage deviation in less than a year, significantly faster than the baseline (0.267) and other groups. However, the low statistical significance indicates that this estimate is not robust enough to be generalized. The primary reason is suspected to be the very limited number of observations (only 8 companies with 32 firm-years). In other words, although numerically, sukuk appear to accelerate adjustments extremely rapidly, em-

http://dx.doi.org/10.21511/imfi.23(3).2026.08

Table 3. Specific results for book leverage

Variables	Only Sukuk	Only Bonds	There isn't any
Lagging Leverage	0.052 (0.154)	0.441 (0.057)***	0.733 (0.014)***
ROA	–0.098 (0.282)	–0.412 (0.146)**	–0.278 (0.017)***
Growth	–0.001 (0.000)	–0.002 (0.004)	0,000 (0,000)
Size	0.057 (0.085)	0.003 (0.019)	0.025 (0.004)***
Sukuk Intensity	–0.865 (0.288)**	–	–
Sukuk Volume	1.307 (0.619)*	–	–
Bond Intensity	–	–0.313 (0.063)***	–
Bond Volume	–	0.292 (0.044)***	–
R^2 (inside)	0.7445	0.7558	0.6078
SOA	0.948	0.559	**0.267**
Half-life	0.33 years	0.89 years	2.26 years
Observations	32	136	2,198

Notes: Data processed with RStudio. SE in parentheses. *** p < 0.001, ** p < 0.01, * p < 0.05.

pirically, this pattern is prone to volatility. This finding reflects the shallow and liquidity-limited condition of the Indonesian sukuk market, as also reported by Uluyol (2023).

Interestingly, Table 3 shows a dual dynamic for key variables. Sukuk Intensity has a significant negative effect (-0.865), indicating that sukuk issuance essentially reduces book leverage. This is consistent with the asset-backed nature of sukuk, which often limits debt expansion. Conversely, Sukuk Volume has a significant positive effect (1.307). This means that the larger the sukuk portion of total debt, the higher the company's book leverage. In other words, the existence of sukuk encourages financial discipline. However, a larger sukuk volume provides the capacity for financial expansion.

The bond-issuing company demonstrated an SOA of 0.559 with a half-life of approximately 0.89 years. This figure is more moderate than that of the sukuk group but significantly higher than that of the non-issuer group. This is consistent with the literature on corporate bonds in emerging markets, where bonds serve as flexible financing instruments that support capital structure rebalancing (Jiang et al., 2021) and firm performance (Arhinful & Radmehr, 2023; Allen & Qian, 2024; Ortega, 2025).

The results for key variables confirm a similar pattern to sukuk. Bond intensity decreases leverage (-0.313), reflecting companies' caution in entering the bond market due to investor ratings and credibility demands. Conversely, bond volume increases leverage (0.292), indicating that large-scale bond issuances provide companies with greater debt capacity. This difference in intensity and volume patterns confirms that the presence of instruments drives discipline, but the scale of instruments drives expansion.

Companies without sukuk or bonds showed the lowest SOA, 0.267, with a half-life of around 2.26 years. This finding confirms that companies that do not access the debt market are very slow to adjust their capital structure. They tend to rely on internal funding or bank loans, thus limiting their ability to adjust leverage towards the target. This finding is consistent with the pecking order theory (Myers & Majluf, 1984) and with empirical evidence (HC et al., 2019), which found that Indonesian companies tend to be slow to adjust their capital structure due to limited access to capital markets.

The results for the control variables are consistent across nearly all subsamples. ROA has a significant negative effect on leverage, supporting the pecking order theory. SIZE has a significant positive effect, indicating that larger companies have greater access to debt financing. Meanwhile, GROWTH is insignificant, indicating that growth opportunities have not been consistently translated into leverage policies in the Indonesian sharia market. Overall, Table 3 confirms three main points: (1) SOA differs significantly across instrument groups: sukuk (0.948) appears to be the fastest but not significantly, bonds (0.559) are relatively stable, and non-issuers (0.267) are the slowest. (2) Financing instruments have a dual function: the intensity of the instrument's presence tends to

Table 4. Market leverage subgroup

Variables	Only Sukuk	Only Bonds	There isn't any
Lagging Leverage	0.656 (0.199)**	0.422 (0.095)***	0.625 (0.016)***
ROA	–0.267 (0.778)	–0.735 (0.404)*	–0.330 (0.027)***
Growth	0.001 (0.001)	0.000 (0.010)	0,000 (0,000)
Size	0.072 (0.212)	–0.019 (0.053)	0.064 (0.007)***
Sukuk Intensity	0.019 (0.735)	–	–
Sukuk Volume	–1.578 (1.525)	–	–
Bond Intensity	–	–0.182 (0.176)	–
Bond Volume	–	0.235 (0.118)*	–
R^2 (inside)	0.9026	0.3267	0.4758
SOA	0.344	0.578	**0.375**
Half-life	1.64 years	0.83 years	1.48 years
Observations	32	136	2,198

Notes: SE in parentheses. *** p < 0.001, ** p < 0.01, * p < 0.05.

reduce leverage (discipline), but the volume of issuance actually increases leverage (expansion). (3) Contextual implications: sukuk function more as an accounting mechanism (book leverage) with mixed effects, while bonds more consistently accelerate capital structure adjustment.

Table 4 presents the estimation results of a subsample model using market leverage as a measure of capital structure. These results provide an important additional perspective because market leverage reflects investor perceptions and equity valuations in the capital market, unlike book leverage, which is based on accounting reports.

4. DISCUSSION

The topic of capital structure has been discussed for a long time in the financial industry. Capital structure is prioritized when making decisions about financial elements or performance since it allows a firm to fund itself with a mix of debt and equity to achieve optimal capital structure and maximum profit (Boh et al., 2020). The results of this study provide strong evidence that the speed of capital structure adjustment in Islamic companies in Indonesia is highly heterogeneous and substantially influenced by the financing instruments used. Initial estimates using the baseline model indicate that all companies in the sample adjusted toward their target leverage, albeit at a relatively slow pace. With book leverage, SOA was recorded at 0.267, while market leverage was higher at 0.364. This difference indicates that the market exerts stronger pressure than accounting information, resulting in companies correcting leverage deviations more quickly when adjustments are measured from an equity valuation perspective. This finding aligns with global literature emphasizing that capital market discipline accelerates capital structure dynamics (Flannery & Hankins, 2013; Mensah et al., 2025). Adiba's study (2022), considering the importance of the leverage coefficient, has demonstrated that Indonesian businesses modify their capital structures to achieve optimal leverage ratios. It is evident that the speed of adjustment value approaches the ideal leverage ratio.

When the results are further analyzed in subsamples based on financing instruments, the heterogeneity becomes even more apparent. Bond-issuing companies exhibit a relatively high and consistent SOA for both book leverage (0.559) and market leverage (0.578). This confirms that bonds serve both as accounting instruments that strengthen the capital structure and as credible signals recognized by the market. In contrast, sukuk-issuing companies exhibit a contrasting pattern. For book leverage, the SOA reaches an extraordinarily high 0.948, numerically indicating a near-full acceleration in a short period. However, this result is not statistically significant and changes drastically when leverage is measured on a market basis. The SOA drops to just 0.344. This sharp difference suggests that while sukuk may be relevant in accounting records, the market has not yet perceived them as a credible signal. This condition aligns with Uluyol (2023), who highlights the limited depth of the sukuk market in Indonesia, in contrast to the Malaysian or GCC markets, where sukuk have stronger liquidity and recognition.

http://dx.doi.org/10.21511/imfi.23(3).2026.08

Furthermore, the research findings confirm that financing instruments not only play a role in determining the speed of adjustment but also influence the direction of leverage through two distinct mechanisms. The speed of adjustment falls with default risk and agency costs and rises with company size, growth prospects, and separation from the desired capital structure (Ghaemi Asl et al., 2024). The presence of both sukuk and bonds tends to reduce leverage, reflecting the disciplinary effect created by demands for credibility and investor oversight. However, the larger the volume of instrument issuance, the more leverage it actually increases, indicating an expansionary role. Thus, Islamic capital market instruments have the dual function of limiting leverage through initial discipline while simultaneously opening up room for expansion through issuance scale. This phenomenon is rarely documented in the dynamic capital structure literature, which typically focuses on adjustment speed as a scalar variable (Jiang et al., 2021). This study broadens understanding by showing that SOA is more appropriately viewed as a function of the financing instrument. Syarif et al. (2023) stated that certain Islamic commercial banks employ a variety of their assets to settle all of their debts, which affects their capacity to offer the best rates of return and creates agency conflicts. In addition, certain Islamic commercial banks can strike a balance between debt and their capacity to offer the best rates of return.

Another important implication is the difference in response between companies that issue sukuk or bonds and those that do not. Companies that do not access the debt market consistently have the lowest SOA (0.267 for book leverage and 0.375 for market leverage), indicating a slow adjustment process due to limited access to financing. However, when leverage is measured from a market perspective, even non-issuing companies show a relative acceleration, confirming that stock prices function as an external disciplinary mechanism. In other words, even if companies do not issue capital market instruments, investor pressure still forces them to adjust their capital structure to maintain valuations. In particular, according to Alnori and Alqahtani (2019), sharia-compliant businesses have much lower leverage and slower rates of adjustment, as indicated by both book and market proxies of capital structure, than non-sharia-compliant businesses.

Theoretically, the research findings extend the literature on dynamic capital structure by integrating the financing instrument dimension into SOA analysis. The results indicate that sukuk and bonds serve not only as sources of funds but also as factors determining the speed of adjustment. This enriches the frameworks of trade-off theory and pecking order theory, providing evidence that sharia instruments have a different functional logic than conventional instruments. Practically, this research provides a clear signal for corporate management. Bond issuance is more effective in accelerating adjustment towards an optimal capital structure, while sukuk can be used as an accounting instrument but still face limited market recognition. For regulators, these findings demonstrate the importance of deepening the sukuk market so that this instrument can function not only at the accounting level but also be recognized as a credible signal by the market.

Overall, this study highlights the credibility gap between sukuk and bonds in the Indonesian Islamic capital market. While bonds are viewed as credible instruments by the market, sukuk are still limited to internal and accounting functions. This contradiction emphasizes that the development of Islamic instruments is not merely about regulation and issuance; it also requires liquidity, transparency, and market recognition. Thus, this study not only contributes to the academic understanding of dynamic capital structures but also offers relevant policy insights for strengthening Islamic capital market infrastructure in a global context.

CONCLUSION

This study aims to examine the role of sukuk, bonds, and sukuk volume on the speed of adjustment. The main findings indicate that the speed of capital structure adjustment (SOA) is not homogeneous but is substantively influenced by the type and scale of the instrument used. Bonds have been consistently shown to accelerate adjustment from both accounting and market perspectives. The study's findings indicate that

companies issuing sukuk have a greater level of observed book value-based net assets (SOA) in the sample investigated, with weak and insignificant market leverage. This difference highlights the credibility gap, where sukuk functions as an accounting instrument but is not yet fully recognized as a credible signal by the capital market.

The implications of this research are significant. Theoretically, the results expand trade-off theory and pecking order theory by incorporating the dimensions of sharia instruments. In practice, these findings allow company management to be convinced that bonds are currently a more effective tool for accelerating adaptation. Meanwhile, sukuk require infrastructure strengthening to gain market recognition. From a policy perspective, this research highlights the need for regulations that not only encourage sukuk issuance but also strengthen liquidity, transparency, and investor participation so that sukuk can function on par with bonds in global capital markets.

The main limitation of this study lies in the small sample size of sukuk issuers, which may affect the statistical significance of the results. However, this condition also reflects the reality of the Indonesian market, which is still in its development stage. Future research could expand the analysis by incorporating international dimensions, such as comparisons with Malaysia and GCC countries, and examining the role of macroeconomic factors and corporate governance in accelerating capital structure adjustment.

AUTHOR CONTRIBUTIONS

Conceptualization: Euis Bandawaty, Yayan Hendayana.
Data curation: Sunaryo, Muhammad Rafik.
Formal analysis: Euis Bandawaty, Gama Ramadani Rakasiwi, Muhammad Rafik.
Investigation: Euis Bandawaty, Yayan Hendayana.
Methodology: Euis Bandawaty.
Project administration: Yayan Hendayana, Gama Ramadani Rakasiwi, Muhammad Rafik.
Resources: Yayan Hendayana, Gama Ramadani Rakasiwi, Muhammad Rafik.
Software: Sunaryo, Yayan Hendayana, Gama Ramadani Rakasiwi, Muhammad Rafik.
Supervision: Euis Bandawaty.
Validation: Sunaryo.
Visualization: Sunaryo, Yayan Hendayana, Gama Ramadani Rakasiwi, Muhammad Rafik.
Writing – original draft: Euis Bandawaty, Muhammad Rafik.
Writing – review & editing: Sunaryo, Yayan Hendayana, Gama Ramadani Rakasiwi.

ACKNOWLEDGMENT

This research was funded by the Directorate General of Higher Education, Research and Technology, Ministry of Education, Culture, Research and Technology of the Republic of Indonesia through the 2025 Fundamental Research Scheme. The author also expresses his appreciation and gratitude to As-Syafi'iyah Islamic University for the administrative support and facilitation provided so that this research can be carried out properly.

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