

POST EVENT REPORT



NOMURA

ISLAMIC ASSET MANAGEMENT
10th Anniversary Investment Forum

Grand Ballroom, Four Seasons Hotel, Kuala Lumpur
February 18, 2019



NOMURA

Connecting Markets East & West

Opening doors to world class Shariah investment opportunities

At award-winning¹ Nomura Islamic Asset Management, we aim to provide a global range of Shariah investment solutions to meet your investment objectives.

With our worldwide network, expertise, and capabilities, we aspire to be at the forefront of Shariah investment as the leading Islamic Fund Manager trusted by institutional and retail investors alike.

**For more info, please visit
www.nomura-asset.com.my/nomura-islamic-asset-management**

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¹ Most Outstanding Islamic Asset Management Company at the 15th Kuala Lumpur Islamic Finance Forum (KLIFF) Awards 2019.

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Mr. Kunio Watanabe — President & Chief Executive Officer, Nomura Asset Management Co, Ltd.

Yang Berbahagia Datuk Syed Zaid Albar, Honourable Chairman of the Malaysian Securities Commission, Yang Berbahagia Tan Sri Samsudin Osman, Chairman of the Malaysian Employees Provident Fund, Datuk-datuk, Datin-datin, distinguished guests, ladies and gentlemen.

Good morning and thank you for joining me today to celebrate the 10th year anniversary of Nomura Islamic Asset Management, our global hub and platform for Islamic asset management business under the Nomura Asset Management Group internationally.

It is my honor and great pleasure to welcome you to join us on this special occasion.

I would like to take this opportunity to express my deepest gratitude for your continued support and for the trust and confidence you have placed in us.

Since establishing operations in January 2009, Nomura Islamic Asset Management has positioned ourselves as a leader in the provision of client-driven investment products both in Malaysia and overseas. To commemorate our 10th anniversary, and to demonstrate our continued commitment to Islamic asset management, we are honored and delighted to host a high-level investment forum today, bringing together our clients, partners and key industry stakeholders to highlight and discuss the issues we consider important in the industry currently — which are: sustainability, ethics, technology and innovation in investment management.

The Islamic fund management industry stands at an important crossroads, and the forum today hopes to address some of the latent issues in Shariah investments and identify new opportunities across similar domains in sustainable and responsible investment, and environmental, social, governance investment, and others such as green investment.

Looking back, for Nomura Asset Management, our first foray into Shariah investments had its important genesis in 1998 when we established a landmark arrangement with the Dallah Al Baraka Group in Saudi Arabia to sub-manage a Shariah equity fund for one of its asset management companies.

Since then, Nomura Islamic Asset Management was set up as a spin-off and two years after the establishment of our Nomura Asset Management Malaysia office in 2006. It has been our intention to establish a full-fledged Shariah business and operations across the full value chain, and to that extent, Nomura Islamic Asset Management has since become the global hub of our Islamic asset management business, where Shariah investments are sourced internationally through our 14 overseas offices and these investments are managed out of Malaysia in support of the aspirations of the Malaysia Islamic International Financial Centre initiative.

Today, Nomura Islamic Asset Management stands as one of the leading global Islamic fund managers with total assets under management of close to RM5 billion from investors in Malaysia and overseas, including in the Middle East; and with full-fledged

global Shariah capabilities across the flagship strategies in equity and Sukuk for the global, regional and single-country portfolios.

For all these proud achievements, we would like to take this opportunity to sincerely thank the regulators in Malaysia, Securities Commission and Bank Negara Malaysia. In particular, the Securities Commission has been instrumental and facilitative toward the growth and development in Islamic asset management through the introduction and issuance of a full-fledged Islamic fund management license in 2009.

The Securities Commission was also integral in the visionary push to propel Malaysia as a global hub for Islamic funds through the implementation of the five-year masterplan for Islamic fund and wealth management industry. In January 2017, the Securities Commission launched the 'Islamic Fund and Wealth Management Blueprint' which envisions Malaysia to be a leading international center for Islamic fund and wealth management.

“ We also seek to capitalize on the greater interests and growing narratives in establishing close links between the principles of Shariah investments and those of other similar domains, such as sustainable and responsible investment and environmental, social, governance investment and green investment ”

We would like to applaud the Securities Commission and Bank Negara Malaysia for the continued efforts and steadfast commitment in facilitating growth for the industry players. As of November 2018, Islamic funds total AUM in Malaysia has steadily grown to RM166.85 billion, an encouraging 21.7 percentage proportion of the total AUM of both Islamic and conventional

portfolios, and quite importantly, showing an impressive 26 percentage growth based on a three-year comparison since 2015.

Looking forward, Nomura Asset Management and Nomura Islamic Asset Management are well-poised and positioned to respond to the emerging growth and developing global trend that shows the Asian region and a number of emerging Muslim economies as being among the fastest-growing regions for wealth.

In particular, we also seek to capitalize on the greater interests and growing narratives in establishing close links between the principles of Shariah investments and those of other similar domains, such as sustainable and responsible investment and environmental, social, governance investment and green investment.

Nomura Asset Management has been a signatory of the United Nations' Principles of Responsible Investing and the Japanese Stewardship Code since 2011 and 2014 respectively.

The underlying principles and inherent guidelines of these two codes bear close similarities to the principles and values of Islamic finance and stewardship, which are centered and governed by the common tenets of fairness, transparency and risk sharing, among others.

Our expertise and experience in managing investment portfolios across these similar guidelines and requirements will certainly augur well for us to take advantage of the growing convergence and opportunities across those investment requirements, and more importantly, to also augment our value proposition internationally to investors in both the emerging and developed markets.

Finally, we aspire to be an industry thought leader for Islamic asset management and Shariah investments, and this forum demonstrates our efforts and commitment to help shape and develop the industry together with other stakeholders and like-minded partners.

I would like to wish you a productive and enriching time in our forum today.

I sincerely look forward to your continued support and guidance in the many good years to come.

Please enjoy the forum.

Thank you very much.

ISLAMIC FUND MANAGEMENT: EMERGING CATALYSTS TOWARD A WEALTH OF OPPORTUNITIES



Datuk Syed Zaid Albar — Chairman, Securities Commission Malaysia (SC)

Mr Kunio Watanabe, president and CEO, Nomura Asset Management; Yang Berbahagia Tan Sri Samsudin Osman, chairman of the Employees Provident Fund; senior management of Nomura Asset Management; distinguished guests, ladies and gentlemen. Assalamualaikum warahmatullahi wabarakatuh and a very good morning.

1. It is a great pleasure for me to be here this morning. The first decade of an organization is a defining milestone, and I would like to congratulate Nomura Islamic Asset Management on their 10th anniversary.
2. It was significant for Malaysia to be selected as Nomura's global hub for Islamic asset management, given Nomura Asset Management's expansive global network with a presence in Asia, North America, Europe and the Middle East. The SC acknowledges the efforts made by Nomura Asset Management to profile Malaysia and Islamic fund management internationally, and we encourage the industry to intensify their efforts to further develop this market segment.
3. On the global scale and despite heightened competition, Malaysia continues to be a leader in the Islamic capital market, with Sukuk and Islamic fund markets which are among the largest in the world. As at end-2018, the Islamic capital market was valued at RM1.88 trillion, representing approximately 61% of Malaysia's overall capital market. It is

supported by a vibrant industry comprising local and foreign fund management companies, stockbrokers and advisors with comprehensive Islamic capital market capabilities. Industry-led innovation in tandem with SC's developmental initiatives also resulted in a diverse range of Islamic investment products including unit trust funds, wholesale funds, private retirement schemes, ETFs and REITs.

Ladies and gentlemen,

DRIVING SYNERGIES BETWEEN ICM AND SUSTAINABLE INVESTING

4. Such an achievement was decades in the making, and rooted in Malaysia's holistic approach toward developing an Islamic capital market ecosystem. Driven by the SC, the approach drew on the insights of Shariah experts, industry professionals, as well as stakeholders such as institutional investors. The outcome was a facilitative regulatory apparatus within an institutionalized Shariah governance framework, which is supported by a Shariah-cognizant tax, legal and accounting framework that provides clarity and commercial certainty. These efforts consolidated interest from investors, issuers and intermediaries in what was then a nascent industry, and enabled Malaysia to leverage its competitive advantage in this area.
5. The SC, in particular, recognizes the Islamic fund management industry as an important channel for mobilizing capital into

Shariah-based investments, and the industry landscape has changed significantly over the past decade. Consider, for example, that in 2008 there were only five Islamic fund management companies and 30 fund management companies with Islamic windows. Today, the numbers have grown to 22 Islamic fund management companies with a further 31 fund management companies operating through Islamic windows, with assets under management of RM158.8 billion.

6. This expansion was supported by SC's initiatives to grow Malaysia's Islamic fund management industry by providing a conducive regulatory and commercial environment. These include the introduction of the Guidelines on Islamic Fund Management in December 2007, tax exemption on fees received for managing Islamic funds, and liberalization of foreign ownership in Islamic fund management companies without any restrictions on overseas investments. All these initiatives provided clarity and a conducive business environment for the industry to develop and grow, especially on the domestic front.
7. At the same time, we strove to internationalize the Islamic fund management industry by establishing linkages with other jurisdictions to facilitate the industry's cross-border expansion. For example, the SC has signed mutual recognition agreements with the regulatory authorities of Dubai and Hong Kong to enable cross-border Islamic fund transactions. We have also instituted arrangements with the regulatory authorities of Ireland and Luxembourg to facilitate the offering of Malaysia's Islamic Undertakings for Collective Investment in Transferable Securities (UCITS) products. As part of our regionalization strategy, the SC as part of the ASEAN Capital Markets Forum has also launched the ASEAN Collective Investment Scheme framework with participation from Malaysia, Singapore and Thailand in 2014 to facilitate cross-border offering of CIS, including Islamic CIS.

Ladies and gentlemen,

DRIVING SYNERGIES BETWEEN ICM AND SUSTAINABLE INVESTING

8. Having grown so prodigiously, what is the next step for this industry? In January 2017, the SC has launched the Islamic Fund and Wealth Management Blueprint with a vision to establish Malaysia as a leading international center for Islamic fund and wealth management. It charts the medium and long-term strategic direction for the industry while mapping out strategies and recommendations to strengthen the country's competitive edge. The blueprint outlines three mutually reinforcing strategic thrusts, namely strengthening Malaysia's positioning as a global hub for Islamic funds, establishing Malaysia as a regional center for Shariah-compliant sustainable and responsible investments, and developing Malaysia as an international provider of Islamic wealth management services.
9. It is pertinent to highlight the concurrent focus on and the commonalities between the principles of Islamic finance

and SRI including the emphasis on ethical business practices and positive social outcomes. Internationally, SRI is gaining momentum, particularly among institutional funds and investors, as illustrated in the 25% growth in global sustainable investment in AUM from US\$18.28 trillion in 2014 to US\$22.89 in 2016.¹ With Islamic funds recognized as part of the SRI universe, Malaysia is currently the largest market for SRI funds in Asia ex-Japan, with a 30% share.

10. Given this structural pivot in investor preference, the SC has identified SRI and as well as the closely-related Islamic fund and wealth management segment as one of the growth drivers for the next phase of Malaysia's capital market development. In 2017, the SC has issued the Guidelines on Sustainable and Responsible Investment Funds to facilitate and encourage further growth of SRI funds in Malaysia. Moreover, the growing pool of SRI assets represents potential scope for fund administration and investment support services firms to serve both the Islamic and SRI funds segments.

“ The SC has identified SRI and as well as the closely-related Islamic fund and wealth management segment as one of the growth drivers for the next phase of Malaysia's capital market development ”

ADAPTING TO DIGITIZATION AND DEMOGRAPHIC SHIFTS

11. As we look ahead, digitization and demographic changes will continue to reshape markets, and it is critical for market participants to adapt to opportunities and risks arising therefrom. A key driver of future industry growth is the shift in investment preferences an emergent generation of investors. The millennials, in particular, are accounting for a growing share of the investor base, with studies identifying their greater awareness on SRI and their propensity to align investment decisions with social causes and personal values. Millennials also see businesses as agents for socioeconomic change, and the ability of our intermediaries to respond to this trend and cultivate this generation of socially-aware digital natives will enhance the value proposition and competitive advantage for Malaysia's fund management industry.
12. When properly harnessed, technology can also strengthen business intelligence through data analytics, enhance investor experience and drive efficiency, for example through the use of technology to manage Shariah and SRI portfolios by integrating the relevant processes into the fund



management system. Alternative financing channels and new business models such as equity crowdfunding, peer-to-peer financing and digital investment management also offer new opportunities for both entrants and incumbents, thus providing for more inclusive access to the capital market.

“ The millennials, in particular, are accounting for a growing share of the investor base, with studies identifying their greater awareness on SRI and their propensity to align investment decisions with social causes and personal values ”

Ladies and gentlemen,

CONCLUSION

13. While the asset management industry remains one of the fastest-growing segments in the Malaysian capital market,

it is important to assess the industry’s readiness in the face of structural shifts in the market landscape. I am pleased to report that the Institute for Capital Market Research Malaysia (ICMR), an independent research institute established in November 2017, has collaborated with the Nomura Institute of Capital Markets Research to prepare a joint report on structural frontiers in the asset management industry, and the efforts required to surmount them.

14. In line with this initiative, ICMR and NICMR has also entered into a Memorandum of Understanding to collaborate in areas pertaining to capital market development. These include providing a platform for the exchange of expertise and technical knowledge, as well as capacity-building through engagements among regulators, the industry and academia.

15. Insights garnered from initiatives such as today’s forum and this research report will help to illuminate our path as we seek to accelerate the development of Malaysia’s Islamic capital market, including its fund and wealth management industry. The growth achieved so far would not have been possible without the contribution of various stakeholders, including institutional investors as well as shariah experts and industry professionals. To take the Malaysian Islamic capital market to the next level, we must harness the same ethos of collaboration and spirit of innovation, and the SC looks forward to continue working with all stakeholders to drive this development agenda.

16. Once again, thank you for inviting me to be here and I would like to wish everyone a fruitful and engaging session.

Thank you.

KEYNOTE INTERVIEW: LEADERSHIP, ISLAMIC FINANCE, ARTIFICIAL INTELLIGENCE AND ETHICS – OPPORTUNITIES AND CHALLENGES



Mr. Daud Vicary Abdullah — Managing Director, DVA Consulting (L); Dato Paduka Iqbal Khan — Chief Executive Officer, Fajr Capital (2012 Recipient of Royal Award for Islamic Finance) (R)

Iqbal Khan, CEO of Fajr Capital and the 2012 recipient of the Royal Award for Islamic Finance, shares his thoughts on Islamic finance leaderships and the state of play of the global Shariah finance industry.

ISLAMIC FINANCE LEADERSHIP

- It is important for aspiring leaders and Islamic finance professionals to:
 1. Stay steadfast and committed
 - “When you are building a business based on the real economy to create value to society, you are already on a winning proposition.”
 2. Continue to work on enabling both the macro and micro environments
 - Malaysia is a great example whereby every government in power has been committed to Islamic finance
 3. Building robust institutions
 - “When you build institutions, you must focus on building people — if you have competence and integrity in management, you will get amazing results.”

THE ISLAMIC FINANCE INDUSTRY: PAST, PRESENT, FUTURE

- When the industry started, the founders have two major concerns: should they wait for the perfect regulatory infrastructure or launch the industry first with a framework that would be a work-in-progress? They chose the latter.
- The Islamic banking and asset management industry should always be about equity and risk-sharing, although in practice, this isn't always the case.
- The current banking model is broken as Islamic finance has grown in the shadows of the conventional industry and as a result, has made significant compromises and lost its authenticity, integrity and impact; however, it has given Islamic finance mainstream relevance in terms of global footprint and coverage.
- The most powerful model for the Islamic finance sector is the consumer-to-business model; in order for the industry to move forward, we need to reach the ‘tipping point’ as expounded by Malcolm Gladwell in his book, ‘The Tipping Point: How little things can make a big difference’.
- Asset management is the future of the Islamic finance industry.
- “What we are missing are authenticity and goodness (financing for good); so it is about converging with ethical finance and shifting toward a cooperative model for banking, Takaful and asset management.”

INVESTMENT ENVIRONMENT OUTLOOK PRESENTATION



Mr. Wataru Ogihara — Senior Managing Director & Chief Investment Officer (Global Equity), Nomura Asset Management Co., Ltd.



Investment Environment Outlook

February 18th, 2019

Wataru Ogihara
Senior Managing Director and CIO – Global equity

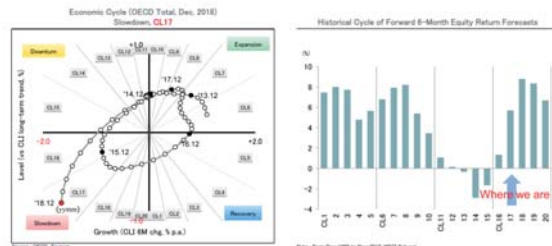
Expertise to Exceed¹¹

Using our expertise and foresight to stay ahead of change, we pursue exceptional performance and create cutting-edge solutions to exceed all expectations.

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Global Economic Cycle

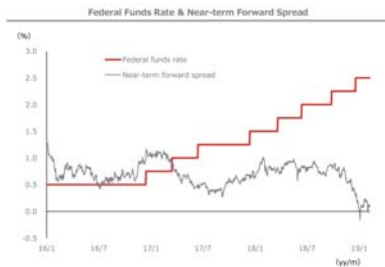
- Global economic momentum has been slowing, but may be approaching a trough.



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Monetary Policy

- The market has incorporated a scenario of "No Further Fed Hikes", and is pricing in expectations of flexible monetary policy over the coming months.



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Equity Valuation and Corporate Earnings

- Equity valuations have fallen below their historical average.
- Corporate earnings have been revised down, but further downward revisions are possible.

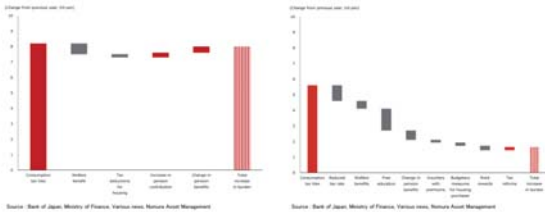


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Japan: Consumption Tax Hike NOMURA

- The consumption tax hike will be implemented in Oct. 2019 in Japan.
- Short-term fiscal policies may limit immediate impact of consumption tax hike
- Marginal negative impact is expected to be smaller than for previous tax hikes.

Consumption Tax Hike Burden on Households (FY2014) Consumption Tax Hike Burden on Households (FY2019)



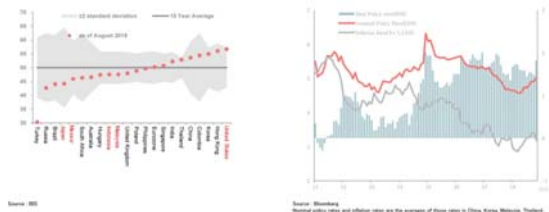
Source: Bank of Japan Ministry of Finance, Japan Bank, Nomura Asset Management

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Currency Outlook NOMURA

- US dollar seems expensive relative to most currencies.
- JPY and most EM currencies are generally undervalued based on real effective exchange rates.

Deviation of REER from the Long-term Average Emerging Market Policy Rates and Inflation Rate



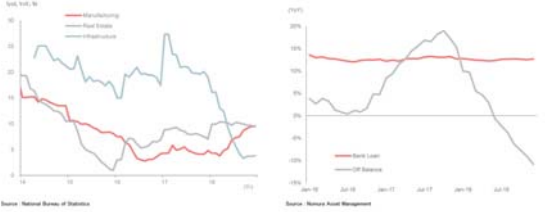
Source: BIS

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Potential Surprises (1): Large Fiscal Stimulus in China NOMURA

- Potential positive surprises could come from an unexpectedly large economic stimulus in China, as occurred after the GFC in 2009.
- Infrastructure investment has been falling and shadow-bank credit has started to shrink.

Fixed Asset Investment by Industry Sector Loan Growth Rate



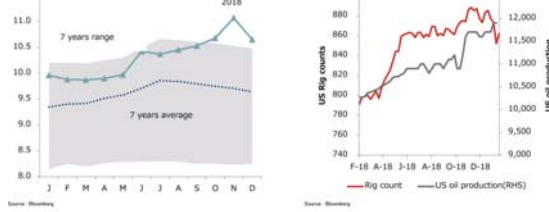
Source: National Bureau of Statistics

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Potential Surprises (2) Oil Price Rebound to the US\$70-80 range NOMURA

- Primary cause of the sharp fall in oil prices toward the end of 2018 was over-supply by OPEC.
- After the sharp fall in oil prices, US production capacity growth is expected to flatten.

Saudi Arabia Crude oil Production (Unit: MMB/D) Loan Growth Rate



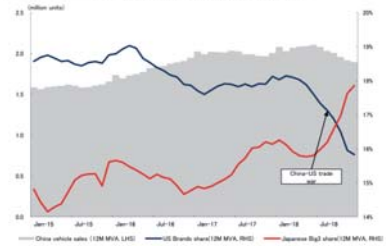
Source: Bloomberg

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Investment Opportunities - Japanese Autos NOMURA

- Market share of Japanese automakers in China has been rising, especially since start of Sino-US trade conflict.
- Other investment opportunities could emerge if the dispute escalates or is prolonged.

Auto Sales in China, Japan and US Market Share



Source: Nomura Asset Management

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Thank you !

Expertise to Exceed^{||}

Using our expertise and foresight to stay ahead of change, we pursue exceptional performance and create cutting-edge solutions to exceed all expectations.

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ROUNDTABLE SESSION: SHARIAH, RESPONSIBLE AND SUSTAINABLE INVESTING, ESG AND SOCIAL IMPACT – CONTRIBUTING TO THE ACHIEVEMENT OF SUSTAINABLE GOALS



MOHAMMAD FAIZ AZMI

Executive Chairman,
PwC Malaysia



DR HURRIYAH EL ISLAMY

Executive Board
Member, Badan
Pengelola Keuangan
Haji Indonesia



MOHD DAUD BAKAR

Founder and Executive
Chairman, Amanie
Advisors



OLIVER WARNER

Environmental and
Social Consultant,
International Finance
Corporation



SHAHRIL RIDZA RIDZUAN

CEO, Khazanah
Nasional

CURRENT STATE

- ESG [environmental, social and governance] and SRI [sustainable and responsible investment] are not new terms; however a great majority of SRI investments are heavily concentrated in North America and Europe, and
- Nonetheless, convergence of SRI and Islamic finance is growing, awareness among regulators is increasing and big investment funds in the Asian region are more willing to engage the board and stakeholders on sustainability especially when investors are seeking stability.

CHALLENGES

- While there is no conflict between Shariah and ESG, devising screening processes should look beyond negative/exclusionist screening
- Performance of Shariah investments is often compared to the performance of the conventional sector – it is akin to comparing apples and oranges; it should instead be done based on comparable variables and other similar Shariah investment schemes
- Data on sustainability and social impact from investments are not sophisticated enough
- There is a financial expectation mismatch between the board and constituents – institutions need to understand accountholders, and
- Shariah boards tend to gravitate toward the opinion of the most conservative scholar which may hinder product innovation.

“ There is not a one-size-fits-all solution to measure social impact; the right ESG principles for investors and companies need to be identified ”

RECOMMENDATIONS

- More flexibility in terms of structure and innovation of SRI/ethical Islamic finance products and more creativity in portfolio diversification
- A more mature reporting approach on sustainability and impact investing is needed
 - Companies should report sustainability performance; this however requires proper guidelines and framework
 - There is not a one-size-fits-all solution to measure social impact; the right ESG principles for investors and companies need to be identified
- An urgent need to move from an aspiration to an implementation phase.

RESEARCH PRESENTATION: THE CLIENTELE EFFECT IN ISLAMIC BONDS OR SUKUK – EVIDENCE FROM THE MALAYSIAN SOVEREIGN BOND AND SUKUK MARKETS



Professor Joseph Cherian — Practice Professor of Finance
Director, Centre for Asset Management Research & Investments (CAMRI), NUS Business School



The clientele effect in Islamic bonds or *Sukuk*: Evidence from the Malaysian sovereign bond and *Sukuk* markets

Presented by
Joseph Cherian*
CAMRI, NUS Business School

18 February 2019

* Co-authored with Chen Minxia (CAMRI, NUS Business School), Shao Yuping (Société Générale), and Marti Subrahmanyam (NYU-Stern); The working paper is available at <https://ssrn.com/abstract=3198506>

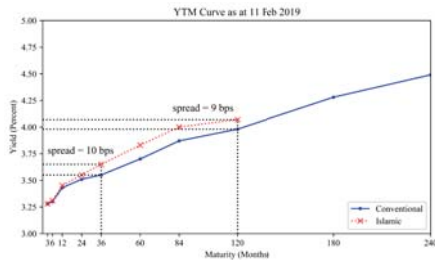
Determinants of the Yield Spread

What can explain the yield spread between any two subsets of bonds (e.g., U.S. corporate bonds versus U.S. Treasury bonds OR French green sovereign bonds versus French conventional sovereign bonds)?

- Maturity differentials
- Credit risk differentials
- Market microstructure factors
 - Market structures
 - Market maker behaviour
 - Liquidity effects
- Clientele effects
 - Supply/demand factors
 - Tax differentials
 - Investor preferences
 - Other clientele effects (e.g., mandates and regulations)

How can we disentangle these various effects from each other?

**Observed Yield Spread as at 11 February 2019
- Sovereign Sukuk versus Conventional Sovereign Bonds**



Data Source: <http://bondinfo.bnm.gov.my>

3

Research Questions and a Preview of our Main Results

- Do sovereign Sukuk have higher or lower yields than conventional sovereign bonds, ceteris paribus?
 - Yes. Our results indicate sovereign Sukuk have, in general, higher yields (lower prices) than their conventional counterparts.
- Can liquidity and maturity effects (fully) explain the yield spread (if it exists)?
 - No. After controlling for bond characteristics and liquidity, sovereign Sukuk on average have a higher yield of 4.8 bps over the entire sample period (Jan 2005 - Dec 2017).
- If the yield spread survives after controlling for liquidity and maturity effects, what are the other explanatory factors?

4

Data and Methodology - Data Sources and Sample Period

- Bond transactions-level data: Bond Info Hub web portal
 - set up by Bank Negara Malaysia (BNM)
 - similar to TRACE in the U.S.
- Issuance data: BNM's FAST (Fully Automated System for Issuing / Tendering)
- Sample period: January 2005 - December 2017

5

Data and Methodology - Data Pre-processing and Sample Construction

- Apply six standard and proprietary filters to drop outliers (in Appendix).
- Further restrict our sample to six fixed-rate "straight" type instruments without optionality:
 - conventional sovereign bond instruments
 - ❖ Malaysian Government Securities (MGS)
 - ❖ Bank Negara Monetary Notes - Discount Based (BNMN-DB)
 - ❖ Bank Negara Bills (BNB)
 - Sovereign Sukuk instruments
 - ❖ Government Investment Issues (GII)
 - ❖ Bank Negara Monetary Notes - Islamic Discount Based (BNMN-IDB and BNMN-IDM)
- Aggregate (and hence reduce) data to the bond-week level.
- Final sample consists of 432,633 transactions and 37,686 bond-week observations.

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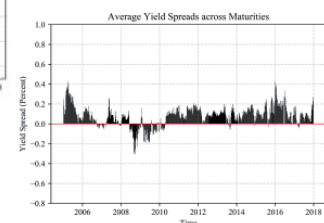
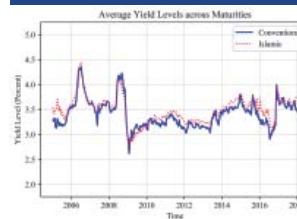
Data and Methodology - Summary Statistics Comparison

cross-sectional mean comparison

| | Islamic | Conventional |
|---|---------|--------------|
| # of obs | 20,303 | < 35,559 |
| Bond Characteristics | | |
| Maturity (year) | 2.939 | < 4.224 |
| Duration (year) | 2.733 | < 3.333 |
| Age (year) | 1.291 | < 2.937 |
| Trading Activities | | |
| # of Trades | 11,418 | < 13,788 |
| Amount Traded (million MYR) | 239.45 | < 313.592 |
| Time Interval (day) | 7.974 | > 4.619 |
| Liquidity Measures | | |
| <i>Amihud Ratio (bps per hundred million MYR)</i> | 437.62 | < 2670.99 |
| <i>Price Dispersion Measure (MYR)</i> | 0.037 | < 0.079 |
| <i>Zero Return Dummy</i> | 0.595 | > 0.429 |
| <i>1st PC of Liquidity</i> | -0.373 | < 0.212 |

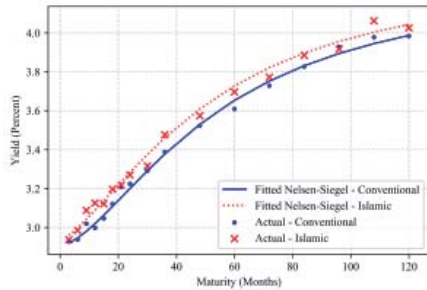
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**Empirical Results
- Actual (data-based) Yield Levels by Maturities**



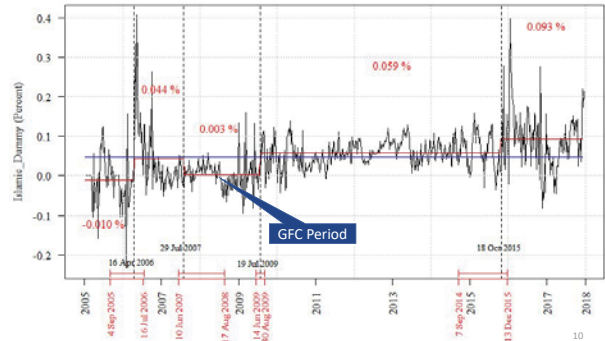
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Empirical Results - Nelsen-Siegel Three-Factor Model Fitted Yield Curves



9

Empirical Results (continued) - Macro Environment Conditions and Multiple Structural Breaks



10

Empirical Results (Continued)

Some additional empirical observations (inclusive of repo markets)

- Islamic sovereign bonds exhibit a higher special repo rate of 37.9 to 56.7 bps, on average, after controlling for repo tenure and bond characteristics.
- The repo rate spread drops significantly after we add liquidity as a control variable in the regression=> high correlation between the two variables.
- By adding the repo market analysis for conventional and *Sukuk*, we find that the Malaysian Sovereign *Sukuk* still has a higher yield on average than their conventional counterparts.

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Summary

- Malaysia's unique dual-structure bond market and excellent transactions data provide researchers a good laboratory to study liquidity, clientele and other effects that traditional bond markets don't provide.
- Malaysian sovereign *Sukuk* have, on average, a higher yield than conventional sovereign bonds of 4.8 to 9.8 bps, after controlling for bond characteristics and liquidity.
- As in the US, we find the repo market appears to affect the liquidity of the underlying Malaysian sovereign (dual-structure) bond market.
- We document that the ratio of foreign to local clientele influenced this yield spread.
- In order to examine what is driving the clientele effects, we need more data. For example,
 - Bid-To-Cover Ratio -> The higher the ratio, the higher the demand.
 - Holdings data at individual bond level:
 - Foreign holdings versus Local holdings;
 - Latent liquidity proxies using holding data -> create liquidity measure when during periods with low liquidity.

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(Appendix) Data and Methodology - Correlation Matrix of Combined Sample

Panel A : Combined Sample

| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
|-------------------------------------|-------|-------|-------|-------|-------|-------|------|
| (a) # of Trades | 1.00 | | | | | | |
| (b) Amount Traded | 0.76 | 1.00 | | | | | |
| (c) Time Interval | -0.25 | -0.27 | 1.00 | | | | |
| (d) Amihud Ratio | -0.09 | -0.17 | 0.15 | 1.00 | | | |
| (e) Price Dispersion Measure | 0.27 | 0.05 | -0.16 | 0.34 | 1.00 | | |
| (f) Zero Return Dummy | -0.57 | -0.51 | 0.41 | 0.069 | -0.33 | 1.00 | |
| (g) 1 st PC of Liquidity | 0.86 | 0.80 | -0.52 | -0.08 | 0.37 | -0.79 | 1.00 |

The 1st PC of Liquidity comprises of the 3 proxies for trading activity: (a) # of Trades, (b) Amount Traded, and (c) Time Interval, and 3 measures for liquidity effects: (d) Amihud Ratio, (e) Price Dispersion Measure, and (f) Zero Return Dummy.

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(Appendix) Empirical Results (in progress) - Repo Market Analysis

| | Model 1 | Model 2 | Model 3 | Model 4 |
|---------------------------------|---------------------|---------------------|---------------------|-------------------|
| Intercept | 2.522*** (25.23) | 2.568*** (13.56) | 2.541*** (11.48) | 3.113*** (6.7) |
| Repo Tenure | 4.08*** (5.08) | 3.544*** (4.8) | 2.969*** (4.45) | 0.274 (0.26) |
| Islamic Dummy | 0.379*** (4.79) | 0.416*** (3.55) | 0.567*** (3.63) | 0.185* (1.88) |
| Maturity | YES | YES | YES | YES |
| Maturity ² | YES | YES | YES | YES |
| Coupon Rate | | YES | YES | YES |
| Age | | | YES | YES |
| 1 st PC of Liquidity | | | | YES |
| R ² | 0.449 | 0.483 | 0.491 | 0.537 |
| N | 3,252 | 3,157 | 3,163 | 2,732 |

- Islamic sovereign bonds still exhibit a higher special repo rate of 37.9 to 56.7 bps, on average, after controlling for repo tenure, as well as the bond characteristics.
- The repo rate spread (Islamic Dummy) drops significantly after we add liquidity as a control variable in the regression.

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Luncheon Address

ISLAMIC FINANCE AND INVESTMENT AS A FORCE FOR GOOD — WHAT LEADERSHIP ROLE CAN THE ISLAMIC FINANCE INDUSTRY HAVE IN THE GLOBAL ECONOMY?



Tan Sri Dr. Zeti Akhtar Aziz — Group Chairman, Permodalan Nasional Berhad (2018 Recipient of Royal Award for Islamic Finance)

Distinguished guests,
Ladies and gentlemen,

I. INTRODUCTION

1.1 It is my great pleasure to be here today to speak at this Nomura Investment Forum in conjunction with the 10th Anniversary of the establishment of Nomura Islamic Asset Management here in Malaysia. The subject matter I have been invited to speak on is “Investment for Good and the Leadership Role that the Islamic Finance Industry can have in the Global Economy”. Let me first congratulate Nomura on its 10th Anniversary. While Islamic finance does not operate in Japan, the Japanese financial industry has taken the lead to participate in Islamic financial systems in the global financial system. The total assets of Islamic finance in the global financial system has now surpassed the US\$2 trillion mark and currently operates in more than 50 countries including several non-Muslim countries.

1.2 The lessons following from the financial crisis in the developed economies in 2008-09 has resulted in greater focus on the soundness and stability of the financial industry. The financial reforms that followed precipitated the introduction of more robust and rigorous regulatory and supervisory regimes. It also saw the demand for the rebuilding of trust and confidence in the financial system. Increased attention was

given to transparency, governance and ethical standards being practiced in the financial industry. Following from the financial crisis, there has been increased global demands for finance to refocus on the impact of finance on the economy, on society and on the environment.

1.3 The focus of my remarks today will be on this aspect of finance — the value that it brings to the economy, to humanity and to environmental sustainability. Finance should thus be about the ‘investment for good’. This refers to the role of finance of mobilisation of capital for the good it brings to the economy, to society and the good it generates to the environment. The focus is therefore on the impact for finance on the ultimate goals that we want to achieve for the economy, for society and for the environment. In relation to this, my remarks will focus on the role that the Islamic finance industry plays in meeting these demands and its potential to provide a leadership role in driving this agenda.

II. INVESTMENT FOR GOOD

2.1 The global focus following the 2008-09 financial crisis, has been on delivering financial stability. Ten years hence, it has indeed not only produced soundness and stability of financial systems throughout the world but it has also delivered financial systems that are more resilient and that

are better able to withstand the challenges emanating not only from the economic cycle but also the more volatile global financial markets. While this financial stability is important, the expectations and demands on financial systems are much more. It has to be beyond about the compliance to the rules and regulations and to the prudential and accounting standards. In essence, finance needs to deliver and add value to the economy, to society and to environment sustainability.

- 2.2 The origins of finance is that it should serve the economy by the mobilization of savings and the allocation of the financial resources to productive investments. In doing so, it facilitates and drives growth and the development of economies. Finance was essentially a means to an end. It was when finance became an end in itself that the linkage between finance and the economy was eroded. This was when finance became inherently unstable and at times having a damaging impact on the economy. Financial crisis frequently resulted in high cost to the economy and to society.

“ Finance was essentially a means to an end. It was when finance became an end in itself that the linkage between finance and the economy was eroded ”

- 2.3 The investment for good is about returning finance to its basic function – to provide financial services that adds value to the real economy. Three important features of finance can be identified to enhance their potential to add value to the economy. The first relates to the focus on the longer term orientation and on the sustainability of the investments. In avoiding short-termism in the performance of companies it protects the interest of the beneficiaries and thus brings value to the economy. The second element is the avoidance of excessive risk or speculative investment activities that are not sustainable. The experience has shown that the build up of such risks becomes highly damaging to economies. The third element relates to the rapid rate of financial innovation. Financial innovation needs to bring benefits to the economy. It is when it is allowed to proliferate and becomes irresponsible that it generates disruptive and damaging consequences on the economy.
- 2.4 The role of finance has also been reexamined in terms of its potential impact of bringing meaningful value to society. While financial practices towards societal aspects are less clearly identified and defined, it is about focusing on the end outcome to society. It involves achieving social good in terms of providing goods and services that benefit society or in doing social good that enhances wellbeing of

communities. It essentially concerns optimising the positive impact on society. There is increased demands for greater stewardship in the financial industry to consider societal issues and to contributing to the economic wellbeing of communities whilst pursuing their financial goals.

- 2.5 Finally, there has been increased attention on the role of finance in contributing towards the ultimate outcome of achieving environmental sustainability. This has arisen from the growing global recognition of the risks that climate shocks generate to macroeconomic conditions and to financial systems, and to its potential profound disruptions and impact on the overall economy. Related to this is also the consideration that in achieving the economic goals, it should not be pursued at the expense of future generations.
- 2.6 Key to meeting these demands is the development of measures to assess the impact and value added that finance brings to the economy, the value it brings to society and not least is its impact on the environment. Two other aspects to facilitate this are the governance and risk management practices to ensure that the assessments are undertaken in a rigorous manner.

III. ISLAMIC FINANCE AND THE INVESTMENT FOR GOOD AGENDA

- 3.1 Finance that facilitate investment for good are thus those forms of financial intermediation which brings such value to the overall economy, to society and to environmental sustainability. Islamic finance is such a form of financial intermediation. It operates according to the Shariah which specifies the permissible financial transactions that do good for others while those that do harm to the economy and to the community should be avoided. In Islamic finance, it is this core set of values that overrides other criteria that becomes the defining parameter. The moral purpose of “doing good and prevent harm to others” constitutes the main underlying principle of Islamic finance.
- 3.2 The role of finance in the economy is explicit in Islamic finance. The central tenet in Islamic finance requires that financial transactions be supported by genuine economic activity. Financing is thus provided to real economic activities that generate economic value. It also advocates for the creation of wealth through trade and commerce. It is thus a form of financial intermediation that explicitly aims to meaningfully facilitate adding value to economic activity.
- 3.3 The focus of Islamic finance is also on achieving social good. Islamic transactions require strict adherence to the permissible, that is Halal. The term Halal encompasses everything that brings value, whether by doing good or providing social good and in doing so, to not cause harm. It is therefore aligned towards the ultimate goal of uplifting social wellbeing.
- 3.4 An element that is distinctive to Islamic finance is the oversight that is undertaken by Shariah Boards or committees at both the institutional and national level. This arrangement

provides a mechanism for ensuring that the financial product and service offerings are in accordance with the principles of Shariah thereby providing a safeguard against irresponsible and unethical practices. This feature allows for innovation while ensuring that such innovation adds value. Innovations are assessed against the Shariah parameters and objectives with the primary objective being the realization of its benefits to society.

- 3.5 Finally, the underlying principle and the moral purpose of “doing good and preventing harm to others” is also consistent with the achievement of sustainability, including environmental sustainability. Equally explicit in Islamic finance is the principle that in pursuing economic activities, there is a duty to make the best use of resources and to not inflict harm to others. The principle of custodianship and trust further states that the earth and all its contents are entrusted to mankind so that it can be protected from harm for the next generations. These broad sustainability principles are embedded in the respective Shariah contracts and are used to govern the relationship between the Islamic financial institutions and its customers.

“ While the development of the Islamic financial industry has been focused on the compliance to the tenets of the Shariah, an imperative for its next phase of development is to give focus of its role in the economy, in bringing benefit to society and in contributing environmental sustainability ”

- 3.6 These elements of ‘investment for good’ are thus evident in Islamic finance. It explicitly incorporates these intrinsic elements that contributes its positive impact on the economy, to society and to the environment but also to achieving sustainability. This is also reinforced by the financial stability elements that are embedded in Islamic finance. In promoting profit sharing, it in turn is supported by the sharing of risk. These arrangements not only limit the extent of leverage but it also places emphasis on transparency and disclosure which are explicitly required in the documentation of the contracts of Islamic financial transactions.
- 3.7 These built-in financial stability elements in Islamic finance have encouraged discipline, and its orderly development

financial stability is further reinforced by the prudential and accounting standards for Islamic financial institutions. This in turn enhances the ability to support the investment for good agenda. The Accounting and Auditing Organisation for Islamic Financial Institutions (AAOFI) which was established in 1991 sets the accounting standards and the Islamic Financial Services Board (IFSB) which was established in 2002, sets the prudential standards for the Islamic financial industry. In 2007, the Bank of Japan became a member of IFSB.

- 3.8 While the development of the Islamic financial industry has been focused on the compliance to the tenets of the Shariah, an imperative for its next phase of development is to give focus of its role in the economy, in bringing benefit to society and in contributing environmental sustainability. Frameworks therefore need to be developed to assess the impact of the financial activities of Islamic finance on the ultimate outcomes. In assessing the impact on the economy, it would bring into focus the activities that generate growth and development. In assessing the impact on society, the focus will be on those activities that uplift social well-being. Finally, it is the focus on those activities that will impact the environment.
- 3.9 Islamic finance thus has significant potential to adopt this approach. This will involve extending the operating framework that includes the Shariah process to also include the assessment of the impact of finance on the economy, on society and on the environment. This needs to be derived from the clarity of intent, the strategies that are being adopted and the performance of such finance that takes into account not only how it contributes to the returns but also its impact on the economy, society and the environment.

IV. FURTHER IMPERATIVES FOR ISLAMIC FINANCE

- 4.1 What more does Islamic finance need to do to contribute to the global drive for ‘investment for good’? While Islamic finance has demonstrated its competitiveness as a form of finance, and its resilience in highly challenging economic and financial conditions, there are further steps that are needed to support its role in driving the agenda of ‘investment for good’ in the global economy.
- 4.2 Firstly, there needs to be greater global awareness of the unique value proposition of Islamic finance and its potential to perform financial intermediation that will bring meaningful value to the economy, to society and to the environment. The opportunity should be taken to intensify efforts to create a greater understanding and appreciation of the inherent elements of Islamic finance and its potential to contribute to growth and stability.
- 4.3 Secondly, there needs to be greater leverage on technology. Indeed we are now living in an era of technological disruption and the digitalization of finance. Such new technologies are known to contribute to new innovative products that can contribute towards greater efficiencies, connectivity and outreach. This trend has also resulted in the emergence of

technology companies that are in the business of financial services and e-commerce. To optimize the benefits from the greater digitalization and the increased leverage on technology, steps need to be taken to facilitate its orderly development.

“ Embraced in its entirety, Islamic finance has tremendous potential to contribute meaningfully to advancing this agenda in the global economy ”

- 4.4 It proposed that for the effective transition to greater digitalization of the industry it would be timely to develop an Islamic Finance Digital Transformation Blueprint. Such a Blueprint would cover the necessary building blocks, the key supporting infrastructure required to achieve the digital readiness, and the development of appropriate regulatory regime and to reorganise the necessary talent for this purpose. Equally important is the necessary legislation and public policy and systems that would contribute to the orderly transition for the industry into being digitally enabled.
- 4.5 Finally, the international dimension of Islamic finance needs to be further strengthened. Islamic finance is still very much domestic centric with its focus on the domestic financial system and economy. As its international dimension is strengthened, it can contribute towards the more efficient cross border mobilisation and allocation of funds across jurisdictions in the global economy. It will also facilitate greater cross border international trade and investment activity. Given the inherent strengths embedded in Islamic

finance including its embedded financial stability elements, it has significant potential to contribute positively towards global growth and stability.

V. CONCLUSION

- 5.1 Allow me to now conclude with the following remarks. Given that the universal propositions that are inherent in the Shariah principles and given that these are consistent with and are aligned to the sustainable finance agenda, the Islamic finance industry is well positioned to take a leading role in driving the investment for good agenda in the global economy. In focusing on the impact of its activities on the economy, on the benefits it brings to society and to the environment, it will be in alignment to other forms of ethical and responsible finance that focus on the positive impacts of such finance. That includes the value it brings to economies, the community and to the environment.
- 5.2 In addition to the financial stability element embedded in Islamic finance, it also operates within a regulatory and supervisory regime that is well developed and gaining maturity. Also emerging are the development of Islamic financial markets that include the capital markets, in particular the Sukuk market and the Islamic money market that has enhanced the liquidity management capability of the industry.
- 5.3 In taking on a leadership role, the Islamic financial industry therefore needs to clearly demonstrate its impact and contribution to the ultimate goals of the global economy. The aspirations for the global economy are for a greater shared prosperity that is mutually reinforcing, soundness and stability of financial systems and the sustainability of this agenda over the medium and longer term. Embraced in its entirety, Islamic finance has tremendous potential to contribute meaningfully to advancing this agenda in the global economy.



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