

# Quantitative Projection of Sukuk Demand in Malaysia and The Potential of Sustainable Sukuk to Bridge Expected Supply-Demand Gap

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*The views expressed in this presentation are those of the authors and not necessarily those of Bank Negara Malaysia.*

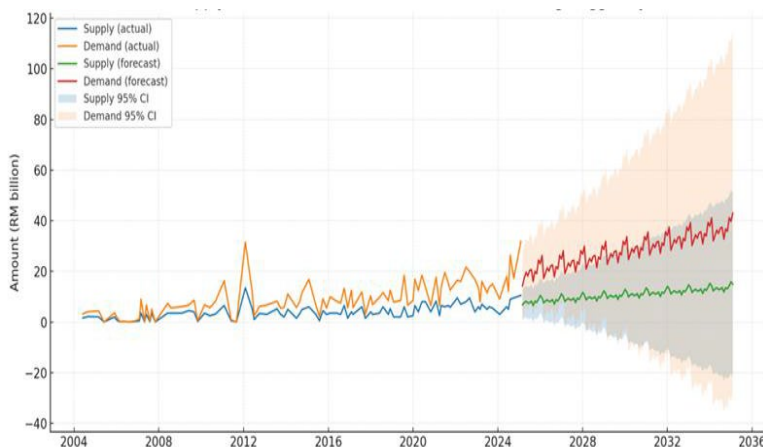
# Executive summary: Demand for Malaysia's sukuk forecasted to triple in the next decade, widening existing demand-supply gap

Sukuk demand projected to triple by 2035

Widening the demand-supply gap even further

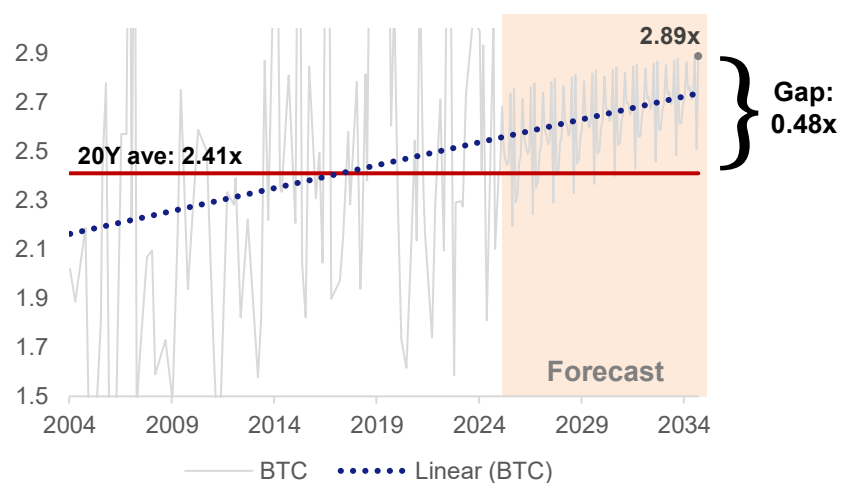
Nevertheless, sustainable sukuk could bridge the expected gap

Malaysia's sukuk issuance supply-demand forecast (2025-2035)



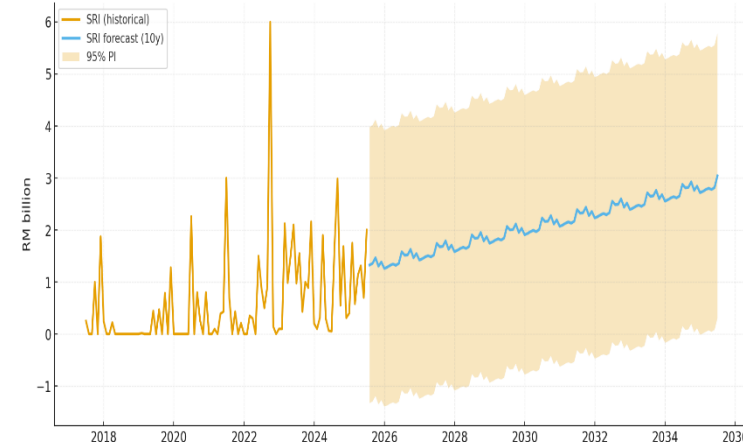
Demand for Ringgit-denominated sukuk is projected to triple in size to RM42 billion by 2035. In contrast, demand for conventional bonds is expected to moderate during the same period. Tested and utilised forecast models include Seasonal Autoregressive Integrated Moving Average (SARIMA), Toda-Yamamoto Modified Wald Test (TY-MWALD) and SARIMA with exogenous variables (SARIMAX).

Malaysia's sukuk bid-to-cover ratio (2004-2035)



Sukuk bid-to-cover ratio (BTC) expected to rise higher than 20-year average (2.41x), as demand outpaces supply. This signals increasing competition among investors for limited Shariah-compliant sukuk issuances.

Malaysia's sustainable sukuk issuances forecast (2025-2035)



Should sustainable sukuk maintain its current rapid growth, the issuance is forecasted to reach up to RM3 billion in the next same period of 10 years, sufficient to address the projected demand-supply gap (BTC 0.48x, or RM2.95 billion). BTC will gravitate back towards 20Y average if this materialise.

**Other forecast:** ICD-LSEG's Islamic Finance Development Report 2024 forecasts that global sukuk is set to grow at 12% (CAGR 2023-2028). Similarly, our model forecasts sukuk issuances (sukuk supply green line in LHS chart) to grow at 12% (5Y CAGR).

**Sustainability definition:** Malaysia is mainly guided by Securities Commission Malaysia's [Sustainable and Responsible Investment \(SRI\) Framework 2019](#) that are aligned with United Nations Sustainable Development Goals (SDGs). The EU similarly adopted the SDGs through its [Taxonomy Regulation 2020](#), setting out overarching conditions for bonds to qualify as environmentally sustainable.

## Presentation Outline

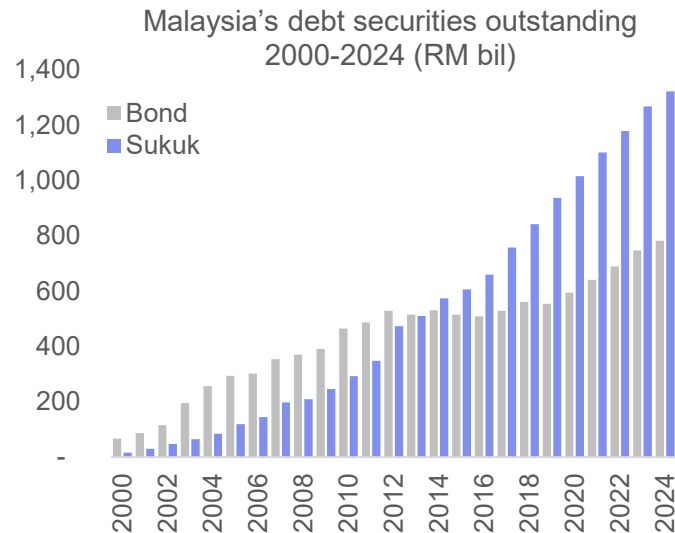
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- 3 Analysis: Forecast findings
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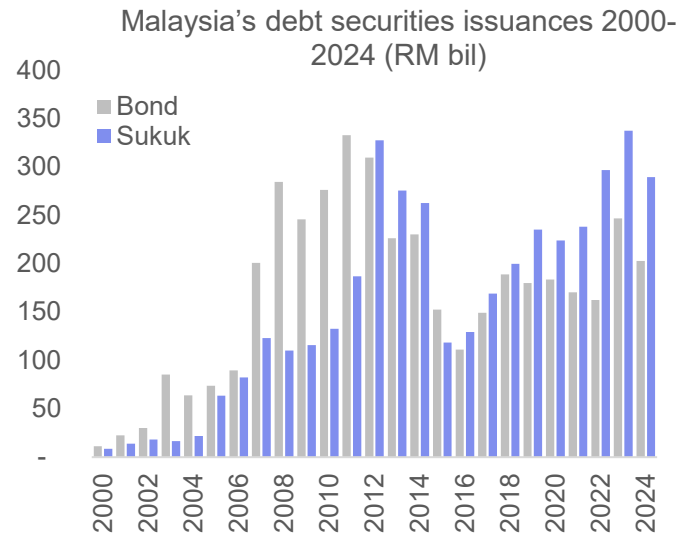
- 1 Literature review
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# Introduction: Islamic finance in Malaysia

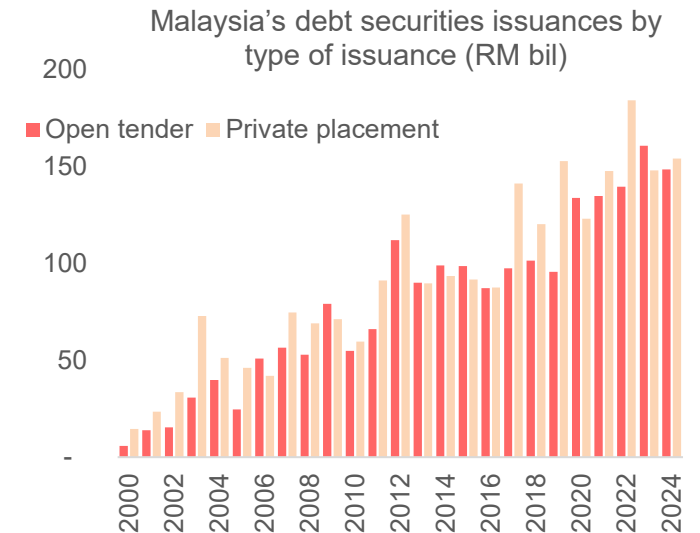
- Islamic finance has evolved from a niche alternative into a cornerstone of the global financial system, driven by ethical imperatives and robust growth dynamics. Underpinning this growth is the **Maqāṣid al-Sharīah** (higher objectives of Islamic law): preserving religion (*dīn*), life (*nafs*), intellect (*‘aql*), lineage (*nasb*), and wealth (*māl*); objectives within wealth are five – circulation, clarity, preservation, establishment, and justice (Bin Bayyah, 2018).
- Globally, the Islamic financial services industry – covering capital market, banking and takaful – experienced growth in 2024, achieving a strong 14.9% year-on-year increase and reaching total assets of USD3.88 trillion; of which global outstanding sukuk surpassed USD900 billion ([Islamic Financial Services Board, May 2025](#)).
- Malaysia is home to the most developed Islamic finance market, ranked first globally for 12<sup>th</sup> consecutive year by the Islamic Finance Development Indicator (IFDI) 2024 released by [ICD-LSEG](#). For sukuk market in particular, Malaysia has the largest share in the global market at 33.2% as at end-July 2024 ([Ministry of Finance Malaysia, 2024](#)).
- Within its unique dual financial system where Islamic and conventional system run in parallel, Islamic market comprised approximately 64% of Malaysia's domestic capital market ([Securities Commission Malaysia, 2025](#)), and anticipated to maintain its growth momentum—a trend observed since the early 21st century.



CAGR (2000-2024): Bond 10.8%; Sukuk 20.3%



CAGR (2000-2024): Bond 12.8%; Sukuk 15.7%



CAGR (2000-2024): Open tender 14.5%; private placement 10.3%

# Introduction: Comparison between sukuk and conventional bonds

Sukuk industry has dominantly advanced in Malaysia's dual financial system, despite structural differences in comparison to conventional bonds:

Bond	Aspect	Sukuk
Represent interest-bearing debt obligation of the issuer	<b>Nature</b>	Represent proportionate ownership in Shariah compliant assets, usufructs, services, or profit-sharing venture or financial asset, or any combination
Any issuer	<b>Issuer</b>	Any issuer engaged in business activities which are permissible under Shariah rulings
Conventional	<b>Investor base</b>	Islamic and conventional investors
Debtor-creditor	<b>Issuer-investor relationship</b>	Sale, lease, partnership, agency or combination
Interest on loan	<b>Returns to investors</b>	Profit from sale, rent from lease, profit from investment activities/service
Return of principal at maturity is an irrevocable, irrespective profitability of funded project	<b>Principal repayment by issuer</b>	In sale-based and lease-based structures, the return of principal is guaranteed. However, in principle, there is no ex-ante fixed obligation of capital repayment for partnership-based sukuk structure
Not applicable	<b>Underlying assets</b>	Shall comply with Shariah requirements, can represent both debt and non-debt assets.
No specific requirements	<b>Utilisation of proceeds</b>	Proceeds must be utilised to finance Shariah-compliant activities
Pricing based on credit rating of issuer and term and conditions, usually a spread over a reference interest rate	<b>Pricing</b>	Pricing depends on the structure of the sukuk. For non-recourse asset-backed sukuk, pricing is based on the asset. For sukuk structured based on fixed income and debt-creating contracts, pricing is typically similar to bond pricing.
Sale of debt	<b>Tradability</b>	Dependent on the nature of underlying assets

# Methodology: Diagnostics, forecast techniques & variable screening

## Model diagnostics

Augmented Dickey-Fuller:

$$y_t = \alpha + \varphi y_{t-1} + \sum_{i=1}^p \psi_i \Delta y_{t-i} + \varepsilon_t$$

Kwiatkowski-Phillips-Schmidt-Shin:

$$KPSS = \frac{1}{T^2 \hat{\sigma}_u^2} \sum_{t=1}^T S_t^2$$

Seasonal differencing cue:

$$\hat{\rho}(h) = \frac{\sum_{t=h+1}^T (y_t - \bar{y})(y_{t-h} - \bar{y})}{\sum_{t=1}^T (y_t - \bar{y})^2}$$

Ljung-Box portmanteau Q:

$$Q(m) = n(n+2) \sum_{k=1}^m \frac{\hat{\rho}_k^2}{n-k}$$

Akaike/Bayesian Info Criterion:

$$\begin{aligned} AIC &= -2\hat{\ell} + 2k \\ BIC &= -2\hat{\ell} + k \ln n \end{aligned}$$

MASE (scale-free), benchmarked to seasonal naïve with  $s = 12$ :

$$MASE = \frac{\frac{1}{T} \sum_{t=1}^T |y_t - \hat{y}_t|}{\frac{1}{T-s} \sum_{t=s+1}^T |y_t - y_{t-s}|}$$

- **Corroborating outcome for stationarity:** Non-rejection for ADF, vice-versa for KPSS renders  $d = 1$
- **Seasonality and residual whiteness:** Seasonal unit-root behaviour, but no autocorrelation at  $m=12/24$
- **Parsimonious model:** Prefers model with lower IC, BIC is harsher, promoting more stable models.
- **Unit-free, seasonally appropriate accuracy metric:** MASE < 1 means the model is better the seasonal naïve forecast at  $s = 12$  [the model's average absolute error is smaller than that of a simple naïve benchmark].

## Main forecasting technique

**Seasonal Autoregressive Integrated Moving Average (SARIMA):**

Operators.  $\Delta(B) = (1 - B)(1 - B^{12})$ ,  $w_t = \Delta(B)y_t$

MA Poly.  $\theta(B) = 1 + \theta_1 B + \theta_2 B^2$ ,  $\theta(B^{12}) = 1 + \theta_1(B^{12})$

Overall model with no intercept:  $w_t = \theta(B)\theta(B^{12})\varepsilon_t$ ,  $\varepsilon_t \sim \mathcal{N}(0, \sigma^2)$

**SARIMA with exogenous variable (SARIMAX):** Let  $Z_{t-1}$  be the lag-1 standardized exogenous vector:

$$Z_{t-1} = [MGS10Y_{t-1}, OPR_{t-1}, FD_{t-1}, FX_{t-1}, QGDP_{t-1}, Bond D_{t-1}, Bond S_{t-1}]^T$$

Overall model with no intercept:  $w_t = \beta^T Z_{t-1} + \theta(B)\theta(B^{12})\varepsilon_t$

- Chosen baseline for both forecasting models: (0,1,2)(0,1,1)<sub>12</sub>, implying no AR terms, 1-time differencing to remove trends, MA term for short-term shocks (2 for non-seasonal, 1 for seasonal effect) with seasonal lag at 12. Ljung-Box at 12/24 checks residual whiteness
- **Regressand:** Sukuk demand and supply. Lag-1 for SARIMAX (applied for exogenous variables as well)
- **TY MWALD-determined exogenous variables:** directionality results from TY MWALD – OPR, GDP growth, 12M fixed deposits rate by commercial banks, quarterly GDP growth, MGS 10-year yield, conventional bonds demand, conventional bonds supply, USD/MYR rate

## Model-agnostic directionality screening

Augmented VAR in levels (avoid pretest bias):

$$Z_t = c + \sum_{i=1}^{k+d_{max}} A_i Z_{t-i} + u_t,$$

$k$  chosen by IC (e.g. AIC/BIC),  $d_{max}$  = max suspected integration order across variables

Modified Wald statistics (valid with unit roots/cointegration):

$$W = R(\hat{\beta})^T [R\widehat{Var}(\hat{\beta}) - r]^T [R\widehat{Var}(\hat{\beta})R^T]^{-1} (R\hat{\beta})^d \rightarrow \chi_q^2$$

- **Exogenous variable candidates** – OPR\*, 12M fixed deposits rate by commercial banks, quarterly GDP growth, MGS 10-year yield, conventional bonds demand, conventional bonds supply, USD/MYR rate, FBM KLCI, FDI inflow, FDI outflow, FDI net flow
- **Bivariate Toda-Yamamoto Modified Wald Test (TY MWALD) testing** – Looking into bi-directional/uni-directional effect.

# Methodology: Establishing forecast baseline and determining external factors

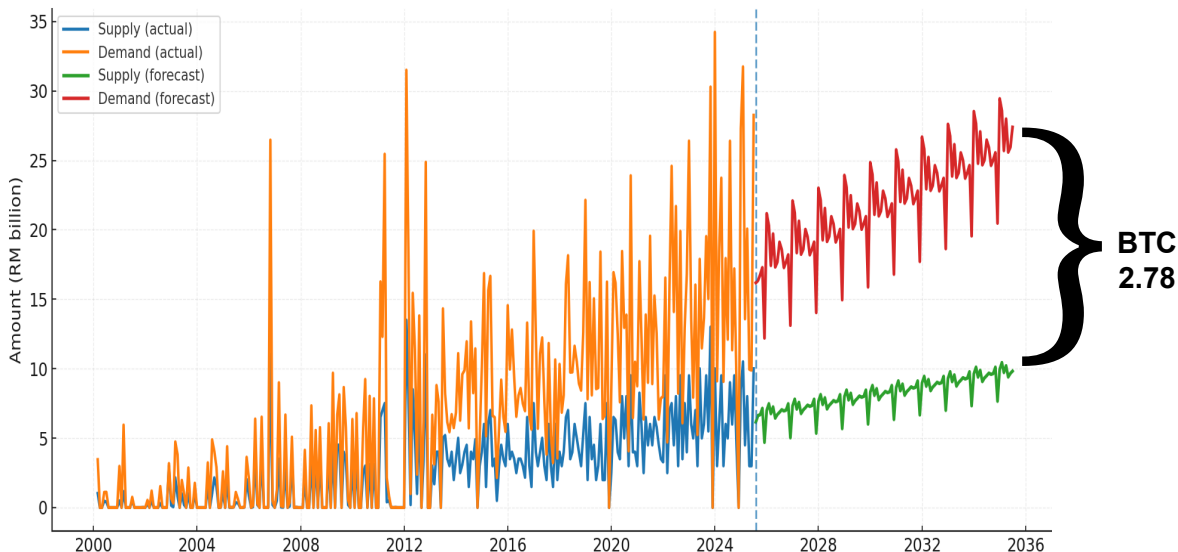
## SARIMA as baseline forecast model

- Baseline model for Seasonal Autoregressive Integrated Moving Average (SARIMA):  $(p, d, q)(P, D, Q)h = (0, 1, 2)(0, 1, 1)12$
- Seasonal differencing and Moving Average (MA) terms are applied.
- $c \neq 0$ , no intercept/drift as it would act like a deterministic trend. After differencing, the series fluctuates around zero without imposed drift.

### Observations:

- Sukuk bid-to-cover (BTC) under SARIMA forecast shows constant value of 2.78 throughout 5-year and 10-year forecast horizon.
- Mean Absolute Scaled Error (MASE) for both Supply and Demand > 1 (1.41, 1.58 respectively). This means its forecast is worse than seasonal naïve benchmark.
- Refinement is needed, leading to utilisation of TY-MWALD to consider for exogeneity.

Baseline forecast for sukuk issuance supply-demand



## Choosing external factors via Toda-Yamamoto Modified Wald Test

### Exogenous variables tested and accepted

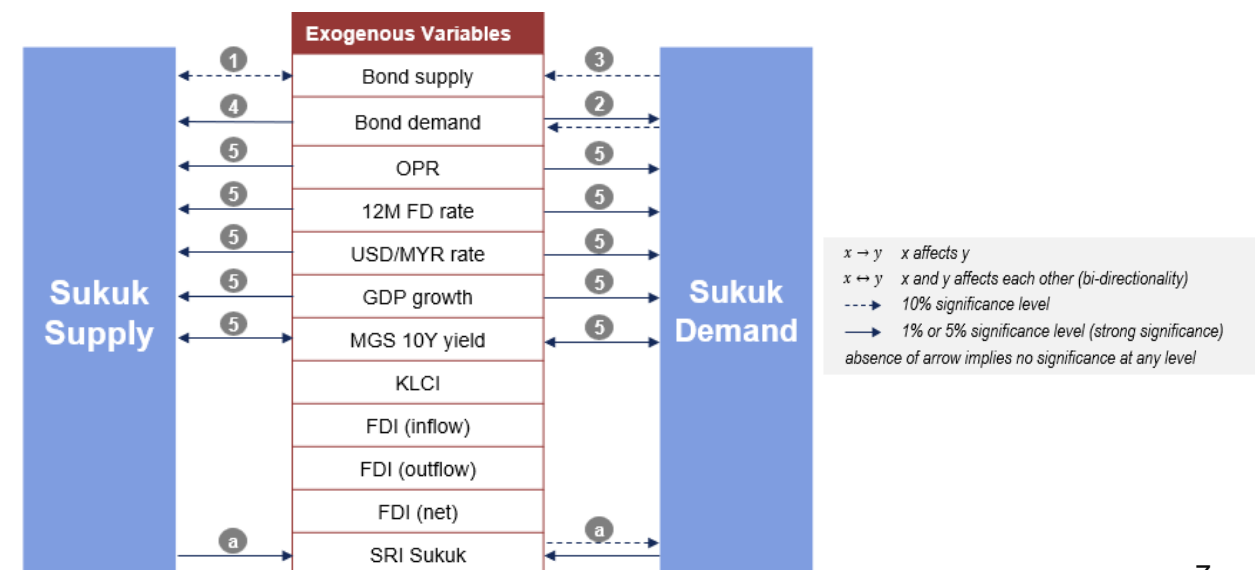
- Sukuk and bond supply affects each other, since the supply of one may prompt adjustment in the other.
- Similarly on the demand side, sukuk and bond demand affect each other, since a surge in demand for one may lead to rebalancing away from the other.
- Sukuk demand affects bond supply, potentially due to strong investor preference for Shariah-compliant instruments influencing bond issuers to reduce issuance of bond.
- Bond demand affects Islamic supply, likely since conventional bond buyers are also able to buy sukuk, causes spillover to sukuk market and influence sukuk supply decision.
- Other variables are well expected to strongly affect both sukuk supply and demand, i.e. OPR, FD rate, FX rate, GDP growth & benchmark MGS 10Y yield. Strong bi-directionality in MGS 10Y yield.

### Exogenous variable tested and accepted, but unable to be applied

- SRI Sukuk to influence Sukuk demand, while being affected by both Sukuk demand and supply. To be excluded due to severe data limitation (dataset starts from 2017, while others from 2000).

### Exogenous variables tested and rejected

KLCI and FDI (tested individually for inflow, outflow and net) are not significant variables.





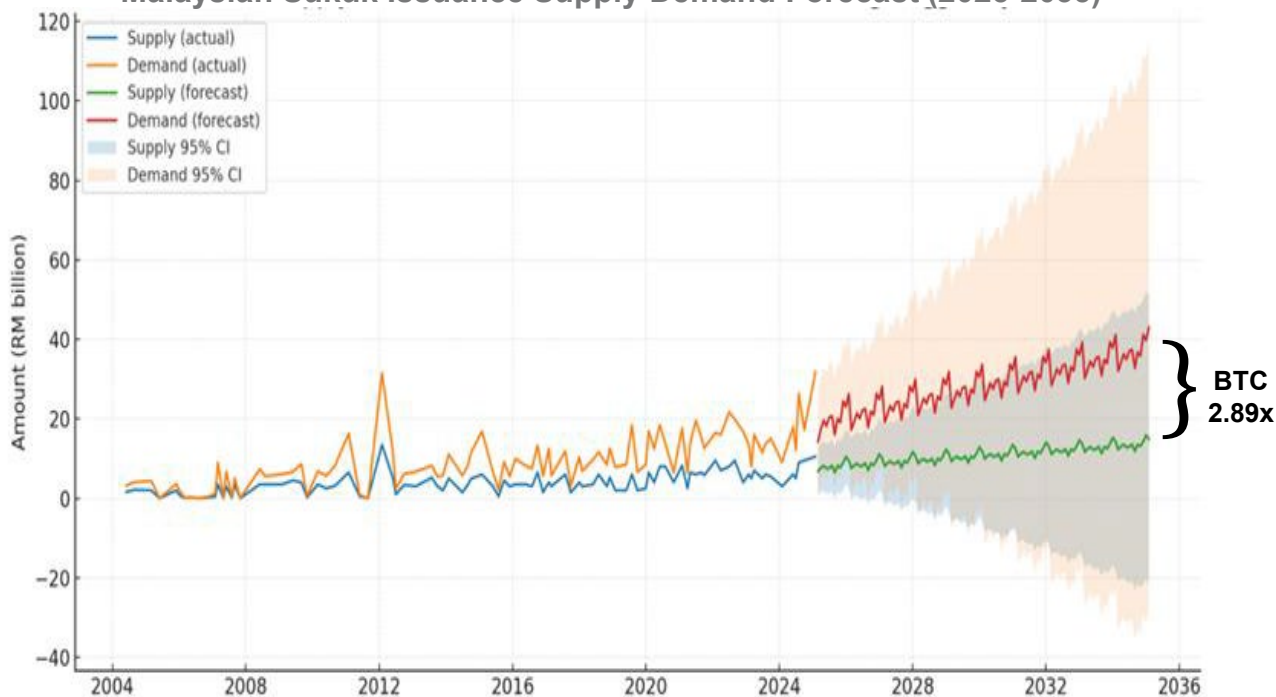
# Analysis: Demand for Malaysia's sukuk forecasted to triple in the next decade, widening existing demand-supply gap

## Model equation

$$w_t = \beta^T Z_{t-1} + \theta(B)\Theta(B^{12})\varepsilon_t$$

$$Z_{t-1} = [MGS10Y_{t-1}, \widehat{OPR}_{t-1}, \widehat{FD}_{t-1}, \widehat{FX}_{t-1}, \widehat{QGDP}_{t-1}, \widehat{Bond D}_{t-1}, \widehat{Bond S}_{t-1}]^T$$

Malaysian Sukuk Issuance Supply-Demand Forecast (2025-2035)



- Accuracy metric: MASE value for Supply and Demand are 0.896, 0.885. This means that the model's average error is smaller than the naïve baseline.
- The same model applies with seasonal differencing (D=1, s=12) and non-seasonal differencing (d=1)
- Ljung-Box at 12 and 24 lags are insignificant, signifying no residual autocorrelation.
- Exogenous variables are all standardised, lagged by 1 month

## Findings

1. **Accelerating demand** – Demand for Ringgit-denominated sukuk is projected to triple to RM42 billion by 2035, with highest estimate to go beyond RM100 billion. In contrast, demand for bonds is expected to moderate during the same period.
2. **Widening demand-supply gap** – Demand growth will further outpace supply, with bid-to-cover ratio (BTC) forecasted to rise to 2.89x by 2035 (2025: 2.10x). This signals increasing competition among investors for limited Shariah-compliant sukuk issuances.
3. **Forecast incorporates exogenous variables** such as OPR, GDP growth, benchmark 10Y MGS yield, conventional bonds demand & supply, 12M fixed deposits rate by commercial banks, USD/MYR exchange rate. The exogenous variables are adding genuine predictive signal to the differenced mean.
4. **Accuracy metric:** MASE value for Supply and Demand are 0.896, 0.885. Reflecting model's average error to be smaller than naïve baseline.

## Supportive anecdotal evidence

Growing appetite from sizeable domestic institutional investors with Shariah-compliant investment mandate. For example, Malaysia's Employee Provident Fund (EPF) – ranked as the 13<sup>th</sup> largest pension fund globally and 5<sup>th</sup> in Asia – recorded an [11% increase in total contribution](#) driven by wage growth, among others.





# Analysis: Coefficients of the exogenous variables

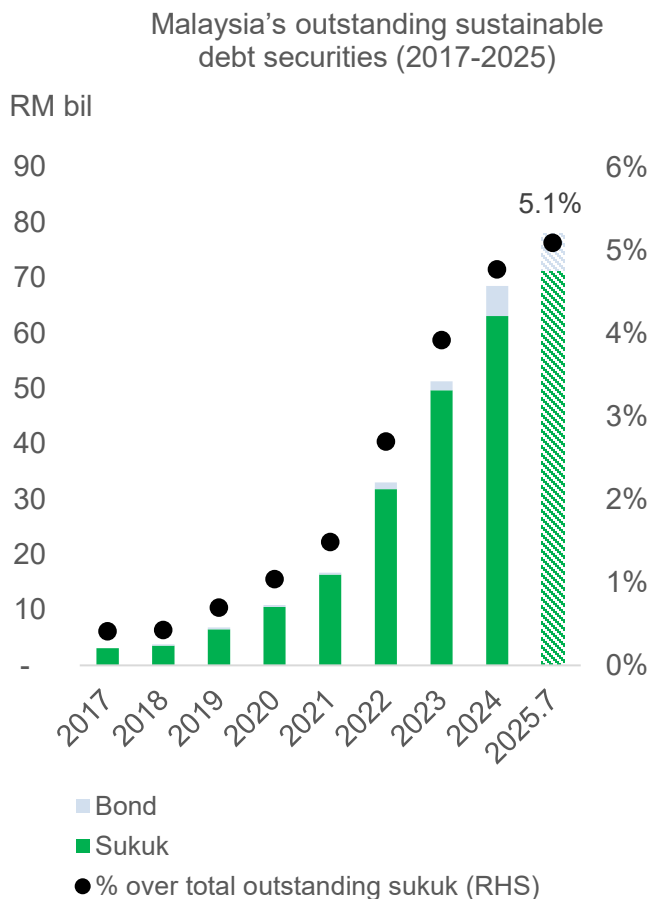
Dependent Variable	Per-Unit Impact	Exogenous Variable	Per-Unit Impact	Dependent Variable
<b>Sukuk supply</b>	+ RM2.18 bn	<b>Bond supply (+RM10 bn)</b>	+ RM4.95 bn	<b>Sukuk Demand</b>
	+ RM0.25 bn	<b>Bond demand (+RM10 bn)</b>	+ RM0.33 bn	
	+ RM0.77 bn	<b>OPR (+25 bps)</b>	+ RM1.10 bn	
	- RM2.68 bn	<b>12M FD rate (+25 bps)</b>	- RM5.17 bn	
	+ RM0.36 bn	<b>USD/MYR rate (+0.10 USD appreciates)</b>	+ RM0.89 bn	
	+ RM0.12 bn	<b>GDP growth (+ 1.0 pps)</b>	+ RM0.30 bn	
	- RM0.82 bn	<b>MGS 10Y yield (+ 50 bps)</b>	- RM1.33 bn	

## Observations:

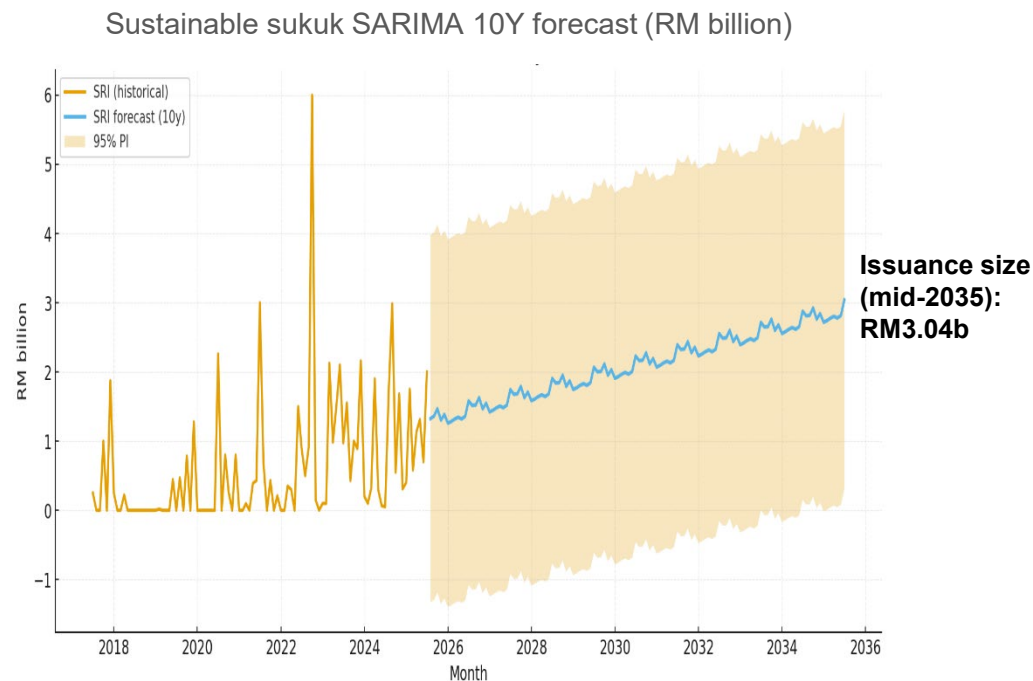
- Increasing rates in 12 Month Fixed Deposit rate and MGS 10-year yield** would **impact negatively** on sukuk demand and sukuk supply.
  - When yields rise, existing bonds with lower coupons become less attractive causing their price to fall. Investors may hold off buying sukuk, expecting better yields (and lower prices) in the near future.
  - Increase in 12M Fixed Deposit rate offers investors alternatives with higher returns, hence reducing sukuk demand as well as supply
- Higher GDP growth** reflects a robust and expanding economy, which boosts business confidence. This economic optimism encourages both companies to issue sukuk for expansion and infrastructure financing (increasing supply) and investors to seek such instruments as a stable, Shariah-compliant investment option (increasing demand).
- An increasing OPR** typically indicates a tightening monetary policy environment in response to inflationary concerns. This can lead to higher benchmark yields, making sukuk relatively more attractive as they may offer competitive returns in line with overall market expectations. Consequently, investors will be more inclined to invest, driving both supply and demand upward.
- Weaker MYR against USD** may expose companies to higher foreign exchange risks and increased costs in international transactions, prompting them to seek alternative financing options like sukuk to better manage their funding needs.

# Analysis: Sustainable sukuk could bridge the expected demand-supply gap

Rapid growth of sustainable sukuk<sup>1</sup>  
(5Y CAGR: 57%)



Forecasted issuance of sustainable sukuk in 10 years is sufficient to plug the projected demand-supply gap<sup>2</sup> (RM2.95 bil)



Multiple drivers are expected to maintain momentum in sustainable sukuk growth

**Alignment with national agenda**  
(e.g. National Energy Transition Roadmap, New Industrial Master Plan 2030)

**Facilitative regulatory landscape**  
(e.g. tax incentives, issuance of industry guidance)

**Enhanced integration of ESG into investors' strategy & mandate**

**Broader range of issuers**

<sup>1</sup> Sustainable sukuk include Sustainable and Responsible Investment (SRI) and SRI-linked sukuk as outlined by Securities Commission Malaysia and ASEAN Green, Social, Sustainability and Sustainability-linked Bond as outlined by ASEAN Capital Market Forum (ACMF)  
<sup>2</sup> Demand-supply gap refers to difference in forecasted BTC (2.89x) and 20-year average BTC (2.41x)

# Challenges and limitations: Considerations for other future studies

## Limitations

## Description

<b>A</b>	<b>Inconsistency in sukuk issuance data frequency</b>	Inconsistent monthly sukuk issuance, where there were zero issuance in several months, which can impact the robustness of forecasts. Forecasting models rely on consistent data patterns to make accurate predictions.
<b>B</b>	<b>Severely limited time horizon for sustainable sukuk</b>	Sustainable sukuk was only first issued in 2017, compared to the overall sukuk dataset that are available from early 21 <sup>st</sup> century. Its limited data timeline renders it incompatible with the overall SARIMAX model.
<b>C</b>	<b>Sustainable sukuk is on private placement only</b>	Sustainable sukuk is currently offered exclusively through private placement, which renders its exclusion from the overall sukuk forecast.
<b>D</b>	<b>Limited benchmarking on sukuk issuance forecasting</b>	There are limited studies conducted on forecasting of sukuk in both industry and academia. This gap underscores the need for more rigorous research and data-driven analysis to establish benchmarks and improve predictive methodologies in the sukuk market.

# Conclusion

1

Sukuk demand in Malaysia is forecasted to triple within the next decade, expected to widen the demand-supply gap and increase competition among investors seeking for the Shariah-compliant investment instrument.

- Seasonal Autoregressive Integrated Moving Average (SARIMA) is inadequate to project the forecast accurately, hence necessitating exogenous variables in the said projection (SARIMAX).
- Incorporated exogenous variables include conventional bonds supply and demand, Overnight Policy Rate, 12-month fixed deposit rate by commercial banks, USD-MYR exchange rate, quarterly GDP growth and Malaysian Government Securities (MGS) 10-year yield.
- Anecdotal evidences are also supportive, with expectation of growing appetite from major institutional investors with Shariah-compliant mandate e.g. Malaysia's Employee Provident Fund (EPF) recorded 11% increase in contribution size.

2

Sustainable sukuk growth is rapid in Malaysia. The segment could bridge the demand-supply gap within the same period, if growth continues.

- Supported by multiple drivers such as facilitative regulatory support and alignment with national agenda such as Malaysia's National Energy Transition Roadmap and New Industrial Master Plan 2030. Malaysia commits to achieving net zero by 2050.



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# Thank you!

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# Appendices



# Literature review

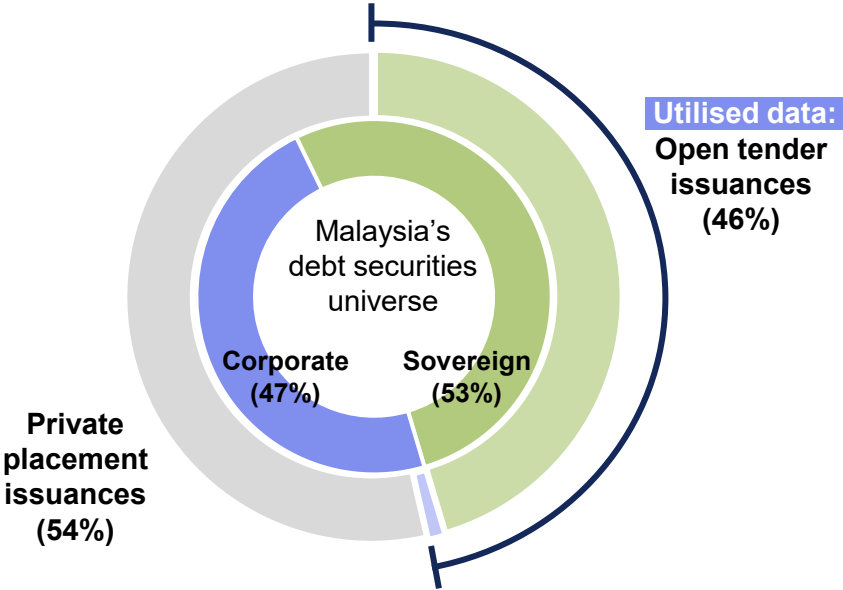
## A. Sukuk industry in Malaysia

- **Foundational insights:** Sukuk is the Arabic term for Islamic securities, it simply means certificate. Sukuk is documented as a tool for resource mobilisation ([Jobst, Kunzel, Mills & Sy, 2008](#)). Sukuk tend to be structured so the end economic result mimic fixed income instrument such as bond with similar risk-reward structures and features, since bond market plays pivotal roles in the economy and financial markets ([Bahari et al., 2016](#), Sairally et al., 2017).
- **Development and evolution of sukuk:** Early experiences in Malaysia was initiated by the Government of Malaysia by issuing Government Investment Certificate (GIC) in 1983 to provide avenue for short-term liquidity management and long-term investment for Islamic financial institutions during the period. First corporate sukuk was later issued in Malaysia in 1990 by Shell MDS Malaysia Sdn Bhd (Sairally et al., 2017). Malaysia's sukuk is known to finance its domestic infrastructure projects, though the market has structured sukuk to suit variety of specific funding needs of various economic activities for example sale-based sukuk (based on the concept of *Murabahah*, *Salam*, *Istisna*), lease-based sukuk (based on the concept of *Ijarah*), partnership-based and agency (based on the concept of *Mudarabah/Musharakah* and *Wakalah*), or any combination thereof. Further innovation introduces capacity sukuk, utilising 'business capacity' of respective companies (such as airtime by telcos, right to travel by airlines) as intangible underlying assets (Djafri et al., 2023).
- **Malaysia's sukuk market:** Malaysia's sukuk market has grown exponentially and even demonstrating positive impact to the Malaysia's economic growth ([Abrorov, 2020](#)). Malaysia provides as an ideal dataset for this study, hosting a matured sukuk market under the dual financial system alongside the conventional bond market, enabling fair comparison against between the two vibrant, deep markets.

## B. Forecast model

- **ARIMA as a baseline:** Many studies start with ARIMA to establish a benchmark forecast for sukuk or related financial series ([Rosadhillah & Ülev, 2024](#)). It captures autoregressive structure but is limited in scope. Our use of ARIMA as an initial step aligns with common practice and provides a yardstick for improvements.
- **ARIMAX with Causality-based Inputs in Sukuk:** Incorporating exogenous macro drivers is advised by numerous researchers. Empirical results show that including relevant variables (e.g. interest rates, inflation) can enhance forecast accuracy for sukuk, such as the case in Malaysia and Türkiye ([Humaida, Nur Atikah and Dini Naziha, 2016](#); [Baykut, 2024](#)). By using the Toda-Yamamoto causality test (as in Baykut, 2024) to guide variable selection, we ensure our ARIMAX model only includes factors that have proven predictive content for sukuk. This evidence-driven ARIMAX is likely to outperform a pure ARIMA, as supported by findings in other domains where ARIMAX was preferred for greater accuracy ([Paul & Sinha, 2016](#)). Essentially, our approach combined ARIMA forecasting with Toda-Yamamoto Modified Wald Test for sukuk and macroeconomic variables.
- **Machine Learning to Rival Econometric Models:** Integration of machine learning techniques with time-series models. [Zainuddin et al. \(2019\)](#) and [Çetin & Metlek \(2024\)](#) examined sukuk investment forecasts using a hybrid of classical moving-average and artificial neural network (ANN) algorithms; they found that a purely statistical moving average (MA) model produced biased estimates for sukuk prices/indices, whereas the proposed ANN-enhanced approach significantly reduced forecast errors. This result underlines a broader point: while linear models like ARIMA/ARDL capture baseline patterns, non-linear or complex patterns might be better handled by machine learning. Other studies in Islamic finance have likewise started comparing traditional models to newer methods (e.g. comparing ARIMA/ARIMAX to deep learning or recurrent networks for financial series) ([Elbatal et al., 2025](#)). In general, these studies show that baseline ARIMA or regression models often benefit from either including exogenous inputs or combining with non-linear learners to capture all dynamics.

# Dataset and assumptions



## Why open tender issuance data?

Market-driven indicator

Market benchmark

Significant size

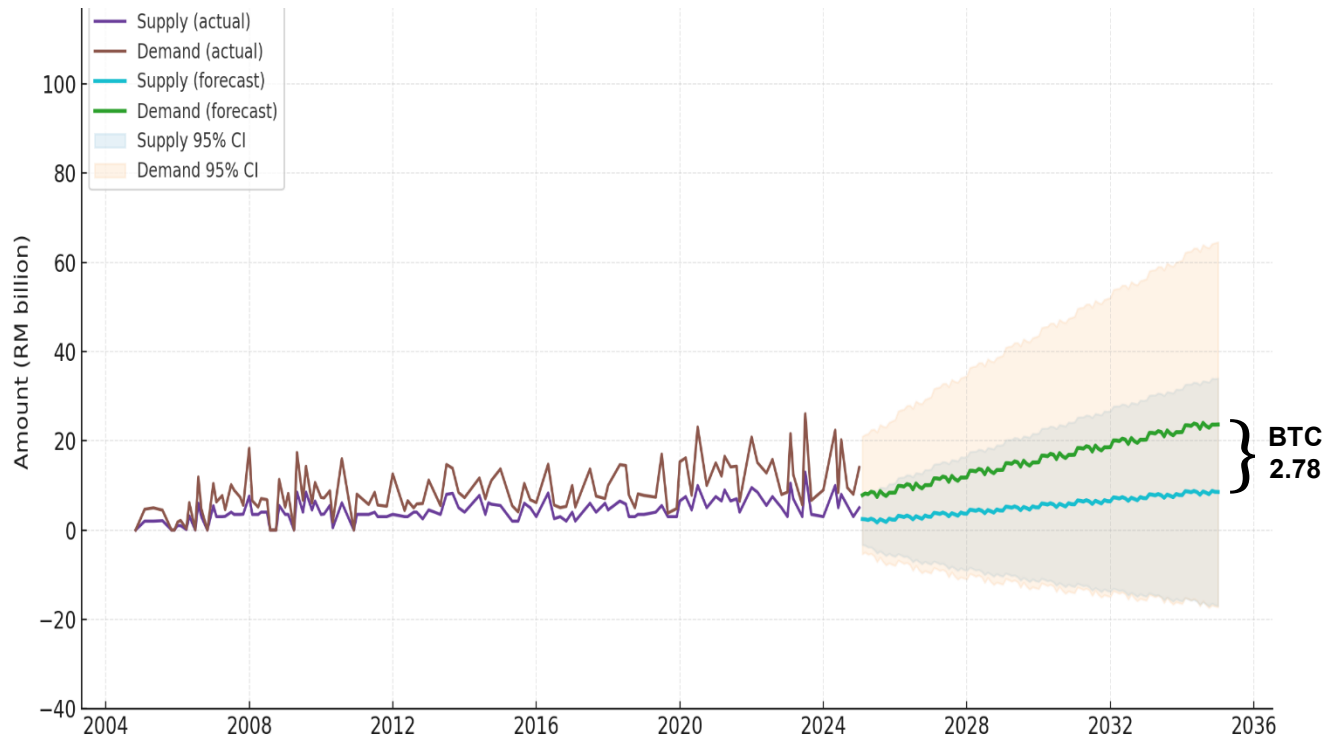
Dataset comprises of 869 issuances from Jan 2000-July 2025, offering a balanced representation across categories

- 655 sovereign issuances (by BNM, GOM) and 214 corporate issuances (from entities such as Khazanah, Cagamas, TNB, Telekom)
- 491 conventional bonds, 378 Shariah-compliant sukuk

## General forecast assumptions

Stable political and policy environment	No policy reversal or regulatory changes that could drastically shock the financial market. This includes Shariah regulations.
No black swan events	No major unforeseen disruptions such as global financial crisis or geopolitical conflicts
Continued growth, stable monetary policy	Economic growth and policy rate follows a historically predictable path; OPR are within range of 1.75%-3.50%
Consistent non-resident	Non-resident holdings remains low (average 3.6% over outstanding), following historical trajectory. Forecast excludes potential upside from increased non-resident interest arising from latest efforts to attract foreign investors
Data aggregation	Issuances are aggregated into monthly data, irrespective of tenor, to ensure analytical viability

# Conventional bond forecast: Bond demand is expected to moderate amid accelerating demand for sukuk



## Model diagnostics

- The same model is applied for forecasting bond  $(0, 1, 2)(0, 1, 1)_{12}$
- Exogenous variables: OPR, 12-month FD rate, FX rate, Quarterly GDP growth, MGS 10-year yield, Islamic demand and supply
- MASE value for Conventional Supply and Demand are 0.68, 0.71 respectively. In terms of accuracy metrics, the model's error are smaller than the naïve benchmark.
- The exogenous variables are adding **genuine predictive signal** to the differenced mean.

## Findings

- Islamic demand outpacing conventional demand – beyond 1.70x
- Closing demand-supply gap – Demand growth will decline towards meeting supply, with bid-to-cover ratio (BTC) forecasted to drop to 2.78x by 2035 (2025: 3.19x). This might entail possible shift to Islamic bonds in the long-term.