

IMF Working Paper

What's in It for Me? A Primer on Differences between Islamic and Conventional Finance in Malaysia

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Asia and Pacific Department

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Abstract

What attracts conventional investors to Islamic financial instruments? We answer this question by comparing Malaysian Islamic and conventional security prices and their response to macrofinancial factors. Our analysis suggests that Islamic and conventional bond and equity prices are driven by common factors. Likewise, especially in recent years, Islamic banks have responded to economic and financial shocks in the same way as conventional banks, suggesting that the gap between Islamic and conventional financial practices is shrinking.

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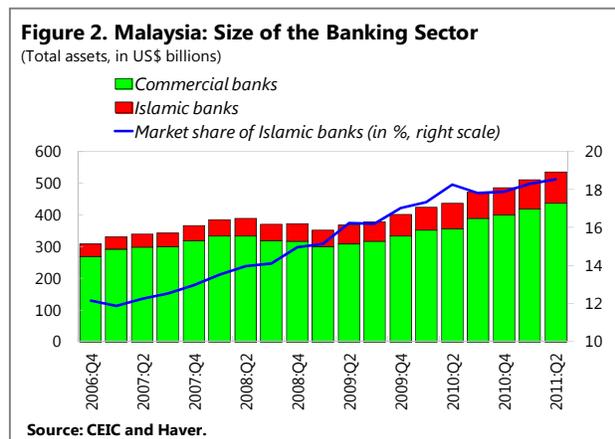
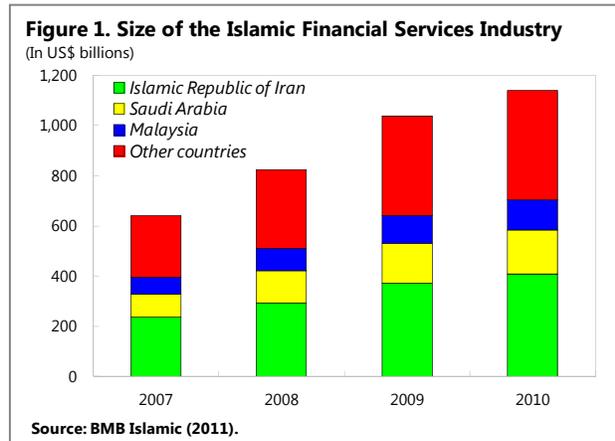
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I. INTRODUCTION

Malaysia has progressively developed its Shariah-compliant Islamic finance industry.² Launched with a small Islamic savings sector fund in 1963, Malaysia's Islamic finance has grown steadily to become the third largest in the global Islamic finance industry (Figure 1) and one of the most developed Islamic banking markets in the world. Presently, Malaysia is the world's largest issuer of Islamic bonds (*Sukuk*) (Khan, 2011).³ Islamic banking assets and assets under management are worth US\$ 1,200 billion with an average growth rate of about 20 percent annually (BMB Islamic, 2011).

Malaysia has a dual financial system with Islamic and conventional markets operating in parallel. Both systems offer a

full range of financial products and services; often use the same infrastructure (Yakcop, 2003);



² Islamic finance offers products that comply with the principles of Islamic law *Sharia*, in which earning of excess interest (*Riba*) and excess risk taking are prohibited. El-Gamal (2006) provides an excellent critical analysis of modern Islamic finance and its modes of operation.

³ *Sukuk* are similar to conventional interest-bearing bonds in terms of their effective cash flows and issuance structure, though the degree of similarity varies across countries. However, the formal structure of *Sukuk* reflects Islamic law, which prohibits charging or payment of interest and taking risks through speculation. Instead, *Sukuk* returns are linked to underlying assets, which could be equity in a tangible company. Thus, *Sukuk* are asset-backed investment instruments and *Sukuk* holders share profits and losses incurred on the underlying assets. In practice, *Sukuk* offer investors a fixed rent and an exit strategy which allows the originator to repurchase the underlying assets in certain circumstances.

and compete for overlapping groups of customers in all segments of the financial system, including banking, insurance, fund management, and capital markets.⁴ The Islamic banking sector positions itself as a “complement, if not alternative, to conventional finance” (Brown, 2009). Its market share has systematically increased: as of September 2011, Islamic banking assets accounted for 21.6 percent of total banking assets in Malaysia, rising from 12 percent in December 2006 (Figure 2),⁵ meeting the government’s goal of 20 percent. On Bursa Malaysia, about two-thirds of the listed securities (by stock market capitalization) are *Shariah*-compliant. The Islamic private debt securities market is the largest in the world, with US\$ 34 billion of domestic corporate bonds outstanding.

The majority of Islamic finance customers are non-Muslims, with an increasing presence of foreign investors (PricewaterhouseCoopers Malaysia, 2008). They have benefited from the government’s continued efforts to develop the Islamic finance sector and promote Malaysia as a major hub for international Islamic finance (Box 1 and Zeti, 2008). The country liberalized its Islamic banking sector to allow participation of international banks and raised the foreign equity ceiling in Islamic financial institutions to 70 percent (the cap on foreign equity stake in conventional banks is currently at 30 percent). Tax incentives have been granted to boost the Islamic financial market (Box 2). Both the government and the central bank have issued *Shariah*-compliant bills and bonds, aiming to deepen the capital market.

What attracts conventional investors to Islamic financial instruments? This paper compares Islamic and conventional financial instruments from the perspective of non-Muslim investors, aiming to answer the following three questions:

- How do Islamic stocks and bonds differ from their conventional peers?
- Which global and domestic economic factors influence both types of securities?
- Are Islamic banks safer and more profitable than conventional banks?

⁴ Conventional banks are able to attract Islamic customers through their existing network of branches by operating Islamic banking windows, which allow customers to conduct *Shariah*-compatible financial operations. Appropriate firewalls are established to avoid the commingling of funds.

⁵ Prior to end-2006, Islamic banks’ activities were reflected in the commercial banks category in Bank Negara Malaysia’s statistics.

Box 1. Malaysia: Developing the Islamic Finance Industry

The Islamic finance industry in Malaysia has steadily built the depth, quality, and quantity of its product portfolio, supported by the government's long-term commitment to developing and promoting the industry. Amongst others, the following policies provided a favorable environment for growth:

- 1983: The *Islamic Banking Act* enabled the creation of Islamic banks. *Bank Islam Malaysia Berhad*, the first Islamic bank in Malaysia, was granted a full banking license in the same year.
- 1983: The *Government Investment Act* initiated the issuance of *Shariah*-compliant government bills and in turn provided liquidity management tools for Islamic banks.
- 1984: The *Enactment of Takaful Act* provided regulation for the Islamic insurance industry. *Syarikat Takaful Malaysia Berhad*, the first *Takaful* operator in Malaysia, commenced its operation in the same year.
- 1993: The introduction of *Islamic windows* allowed conventional banks to attract Islamic customers through their existing network of branches and contributed to creating a more competitive banking environment.
- 1994: The creation of the *Islamic Interbank Money Market* provided Islamic financial institutions with the facility for short-term liquidity management.
- 1997: The *Shariah Advisory Council* of Bank Negara Malaysia was established to promote harmonization of *Shariah* rulings in the Islamic finance industry.
- 2001: Islamic finance was given formal prominence in the government's *Financial Sector Master Plan* and the *Capital Market Master Plan*. The establishment of the *Islamic Capital Market* created a primary and secondary market for Islamic securities.
- 2005: The creation of the *Malaysia Deposit Insurance Corporation* ensured that both conventional and Islamic deposits are guaranteed by a common deposit insurance system.
- 2006: the government introduced a package of tax exemptions and incentives for Islamic finance (see Box 2 for details).
- 2009: the financial sector was further liberalized, with nine new banking and insurance licenses granted to foreign financial institutions.
- 2011: The *2011-2020 Financial Sector Blueprint* reinforced the government's initiatives to establish Malaysia as the international Islamic finance center through the development of innovative Islamic financial instruments, further mobilization of international Islamic financial flows, and strengthening the legal and *Shariah* frameworks.

Sources: PricewaterhouseCoopers Malaysia (2008) and Solé (2007).

Box 2. Malaysia: Islamic Finance Tax Incentives

The tax neutrality of Islamic finance was provided by changes in the *Income Tax Act* (1967) and the Stamp Act (1949).

- The equal footing provision in the *Income Tax Act* ensures that Islamic financial transactions are not taxed differently from conventional financing transactions, regardless of the fundamental differences between the two. This means that, for tax purpose, profits received in *Shariah*-compliant transactions are treated in the same way as interest rate gains in conventional finance. Conversely, the payment of profits (equivalent to the payment of interest in conventional finance) by the borrower is treated as interest costs from a tax perspective.
- Similarly, partnerships formed under the *Shariah* concept of a joint venture entailing the sharing of profits and/or losses are not recognized as partnerships from the tax perspective.
- The equal footing provision in the *Stamp Act* ensures that Islamic banking and investment products, which require additional sales and purchases of the underlying assets due to the profit-and-loss sharing agreements, are as attractive and cost-efficient as their conventional counterparts. The provision ensures that where assets are required to be transferred (which would not otherwise be necessary under conventional financing schemes), the transferor is not subject to balancing adjustments on the sale/purchase and thus the transaction remains tax neutral. Similarly, partnerships formed under the *Shariah* concept of a joint venture entailing the sharing of profits and/or losses are not recognized as partnerships from the tax perspective.
- Additional Islamic finance tax incentives include:
 - Tax exemption for profits derived from *Sukuk*.
 - 10-year tax exemption for Islamic banks and Islamic insurance companies on income derived from business conducted in foreign currencies, including transactions with Malaysian residents. This exemption was given to encourage foreign participation in Malaysia's Islamic finance and to encourage Islamic financial institutions to transact internationally in making Malaysia an international Islamic financial hub.
 - 10-year income tax exemption for domestic and foreign fund managers who manage Islamic funds for foreign investors.
 - 3-year stamp duty exemption of 20 percent on instruments related to Islamic financing.
 - Tax deductions on expenses incurred in establishing an Islamic stock broking firm.
 - Tax exemption on profits paid by licensed Islamic banks in Malaysia to non-resident customers.

Source: PricewaterhouseCoopers Malaysia (2008) and Bhupalan (2009).

The empirical analysis suggests that returns on Malaysian security prices are driven by common economic factors, with changes in domestic economic activity and inflation being most important and global factors affecting equity indices only. Differences between returns on Islamic and conventional bonds are not statistically significant. Neither are the differences between Islamic and conventional banks, especially in the most recent years. This implies that the gap between Islamic and conventional financial practices is shrinking, as argued by El-Gamal (2006).

The rest of the paper is structured as follows: Section B presents some stylized facts about Malaysian capital markets and its banking sector. Section C compares Islamic bonds and stocks with their conventional peers, and examines how they are affected by domestic and global economic factors. Section D presents a comparative analysis of Islamic and conventional banks before, during, and after the global financial crisis. Section E discusses some policy implications and concludes.

II. MALAYSIA'S CAPITAL MARKETS AND THE BANKING SECTOR: STYLIZED FACTS

Malaysia has one of the largest bond markets in Emerging East Asia. The size of the bond market rose to US\$ 269 billion as at end-June 2011, making Malaysia the third largest debt market in Emerging East Asia (Table 1). The ratio of local currency bonds outstanding to GDP stood at 103.5 percent in mid-2011, the second highest in Emerging East Asia. The government bond sector constitutes about 60 percent of the market and is expanding particularly rapidly, with a year-on-year growth rate of 20.9 percent in 2011Q2, compared with 11.1 percent for the corporate sector (Asian Development Bank, 2011, and Figure 3). Banks and government-linked corporations (GLCs) account for about 80 percent of the corporate debt issuance.

Table 1: Selected Asia: Bonds Outstanding in mid-2011
(In US\$ billions)

	Amount	In percent of GDP
China	3,190	48.1
Korea	1,273	117.0
Malaysia	269	103.5
of which: government	161	59.9
Thailand	222	65.3
Singapore	204	79.3
Hong Kong SAR	167	71.4

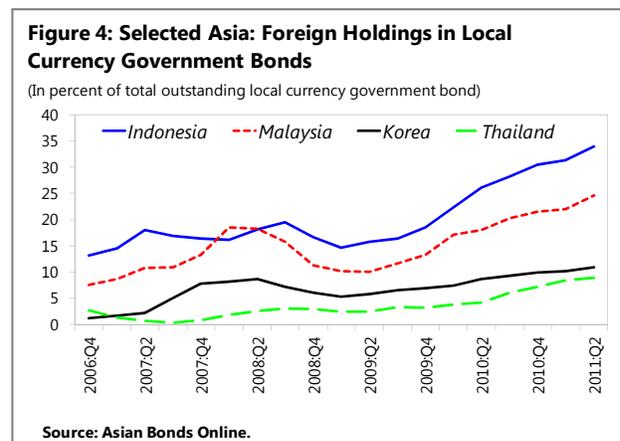
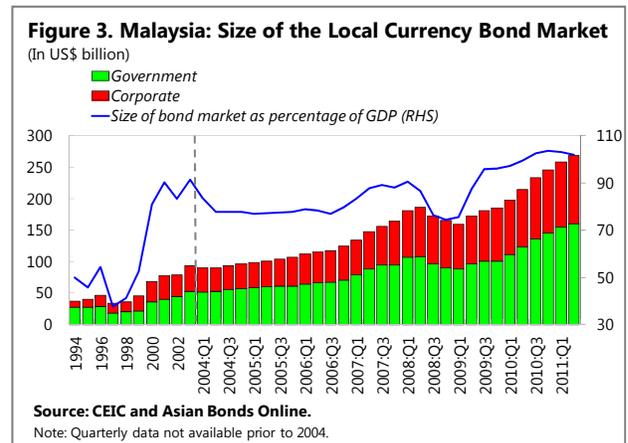
Source: Asian Development Bank (2011).

Malaysia's sovereign debt attracts substantial interest from foreign investors. In mid-2011, nonresident holdings of Malaysia sovereign debt reached 24.6 percent of total government

bonds outstanding (Figure 4), one of the highest levels in Emerging Asia and continues to rise. In particular, Islamic bonds continue to attract strong international demand despite increased global financial turbulence, including for Malaysia's US\$ 2 billion global *Sukuk* in July 2011 and for the pioneering renminbi-denominated *Sukuk* of RMB 500 million issued by Khazanah in September 2011 (Oakley, 2011).

Islamic securities account for about 40 percent of the sovereign and corporate bond issuance (Figure 5). The government, Bank Negara, and many companies issue both conventional bonds and *Sukuk*, at diminishing spreads between the two. According to market participants, *Sukuk* issued in Malaysia are very comparable to conventional bonds in both economic and legal terms. Indeed, issuers often have no preference for emitting either *Sukuk* or conventional debt, with the type of issuance determined by market conditions only.

On Bursa Malaysia, nearly 90 percent of the listed securities are *Shariah*-compliant.⁶ These stocks account for two-thirds of the stock market capitalization and 70 percent of the broad equity index known as *FTSE Bursa Malaysia EMAS Index* (by stock market capitalization). The



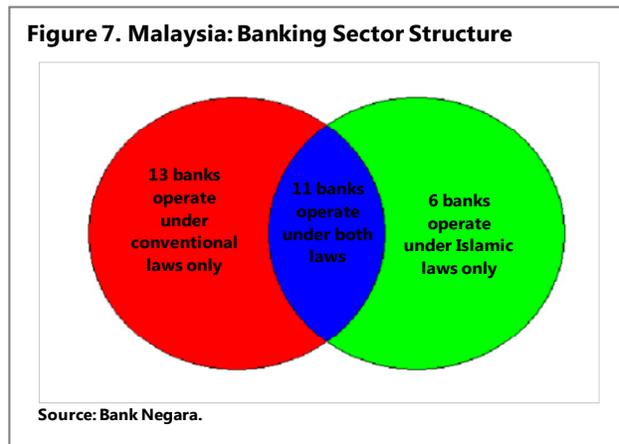
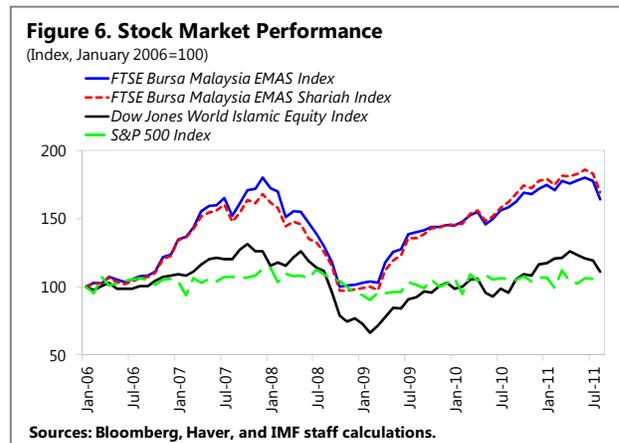
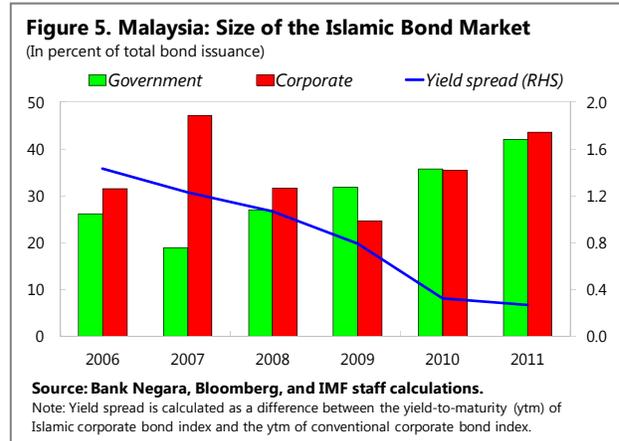
⁶ *Shariah*-compliant securities are issued by companies with “good public image” that are involved in activities that benefit the Muslim nation and the country, and are not contrary to *Shariah* principles. The *Shariah* Advisory Council at Malaysia’s Securities Commission lists the following core activities as noncompliant with the Islamic law: (1) conventional financial and insurance services; (2) gambling and gaming; (3) manufacture or sale of non-halal products; (4) entertainment activities that are non-permissible according to *Shariah*; (5) manufacture or sale of tobacco-based products; (6) stockbroking or share trading in Islamic non-compliant securities; and (7) other activities deemed prohibited by the Islamic law.

constituents of the *EMAS Index* that are involved in activities allowed by Islamic law comprise the *FTSE Bursa Malaysia EMAS Shariah Index* (Securities Commission Malaysia, 2011). The two indices follow each other closely, with the *EMAS Shariah Index* slightly outperforming the overall index since early 2010 (Figure 6).

The banking sector is dominated by conventional banks but Islamic banks are increasing their market share (Figure 2).

There are 24 commercial banks and 17 Islamic banks in Malaysia. Within this system, 11 banks operate under both laws, with Islamic and conventional parts treated separately in all statistics (Figure 7). Conventional banks hold about 80 percent of total banking assets, loans, and deposits (Table 2). On average, Islamic banks' balance sheets are 3 times smaller than commercial banks' balance sheets.

Overall, the market share of the Islamic finance sector is growing and the market is deepening. *Sukuk* issuance is becoming cheaper and more cost-effective—some *Sukuk* issues actually have a few basis points advantage (for the issuer) over conventional bond issues.⁷ In part, this expansion is driven by untapped demand for *Shariah*-compliant products and services from Islamic saving funds, Islamic banks, and Islamic charities, which are



⁷ For example, the national mortgage provider Cagamas issued almost simultaneously in 2010:Q3 a conventional 3-year bond with a yield of 3.5 percent yield and an Islamic bond with a yield of 3.48 percent.

unable to reach for conventional products. Especially the demand for sovereign *Sukuk* seems to exceed the amount offered due to high demand from Islamic banks in Malaysia and foreign investors (BMB Islamic, 2011). The preferential regulatory treatment (including attractive tax incentives) further supports the development of the sector (see Box 2 for details).

Table 2: Malaysia: Size of the Banking Sector
(In US\$ millions)

	Conventional banks	Islamic banks	Islamic banks' market share (in %)
Number of banks	24	17	41
Total assets	446,075	97,488	18
Average bank size	18,586	5,735	-
Total loans	258,296	60,168	19
Total deposits	318,561	76,610	19

Source: Securities Commission Malaysia (2011).

III. ISLAMIC AND CONVENTIONAL BONDS AND STOCKS IN MALAYSIA

This section compares Islamic stocks and bonds with their conventional counterparts. First, the principal component analysis focuses on the common factors that drive bond and equity returns. Second, the regression analysis sheds light on which domestic and global macrofinancial variables influence bond and stock returns in Malaysia.

Data description. The data on equity and bond returns come from Bloomberg. For government securities, we utilize two indices based on medium-term (3 to 10 years) conventional and Islamic government bonds (Malaysian Government Securities and Government Investment Issues). For corporate fixed-term debt, we construct the indices ourselves. We utilize the pricing data available from Bloomberg for the largest corporate issuers, as listed in Asian Development Bank (2011). We select only the most liquid issues of medium-term papers and weight them by the size of issuance to come up with the indices. The corporate conventional and Islamic indices are dominated by debt issues by government-linked companies, banks, and financial corporations. For stocks, we draw on the *FTSE Bursa Malaysia EMAS Index* and *FTSE Bursa Malaysia EMAS Shariah Index*. Our sample period runs from January 2006 through November 2011.

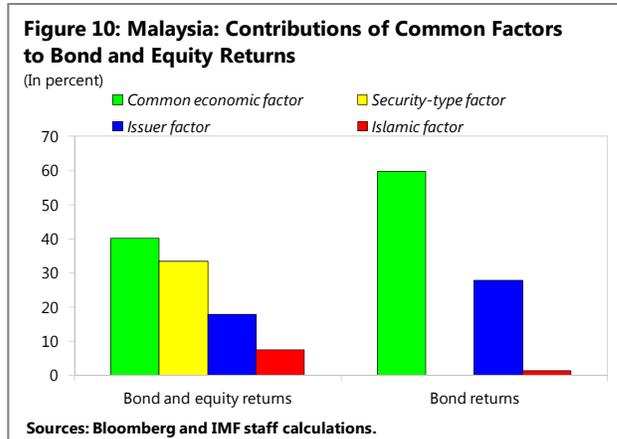
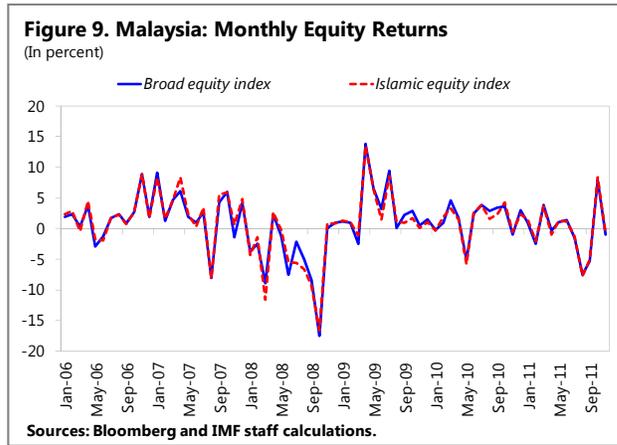
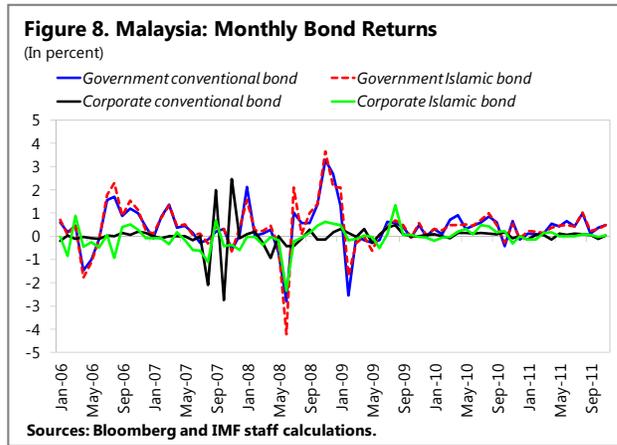
Returns on bonds and equities tend to move together (Figures 8 and 9). For government conventional and Islamic bonds, the correlation between monthly returns was 0.95 during the sample period; for the equity indices it was almost 0.99. However, the co-movement between corporate bonds was relatively weaker (0.32), probably due to the relative illiquidity of the

corporate *Sukuk* market. For each pair of instruments, the median returns over the sample period are not statistically different from each other.

A large proportion of changes in bond and equity returns can be explained by economic factors. To assess the main drivers of the different types of securities, a principal component analysis was applied to the data. The analysis suggests that about 40 percent of the variation in all returns can be explained by a “common economic factor” (Figure 10).⁸ Whether the security is a stock or a bond explains a further 33 percent of the variation in the data. Differences between types of issuers account for 18 percent of changes. In contrast, whether the security is Islamic or not explains very little variation in the data.

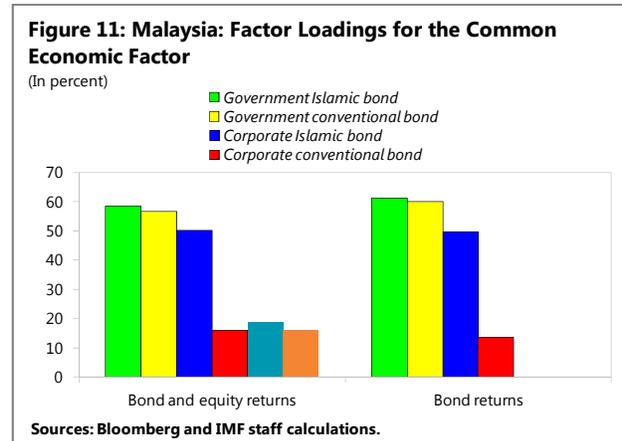
For bond returns, the common economic factor plays an even larger role, explaining 60 percent of the variation in the data. The differences between public and corporate issuers explain 28 percent of changes in bond returns but—similar to the overall results—the differences between Islamic and conventional bonds provide little information about the movement of bond prices.

The common economic factor affects *Sukuk* more than conventional bonds (Figure 11).



⁸ The results are based on the standard principal component analysis of (1) bond and stock returns jointly; and (2) bond returns only.

Factor loadings, which show to what extent each return series is affected by the common economic factor, are larger for *Sukuk* than for the conventional bonds. This is particularly pronounced in the case of corporate debt, implying that *Sukuk* prices are more sensitive to changes in the macroeconomic setting than conventional debt. In contrast, the returns on the broad equity index are more strongly correlated with the economic factor than the returns on the Islamic equity index, though overall the common factor loadings for stock returns are much lower than for bonds.



Regression analysis suggests that returns on Malaysian conventional and Islamic bonds are driven by domestic economic factors, in particular domestic industrial production growth and inflation (Box 3). The correlation between domestic factors and bond returns is stronger for government bonds (our parsimonious models explain about 50 percent of the variation in the bond returns, marginally more in the conventional bonds) than for corporate bonds (the models explain 46 percent of changes in corporate conventional bond returns but only 24 percent of changes in corporate *Sukuk* returns). During calm periods, both types of bond returns are negatively correlated with rising inflation and positively correlated higher industrial production growth.

Equity returns are determined mostly by global factors. While domestic inflation and industrial production growth matter, changes in the U.S. equity index S&P 500 and the CBOE S&P 500 volatility index VIX are considerably more relevant: domestic factors alone account for only about 15 percent of changes in the equity returns, whereas global factors explain about 50 percent (marginally less for Islamic stocks). During tranquil periods, Malaysian conventional and Islamic equity prices tend to rise as the risk sentiment improves and the U.S. stock markets strengthen. As with bond returns, equity returns are correlated positively with lower inflation and higher industrial production.

There is strong evidence of investors' flight-to-quality during crisis. As the financial and economic conditions worsened in 2008–2009, investors sold off higher-risk equity assets and

Box 3. Malaysia: Empirical Analysis of Bond and Stock Returns

Which global and domestic macrofinancial factors influence bond and stock returns in Malaysia? We answer this question by regressing monthly returns on contemporaneous economic and financial variables. We start with a large set of variables, as suggested by Chen and others (1986) and Carmichael and Samson (2003), and narrow it down to the most significant ones. Our final specification for equity returns ($ret_{i,t}$) includes the industrial production growth in Malaysia (ΔIP_t) as a proxy for broader economic growth. We also allow for different correlations during the crisis periods and for autoregressive behavior in the return series. Thus the equation we estimate for equity returns is:

$$ret_{i,t} = \beta_{i,0} + \beta_{i,1}\Delta IP_t + \beta_{i,2}\Delta I_t + \beta_{i,3}\Delta SP500_t + \beta_{i,4}\Delta VIX_t + \beta_{i,1}^{crisis}\Delta IP_t \times I_{t=crisis} + \beta_{i,2}^{crisis}\Delta I_t \times I_{t=crisis} + \beta_{i,3}^{crisis}\Delta SP500_t \times I_{t=crisis} + \beta_{i,4}^{crisis}\Delta VIX_t \times I_{t=crisis} + ret_{i,t-1} + \varepsilon_{i,t}$$

where $I_{t=crisis} = 1$ between September 2008 and September 2009, and then again between August 2011 and November 2011; and 0 otherwise. In the bond return equations, the global variables turn out to be statistically insignificant, so we estimate the following instead:

$$ret_{i,t} = \beta_{i,0} + \beta_{i,1}\Delta IP_t + \beta_{i,2}\Delta I_t + \beta_{i,1}^{crisis}\Delta IP_t \times I_{t=crisis} + \beta_{i,2}^{crisis}\Delta I_t \times I_{t=crisis} + ret_{i,t-1} + \varepsilon_{i,t}$$

The data are monthly for the period January 2006–November 2011. Most explanatory variables are in first log differences to account for non-stationarity during the crisis period; the T-bill interest rate is in first difference. Newey-West standard errors are employed to account for heteroskedasticity and autocorrelation in the residuals $\varepsilon_{i,t}$. Regression results are reported in the table below.

Table: Impact of 1 Percentage Point Increase in a Macroeconomic Factor on Monthly Bond and Equity Returns

	Government conventional bond	Government Islamic bond	Corporate conventional bond	Corporate Islamic bond	Broad equity index	Islamic equity index
Non-crisis period						
Inflation	-0.72 *	-1.02 *	-0.13 *	-0.44 *	-1.61 *	-1.18 *
IP growth	0.03	0.04	0.04	0.00	0.46 *	0.43 *
S&P500					0.37 **	0.48 **
VIX					-0.06	-0.04
Crisis period						
Inflation	-2.19 **	-2.17	-0.08	-0.41	-3.31 *	-3.24 *
IP growth	-0.10 *	-0.04 *	0.02 *	-0.03 *	0.99	0.92
S&P500					0.29 **	0.24 *
VIX					-0.17 *	-0.18 *
Number of observations	71	71	71	71	71	71
R-squared for domestic factors only	0.48	0.44	0.46	0.24	0.16	0.14
Overall R-squared	0.48	0.44	0.46	0.24	0.67	0.61

Source: Bloomberg, Haver, and IMF staff estimates.

Note: Sample period: January 2006–November 2011. A single asterisk denotes a coefficient significant at 5 percent level, a double asterisk denotes a coefficient significant at 10 percent level.

Box 4. Malaysia: Strength and Profitability of Islamic and Conventional Banks

Do Islamic and conventional banks differ in terms of balance sheet performance? We answer this question by estimating several panel regressions, with various financial ratios provided by BankScope as dependent variables, and dummies for Islamic and large banks as explanatory variables. Large banks are defined as banks that hold at least 10 percent of the overall banking assets throughout the sample; these are Maybank, CIMB Bank Berhad, and Public Bank Berhad. We use the following financial indicators:

- *Capital adequacy*: capital adequacy ratio;
- *Profitability*: return on equity (ROE) and net interest margin (NIM);
- *Quality of assets*: non-performing loans to total loans ratio (NPL);
- *Liquidity*: liquid assets to total assets ratio and interbank assets to interbank loans ratio;
- *Leverage*, defined as the total assets to equity ratio.

We start by estimating the full sample model

$$y_{i,t} = \beta_0 + \beta_1 I_{i=Islamic} + \beta_2 I_{i=Big\ Bank} + \sum_{year=2006}^{2010} \beta_3^{year} I_{t=year} + \varepsilon_{i,t}$$

where

$y_{i,t}$ denotes indicator y for bank i at the end of year t , $I_{i=Islamic}$ is the Islamic bank indicator, $I_{i=Big}$ 2010. We utilize White cross – section standard errors to account for cross – equation (contemporaneous) correlation and heteroscedasticity. In this setting, β_0 estimates the average for conventional banks, β_1 estimates the average for Islamic banks, controlling for size and time effects.

Next, we analyze how banks' performance changed over time by restricting the sample period to (1) pre-crisis period 2006-2007; (2) crisis period 2008-2009; and (3) 2010 only. The results are reported in the table.

Table: Malaysia: Average Financial Ratios for Conventional and Islamic Banks

(In percent, unless otherwise noted)

	2006-2010		2006-2007		2008-2009		2010	
	Conv.	Islamic	Conv.	Islamic	Conv.	Islamic	Conv.	Islamic
Capital adequacy								
Capital adequacy ratio	14.0	15.1 *	13.3	15.1 *	14.2	14.5 *	14.8	16.4
Profitability								
ROE	16.4	22.1	15.4	40.2	17.8	11.0 *	16.5	10.8 *
NIM	2.9	3.4 *	3.0	3.1	3.0	3.6 *	2.8	3.5 *
Quality of assets								
NPL	4.4	6.0 *	6.4	7.9 *	3.5	4.9 *	2.7	4.6
Liquidity								
Liquid assets to total assets ratio	23.9	34.7 *	24.8	45.3 *	23.6	29.8	23.2	25.1
Interbank assets to interbank loans ratio	36.1	106.8 *	39.8	192.6 *	32.1	63.3 *	37.5	27.9
Leverage								
	15.3	12.1	16.3	8.6 *	14.9	15.2 *	14.1	12.5
Total assets (in US\$ billions)	17.3	3.9 *	14.5	2.1 *	17.6	4.5 *	22.0	6.1 *

Source: Bloomberg, Haver, and IMF staff estimates.

Note: Sample period: 2006-2011. Asterisks denote ratios that are statistically different between conventional and Islamic banks at 10 percent level, as tested using Wald test with White cross-section standard errors.

rushed to purchase safer fixed-income instruments. The increased demand for both conventional and Islamic bonds entailed the negative correlation between bond returns and industrial production. Conversely, the sell-off of equities meant that equity returns moved in parallel to the economic decline during the crisis. Moreover, Malaysian and United States stocks moved together during the crisis.

In summary, the empirical analysis suggests that even though conventional and Islamic financial instruments are fundamentally different, they perform similarly in a competitive market. In other words, investing in *Shariah*-compliant securities has no statistically significant downside or upside effects on investors' wealth compared to investing in conventional instruments. There are several studies that report similar findings for Islamic equity indices (see for example Girard and Hassan, 2008) and Islamic mutual funds (see for example Elfakhani and Hassan, 2007). From the perspective of conventional investors, our results imply that including *Sukuk* and Islamic equities in their portfolios may not provide significant diversification benefits, given the similar price behavior of conventional and Islamic instruments.

IV. ARE ISLAMIC BANKS SAFER AND MORE PROFITABLE THAN CONVENTIONAL BANKS?

This section analyzes the behavior of Islamic and conventional banks in Malaysia before, during, and after the global financial crisis. Panel regressions are employed to investigate correlations between bank financial ratios and bank fundamental characteristics: whether a bank is an Islamic bank and whether it is a large bank (Box 4). The analysis is conducted using annual data and supplemented with BNM's statistics.

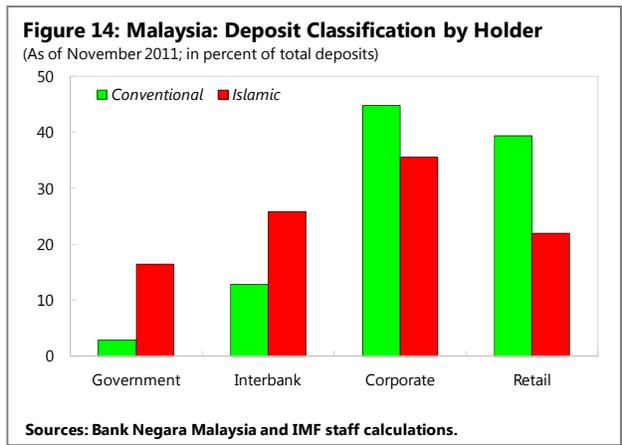
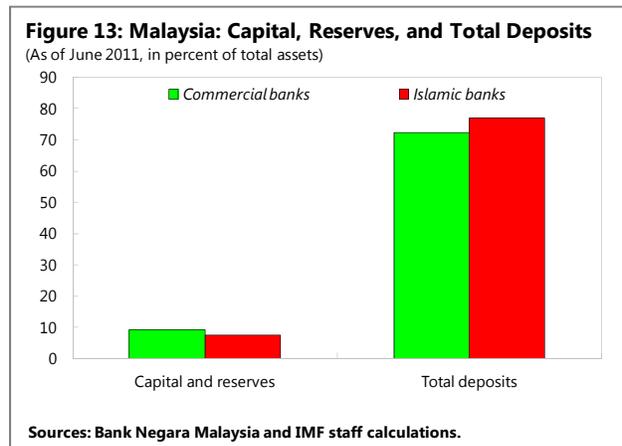
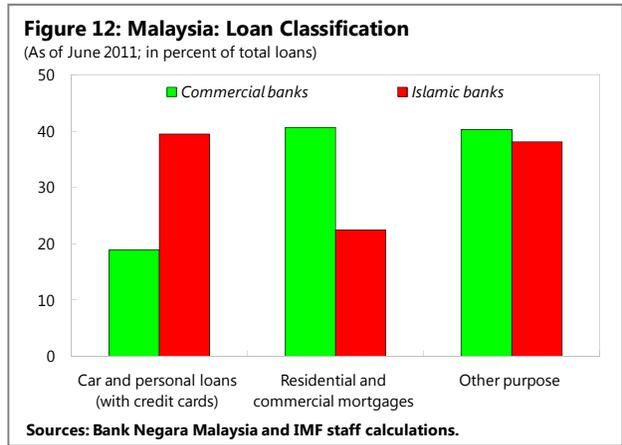
Data description. Annual data on Malaysian banks are drawn from BankScope. We collect major balance sheet variables on the 11 largest conventional banks and 11 largest Islamic banks (by total assets) for the period 2006–2010. Within the sample, seven Islamic and conventional banks belong to the same financial group, i.e. they conduct business under both laws and report as separate entities. We supplement these data with the Bank Negara Malaysia's statistics on the banking sector.

Overall, the analysis suggests that Islamic banks tended to hold more capital and be more profitable, but the differences between Islamic and conventional banks diminished after the global financial crisis (Box 4). Panel analysis shows that the capital adequacy ratio (CAR)

of Islamic banks was significantly higher than conventional banks' CAR in 2006–07 and even during the global financial crisis, but not in 2010. In terms of profitability, Islamic banks' return on equity (ROE) in the run-up to the crisis was considerably larger than conventional banks' ROE but since the crisis, conventional banks are significantly more profitable. However, Islamic banks operate with consistently higher net interest margin (NIM) over the whole sample period. These findings are consistent with Hasan and Dridi (2010), who show that Islamic banks performed better than conventional banks during the global financial crisis but profitability declined afterward due to weak management practices.

Distinct loan portfolios could explain the differences in NIM and ROE (Figure 12).

Vehicle and unsecured personal loans (including credit cards) account for about 20 percent of commercial banks' total loans but twice as much for Islamic banks. Conversely, residential and commercial mortgages account for about 22 percent of Islamic banks' total loans but 41 percent for conventional banks. About 40 percent of other loans are for other purposes, with similar distribution for both types of banks. The higher concentration of car and personal loans in the Islamic banks' loan portfolio explains the higher NIMs but also lower quality of assets, as measured by the non-performing loan ratio.



In mid-2011, Islamic banks held less capital than conventional banks (Figure 13). As for the CAR, Islamic banks' capital and reserves to total assets ratio of 7.5 percent is lower than conventional banks' ratio of 9.3 percent. Conversely, the ratio of total deposits to total assets is larger for Islamic banks than for conventional banks (77 percent and 72.3 percent, respectively).

Islamic banks also became net borrowers in the interbank market. Their interbank assets to interbank loans ratio fell from 192.6 percent in 2006–07 (when Islamic banks were the net lenders in the interbank market) to 27.9 percent in 2010. By contrast, the ratio of interbank assets to interbank loans for conventional banks remained relatively stable at around 32–40 percent. Overall, Islamic banks depend on wholesale funding much more than conventional banks (Figure 14).

V. POLICY IMPLICATIONS AND CONCLUSIONS

Even though the Islamic financial services industry represents only 1 percent of global financial assets, it has been growing strongly over the past decade. In 2011, Islamic financial assets expanded US\$ 1,086 billion, an impressive 21-percent growth over the previous year (Oakley, 2011). Malaysia's efforts to become an important player in this market are clearly paying off: Malaysian Islamic finance has grown to the third largest market in the global Islamic finance industry and the local *Sukuk* market is the biggest in the world.

This paper contrasts conventional and Islamic financial instruments and banks in Malaysia. First, the analysis compares bond and stock returns during 2006–2011 and examines which macrofinancial factors drive the returns. Next, the focus shifts to the performance of conventional and Islamic banks; and the impact of the global financial crisis on banks' profitability and liquidity.

The paper shows that as the Islamic financial sector matures in Malaysia, the gap between Islamic and conventional financial practices is shrinking. Given Malaysia's competitive, efficient financial market, this convergence is only natural. By offering Islamic alternatives to conventional financial products, Islamic banks increase access to finance for the previously under-banked Muslim population of Malaysia. Providing finance—especially microfinance, which currently represents only a small part of Islamic finance in Malaysia—to the Muslim poor

is particularly important, given the propensity to reject conventional microfinance, even if available, on religious grounds (see El-Gamel and others, 2011, for compelling evidence).

Moving forward, the sector should be allowed to grow organically, with diminishing government involvement. Market participants highlight the role of strong government support in transforming Malaysia into an Islamic financial services hub (BMB Islamic, 2011). Currently, government and quasi-government issuance of Islamic bonds keeps the *Sukuk* market momentum going. Likewise, Islamic banks rely on government deposits for funding. As the industry matures, government support should be gradually withdrawn. Growth is to be expected, even without government assistance, because vast numbers of Muslims do not use conventional finance.

BNM's focus should be mainly on further strengthening prudential standards and the supervisory framework for Islamic financial services. The empirical results suggest that systematic differences between conventional and Islamic banks have diminished over time and seem to be due to different business models rather than *Shariah* principles. This would suggest that conventional and Islamic should be subject to the same sound regulatory and supervisory standards. However, BNM often issues individual guidelines for Islamic banks after consultations with *Shariah* advisory boards. These boards advise on the consistency and compliance level of the regulatory practices to *Shariah* rulings and do not necessarily follow Basel principles.

Malaysia's efforts to become a global leader in Islamic finance should concentrate on establishing an internationally consistent, robust regulatory and supervisory framework. First, a sound regulatory and supervisor framework consistent with Basel standards for conventional banks needs to be developed for Islamic banks. Second, *Shariah* rulings and interpretations need to be harmonized within Malaysia and across countries in order to provide a common platform for cross-border industry players. In this regard, BNM could combine efforts with the Islamic Financial Services Board, the prudential and supervisory standard-setting organization for the global Islamic financial industry.

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