



Quantifying the Effect of Interest Rate on Islamic Banks Financing in the United Kingdom

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Abstract

The conceptual framework of Islamic banking and finance is predicated on prohibiting riba (interest) and avoiding business practices that contravene ethical norms, potentially leading to injustice. Notwithstanding its professed commitment to eschew interest-based transactions, there is a prevalent concern among scholars and researchers that Islamic banking remains susceptible to the vicissitudes of interest rate fluctuations. This research examines the nexus between interest rates and Islamic bank financing within the United Kingdom, which is recognised as a pivotal centre for Islamic Finance in Europe. Employing a panel dataset that includes 60 observations spanning from 2008 to 2021, derived from the annual reports of the four full-fledged Islamic banks in the UK, and utilising the Random Effect model, our analysis discloses a negative, albeit statistically insignificant, correlation between the financing activities of Islamic banks and interest rates in the UK. Furthermore, the study elucidates that interest rates adversely impact deposit accumulation in Islamic banks, consequently hindering their capacity to extend credit to their clientele. As a result, it becomes imperative for Islamic banks to diminish their dependency on conventional interest rates to maintain the trust of stakeholders, who are motivated by the intention to avoid interest-based transactions in all their manifestations. This study contributes to the enrichment of the extant literature by convincingly demonstrating that the influence of interest rates on Islamic banking financing in the UK aligns with the findings from other jurisdictions reported in similar research endeavours.

Keywords: Islamic banks, Conventional banks, Interest Rate, Islamic Finance, United Kingdom



1. Introduction

The emergence of Islamic banking is arguably one of the most significant events of the 21st century in the global financial industry, growing phenomenally across various jurisdictions. Particularly of interest is the fact that the sphere of influence of Islamic banking has gone beyond the traditional Islamic countries, extending to Asia and Europe. Presently, a little above 500 Islamic Banks are operating in about 90 countries across the globe, 15 of which have attained the status of systemic significance (IFDI, 2022). With a total asset jumping from \$1.6 trillion in 2015 to \$2.8 trillion in 2021 and a projection of \$4.0 trillion by 2026 (IFDI, 2022), Islamic banking is poised to sustain its growth trajectory beyond the immediate era.

A well-known distinguishing feature of Islamic banking is the avoidance of interest. This is so because Islam abhors and prohibits *riba* (loosely interpreted as interest), a form of excess repayable by a debtor over the original amount borrowed. Hence, all transactions of an Islamic bank are expected to be devoid of paying or receiving interest. Instead, the principle of profit and loss sharing (PLS) is adopted as the basis of financing in Islamic banking. This ensures that stakeholders in any financial dealing share both risks and benefits from the transaction. Islamic banking is also asset-based as against conventional banking, is interest-based; this makes it more resilient during the crisis (M. H. Ali et al., 2020) just as it is less prone to interest rate risk (Kia & Darrat, 2007). Additionally, Islamic banks operate based on another set of Shari'ah rules, which prohibit gambling, excessive uncertainties and dealing in immoral, unethical 'goods' such as pornography. However, the major signpost of Islamic banking remains its non-interest disposition.

In most jurisdictions, Islamic banks operate alongside conventional banks in a dual banking system, in the same market, and under the same regulatory environments. This poses a significant challenge to the ability of Islamic banks to maintain their distinct identity (Nouman et al., 2022). While Islamic banks do not charge or pay interest, the quest to compete effectively with conventional banks has seen them benchmarking their products against conventional interest rates such as the London Interbank Offer Rate (LIBOR), Karachi Interbank Offer Rate (KIBOR), Kuala-Lumpur Interbank Offer Rate (KLIBOR) etc. (Ahmed et al., 2018; Nouman et al., 2022). The implication is that Islamic banks become exposed to interest rate volatility (Archer & Karim, 2019).

Consequently, it would appear that Islamic banks may have drifted and deviated from the lofty ideal model (Šeho et al., 2020a). It is, therefore, not surprising that concerns are being raised that the activities of Islamic banks have continued to mirror those of conventional banks not only in terms of product offerings and benchmarking of their profit rates against traditional interest rates but also in terms of how financing activities of Islamic banks appear to be driven by gyrations in interest rate.

Several studies have investigated the link between Islamic banking financing and interest rates and have found results that largely corroborate the insinuation that interest rates somewhat drive Islamic banking financing. These studies include Aysan, Disli, & Ozturk (2018); Ergeç & Arslan (2013); Saeed et al. (2023); Šeho et al. (2020a) and Zulkhibri (2018).

However, all the studies cited above have focused on Islamic banks in the GCC countries or South-Asian countries. To my knowledge, no study has investigated the effect of Interest rates on Islamic bank financing in Europe or elsewhere. Therefore, this study seeks to fill the gap and expand the frontier of knowledge by investigating the effect of interest rates on Islamic bank financing in the United Kingdom. In achieving the set objective, the study specifically aims to answer the following questions:



RQ1: Is Islamic bank financing in the UK influenced by changes in the interest rate?

RQ2: How does an Islamic bank deposit respond to changes in interest rate?

The choice of the UK is based on the country's position as the hub of Islamic finance in Europe. Outside of the Muslim-dominated countries of Southeast Asia and the Middle East, the United Kingdom is one country where Islamic finance has shown strong signs of a promising future. According to the Islamic Finance Development Indicators, IFDI (2022) report, the UK's total Islamic banking assets, worth \$7.5 billion as of 2021, accounted for 85% of total Islamic banking assets in Europe. The UK also ranked 27th out of 136 countries in terms of growth of Islamic finance. Despite controlling only 0.3% of global Islamic banking assets, the UK occupies an enviable 2nd position regarding the number of companies offering Islamic finance-related professional services. After Indonesia, the UK also comes second in the number of Islamic Fintech companies. It is also remarkable to note that the London Stock Exchange has become a preferred exchange for listing Sukuk. Interestingly, the UK authorities have reacted to the growth of this industry by ensuring that regulations governing financial services in the UK give adequate recognition to this segment of the industry. Tax laws on financial products and services have also been amended to apply to Islamic bank's products appropriately. Perhaps most significant is the issuance of the UK government's first-ever sovereign sukuk in the West in 2014 (British Embassy, Bishkek, 2023).

The remainder of the study is structured as follows: Section two discusses the theoretical and empirical literature on the topic, while section three sets out the data specification and methodology. Section four is dedicated to the presentation of the results and a discussion of key findings. Section five concludes the essay.

2. Literature review

One of the earliest works on this subject matter is that of Rosly (1999), who explained the relationship between Interest rates and Islamic bank financing. His postulations are hinged on the assumption that Islamic bank financing is dominated by Ba'i Bithamana Ajal (BBA), also known as Differed Payment Sales and that Islamic banks operate in a dual banking system.

According to Rosly, when the market interest rate rises, conventional banks increase the interest on deposits and raise interest charges on loans to maintain a stable profit margin. On the other hand, Islamic banks cannot adjust the fixed rate on their existing BBA contracts, nor can they increase the return payable on Wadiah deposits or dividends payable to Murabaha account holders. This effectively makes Islamic bank deposits decline as non-Muslim customers, who are only driven by pecuniary considerations, move their deposits to conventional banks to benefit from higher interest rates. In the same breath, the fixed rate BBA financing provided by Islamic banks becomes cheaper than traditional loans. This leads to a surge in demand for Islamic bank financing, which the banks cannot meet given declining deposits.

However, during periods of economic slowdown when interest rates are falling, the conventional deposit rate falls while the loan interest rate follows suit. Again, Islamic banks are not allowed to reduce the rate on BBA since it is a fixed-price contract, even though they can reduce the rate they pay on Wadiah's deposit. But they are not likely to do so. This situation incentivises "rational", mainly non-Muslim customers, to move their deposits from conventional banks to Islamic banks where deposit rates (returns on investment account) now appear higher. However, demand for Islamic financing will decline as conventional loans become cheaper. The increased deposit recorded by Islamic banks leads to excess but idle liquidity.



Therefore, Islamic banks tend to benefit more when interest rates fall. They maintain the fixed rate on the existing BBA while being able to reduce the Hibah they pay on Wadiah's deposit. But they are also trapped in the web of excess liquidity without additional earnings. Thus, it would appear that non-Muslim customers, as well as less-devout Muslim customers, are the greatest beneficiaries of the dual banking system and are the destabilising agents through whom interest rate influences the activities and operations of Islamic banks.

The issue of how Islamic Banking activities are intertwined with conventional banking activities has long become a subject of interest not only to promoters of Islamic Banking and Finance (IBF) but it has also become a potent weapon in the hands of critics of the new paradigm, who see Islamic finance as nothing but a smokescreen to charge interest. Few have argued that Islamic banks have deviated from their original ideals through their emulation and replication of Conventional banking practices and techniques (Iqbal et al., 2015). This explains why even Islamic banks have become as vulnerable as their conventional counterparts (Seho et al., 2020a).

The ideal Islamic banking model envisioned by its proponents is based on risk-sharing that enables both the bank and entrepreneur to jointly partake in a business venture's management, profit, and loss. This implies that Islamic banks are expected to act as venture capital providers, promoting entrepreneurship. The centrality of risk-sharing in Islamic finance has been emphasised by many Shari'ah scholars (Alaabed & Masih, 2016), who have also warned against debt-based financing, which is interest-based (Iqbal & Mirakhor, 2013). Nonetheless, many studies have shown that Islamic banks have concentrated more on debt-based rather than risk-sharing financing. For example, Khan (2010) showed evidence that non-PLS type constituted more than 90% of funding provided by the most prominent Islamic banks in the MENA region. Rosly (1999) It also found that at some point, sales-based financing accounted for over 94% of funding provided by Bank Islam Malaysia Berhad, the most prominent Islamic Bank in Malaysia.

In explaining the dominance of debt-based financing in the portfolio of Islamic banks, Azmat et al. (2015) argued that the fact that depositors of Islamic banks are mainly risk-averse is why the banks prefer short-term debt-like financing, which is less risky than joint venture partnerships. Furthermore, they noted that PLS financing is more prone to the twin evil of moral hazard and adverse selection. Unfortunately, this preference for debt-based funding exposes Islamic banks to interest rate shocks.

It is a fact that interest rates are at the heart of modern conventional banking. However, Samuelson (1958) opined that a nominal interest rate of zero percent would better ensure optimal resource allocation in an economy. In the view of Al-Jarhi (2017), this confers a distinct advantage on Islamic finance as a vehicle for economic justice and fairness and as an agent for reforming the current market economy. An essential distinction between Islamic and conventional banking models is that whereas the latter thrives on interest, the former is devoid of interest, at least in theory. It may then appear as a paradox, seeking to investigate the effect of interest rates on Islamic bank financing.

Various studies have investigated the connection between interest rates and Islamic banking operations, especially concerning the provision of finance and deposits. These studies have attempted to dissect the issues from different perspectives, focusing primarily on countries operating dual banking systems. The results have, however, been quite contradictory, suggesting the need for further empirical evidence. The issues analysed in the literature have ranged from how interest rates influence Islamic banks' financing and deposits as compared to conventional banks' funding and deposit, the relationship between traditional deposit rates and the rate of return on Islamic banks' deposits, similarities or differences in the monetary



transmission mechanisms between Islamic and conventional banks; the response of Islamic banks depositors to changes in interest rate; among others.

Hakan & Gülümser (2011) examined how interest rate affects deposits and loan advances (financing) in both conventional and Islamic banks in Turkey using the Vector Error Correction (VEC) methodology on monthly data covering December 2005 to April 2009. They found that a rise in interest rates results in an increase in conventional deposits and a drop in Islamic bank deposits. This happens perhaps because Islamic banks cannot adjust their rate as quickly as traditional banks would do in the circumstance, forcing some customers to move their deposits to conventional banks to take advantage of the arbitrage opportunity that a rise in deposit rates in conventional banks presents. But contrary to this line of thought, Saeed et al. (2023) found evidence that Islamic bank rates in Malaysia positively adjust to changes in conventional bank rates to avoid withdrawal risk of investment deposits by profit-driven depositors who find Islamic investment deposits and conventional fixed deposits as substitutes. This empirical evidence also challenges the theoretical postulation of Usmani & 'Uṣmānī (2002), who had argued that investment account deposits are insulated from withdrawal risk since, by conceptualisation, the Islamic bank is under no obligation to refund the deposit of this category of customers. According to him, the bank can refuse withdrawal requests by investment account holders.

Perhaps one study that buttresses the fact that Islamic banks in Malaysia can forestall the withdrawal of investment deposits in response to an increase in interest rate is Ali et al. (2020), who examines how changes in interbank interest rates in Malaysia affect Islamic banks' deposit and financing, using Auto Regressive Distributed Lag (ARDL) and data covering 2007 to 2018. Their findings reveal that the Interbank interest rate positively correlates with Islamic Banks' deposits and total financing. The observed increase in Islamic banks' deposits may be due to the adjustments they can make in response to conventional bank rate changes. This outcome contradicts the findings of Hakan & Gülümser (2011), who found that Islamic banks' deposits drop with rising interest rates. Both studies, however, agree on the point that a rise in interest causes Islamic loans (financing) to increase. Other studies that have found evidence that Islamic bank financing responds positively to the increase in interest rate include Ergeç & Arslan (2013), Sukmana & Kassim (2010) and Rosly (1999).

The causal effect of conventional banks' deposit rate on Islamic bank investment deposit rate (return rate) was also established by Chong & Liu (2009), who investigated the relationship between the two rates in Malaysia. The study used the Bivariate Granger causality test for long-term relationships and the error correction representation method to determine the short-term relationship. An analysis of Monthly data from 1995 to 2004 and 109 sample size for each time series revealed changes in conventional deposit rate granger-cause changes in Islamic investment rate but not vice versa. The study further confirms a long-term cointegration between the Islamic investment rate and the traditional deposit rate of both bank and non-bank financial institutions in Malaysia. Islamic deposit rates are found to be pegged to conventional rates. The reason for this relationship, the study notes, is the environment in which Islamic banks operate, which requires them to compete with their traditional counterparts. Other studies such as Cevik & Charap (2015), Abdurraheem & Mohamed Naim (2016), Anuar et al. (2014) and Yüksel et al. (2017) have all found corroborating evidence for the nexus between conventional banks deposit rates and Islamic banks return rate on investment account deposits.

In justifying the above findings, Saeed et al. (2023) explained that when deposit rates go up in conventional banks, Islamic banks try to forestall withdrawals of deposits by profit-driven customers by using some of their earnings to argue the



returns payable to Investment Account Holders. Where the earnings are inadequate to cater to this need, part of the banks' capital is deployed to the rescue, leading to displaced commercial risk.

On his part, Khalidin (2017) examined how conventional banks' interest rate on consumption, the interest rate on working capital and interbank money market rates affects Islamic bank's total financing and Murabaha financing in Indonesia through the instrumentality of a Vector Auto Regression model covering the period between 2009 and 2015. The study finds that while commercial banks' rate on working capital and Inter-bank money market rates influence Islamic banks' total financing, Commercial banks' rate on consumption influences Murabaha financing. Curiously, the study is silent on the nature of the effect, whether it is positive or negative. However, looking at the result, one can deduce that the relationship is negative.

Nouman et al.'s (2022) study on interest rate volatility and Islamic bank financing in Pakistan also reveals both short- and long-term relationships between interest rate volatility and Islamic banks' financing, which the authors attribute to the prevalence of the use of conventional interest rate as a benchmark for pricing Islamic banks products in the country. They employed data on Islamic banks' financing to various sectors and the Karachi Inter-Bank Offer Rate (KIBOR) from 2006 to 2020 comprising 734 observations while carrying out unit root test, Cointegration test, and test for Error correction. The study further finds a linkage between interest rate volatility and volatility of financing portfolios of Islamic banks.

A similar study in Malaysia investigated whether there is any difference in the responses of Islamic financing and conventional credit to shocks in monetary policy using the Structural Vector Auto Regression and quarterly data spanning 2000 to 2013 (Akhatova et al., 2016). Their results reveal that while Islamic financing responds instantaneously to monetary policy shocks, conventional credits exhibit delayed response. Reasons advanced include the fact that Islamic banks are mainly limited to customer deposits as a source of funds, hence a contraction in deposits due to increased interest rates, which may motivate less-religious customers to move their funds to conventional banks, seriously impacting their financing.

Ali, A. O. (2021), on his part, evaluated how monetary policy, as represented by overnight policy rate, affects Islamic banks' "loans" and conventional banks' loan advances using Auto Regressive Distributed Lag (ARDL) and monthly data from 2015 to 2018. The study finds that interest rate has a statistically negative impact on Islamic banks' loans in the short run but not in the long run. For conventional banks, the effect of interest rates is negative in the short run and positive in the long run. A similar study in Malaysia reported that the response of Islamic bank financing to changes in monetary policy is no different from that of conventional banks, with no distinction between the short and long run.

Finally, Šeho et al. (2020) took an innovative approach to the issue by disaggregating Islamic bank financing into three categories comprising Sales-Based, Lease-based and Risk-Sharing financing types while seeking to investigate the impact of interest rates on each type. They also used cross-country panel data containing 77 Islamic banks from 13 countries, including Southeast Asia and GCC countries, covering 2003-2017. This is unlike most other studies which focus on individual countries. Their analysis of data obtained using the GMM estimator is, perhaps, the most comprehensive and most robust on this subject in the literature, creating deeper insight into how interest rate affects different components of Islamic banks' financing. The results show that while interest rate has a negative effect on sales-based and lease-based financing types, the effect is neutral on risk-sharing financing. This underscores the importance of the risk-based financing type as the most ideal Islamic financing model. The study finds that even in jurisdictions where Islamic banks have attained systemic significance, interest rate continues to have a statistically significant negative influence on Sales-based financing but not on lease-based and risk-sharing financing.



3. Methodology

This study aims to evaluate the effect of Interest rates on Islamic bank financing in the United Kingdom. We use annual data for total funding, assets, and deposits of all four full-fledged Islamic banks in the UK. Our sample consists of the following banks: Al-Rayan Bank, Bank of London and Middle East, Qatar Islamic Bank, and Gatehouse Bank. Data covering 2008 to 2021 was obtained from the bank's annual financial statements to form panel data comprising 60 observations. Similarly, data on the United Kingdom's macroeconomic variables, such as inflation rate, interest rate (proxied by Bank Rate) and GDP growth rate, were obtained from www.macrotrends.net. The natural log of Total Financing, Total Assets and Total Deposits addresses the trend problem in the data. Panel data has been adopted because it is more informative and reduces the incidence of collinearity among variables of interest. Furthermore, it enables the relaxation of the zero conditional mean assumption to derive consistent and unbiased estimates for our regression coefficients. The Random Effect Estimation technique is adopted to analyse the data. This technique is chosen after carrying out the Hausman Test for each version of the regression models specified in the study. The method provides for time-invariant unobserved variables, which are assumed to be uncorrelated with the explanatory variables. The choice of variables follows what is found in various literature, such as Zulkhibri (2018) and Ergeç & Arslan(2013).

The following hypotheses have been defined:

Ho: Interest rate does not have any effect on Islamic Banks' Financing

H1: Interest rate has a significant effect on Islamic Banks' Financing.

Accordingly, the following random effect baseline model is specified to quantify the relationship between Islamic bank financing and interest rate as represented by the Bank of England Rate or Bank Rate for short, while controlling for Total Deposit, Total Assets, and other microeconomic variables including Inflation and GDP growth rate.

$$\text{LNTFIN}_{it} = \alpha_i + \beta_1 \text{INTR}_{it} + \beta_2 \text{INFL}_{it} + \beta_3 \text{LNTDPI}_{it} + \text{LNASSET}_{it} + \text{GDPGRT}_{it} + \gamma Z_i + \text{eit} \dots \dots (1)$$

$$\text{LNTFIN}_{it} = \alpha_i + \beta_1 \text{INTR}_{it} + \beta_2 \text{LNTDPI}_{it} + \beta_3 \text{LNASSET}_{it} + \gamma Z_i + \text{eit} \dots \dots (2)$$

$$\text{LNTFIN}_{it} = \alpha_i + \beta_1 \text{INTR}_{it} + \beta_2 \text{LNTDPI}_{it} + \gamma Z_i + \text{eit} \dots \dots (3)$$

$$\text{LNTFIN}_{it} = \alpha_i + \beta_1 \text{INTR}_{it} + \gamma Z_i + \text{eit} \dots \dots (4)$$

$$\text{LNTFIN}_{it} = \alpha_i + \beta_1 \text{LNTDPI}_{it} + \gamma Z_i + \text{eit} \dots \dots (5)$$

Where:

LNTFIN= Log of Total Financing of Islamic Banks

INTR = Interest Rate (as proxied by Policy Rate)

INFL= Inflation Rate

LNTDPI= Log of Total Deposit of Islamic Banks

LNASSET= Log of Total Assets of Islamic Banks

GDPGRT= GDP Growth Rate



Z_i = Time invariant unobserved variables

e = Idiosyncratic error term

Interest rate is included in the model as the main explanatory variable, given that our primary focus is to establish whether or not conventional interest rates influence Islamic Banks' financing. The inclusion of inflation as a control variable is based on the fact that inflation affects Islamic bank financing as borrowers slow down on borrowing during periods of high inflation (M. H. Ali et al., 2020). It also follows what is found in previous works such as (Zulkhibri, 2018) and (Ergeç & Arslan, 2013). The total deposit of Islamic banks is undoubtedly a determinant of the capacity of the banks to extend financing to their customers. Its inclusion in our model follows the example of Ergeç & Arslan (2013) and (M. H. Ali et al., 2020). Another bank-specific variable introduced is total assets in line with existing literature (Šeho et al., 2020b). Finally, including the GDP growth rate also follows the example (Zulkhibri, 2018).

In line with the findings of some previous studies, such as Šeho et al. (2020a), we assume a negative relationship to exist between interest rates and Islamic banks' financing, a positive relationship between deposit and funding, a positive relationship between banks' total asset and financing; a negative relationship between inflation and Islamic banks' financing and; a positive relationship between GDP growth rate and Islamic banks' financing.

We also seek to test whether changes in interest rates have any effect on Islamic banks' deposits, as postulated by Rosly (1999), by specifying the following hypothesis and model:

H0: Interest Rate does not have a significant impact on Islamic banks' deposits

H1: Interest Rate has a substantial impact on Islamic banks' deposits

To test this hypothesis, we specify the model below:

$$\text{LNTDP}_{it} = \alpha_i + \beta_1 \text{INTR}_{it} + \gamma Z_i + e_{it} \dots\dots\dots (6)$$

Where all variables remain as specified above.

The expectation is a negative relationship between interest rates and Islamic banks' deposits.

4. Results

Table 1 presents all our variables' mean, standard deviation, minimum and maximum values. The average amount of funding provided by all four Islamic banks in the UK over the period is £532,025 with a standard deviation of £551,414, while the average total deposit is £492,698 with a standard deviation of £574,558. The average total asset is £792,348. The average interest rate over the same period is 0.9, hovering only between 0.16% and 2.57%. The average growth rate is 1.08%, with a standard deviation of 4.06%. The high standard deviations recorded suggest some abnormality in the data distribution.



Table 1. Summary Statistics

Variables	Obs.	Mean	Std.Dev.	Min	Max
Finance	60	532025	551414.8	0	1997919
Deposit	60	492696.8	574558.4	0	2044149
Asset	60	792348.5	662324	31453	2400294
Interest rate	60	0.90200	0.914146	0.16	2.57
Inflation	60	2.579393	1.967023	0.368	9.07
GDP Growth Rate	60	1.080413	4.054998	-11.0309	7.5249

Source: Authors' elaboration

The results presented in Table 2 show that for model 1, a negative but statistically insignificant relationship exists between interest rate and financing. A 1% increase in the interest rate causes a 0.07% decrease in funding. As expected, a positive relationship is observed between Islamic banks' deposits and financing with a coefficient of 0.1138. A 1% increase in deposits leads to a 0.11% increase in financing. The coefficient is statistically significant. Total assets similarly exhibit a statistically significant positive relationship with financing. The inflation coefficient is negatively signed, implying a negative relationship between price levels and Islamic bank financing. Although unexpected, the coefficient of growth rate also turns up with a negative sign but not statistically significant. The pattern is the same for all the variables in all other models (2-5) in terms of the signs and significance of the coefficients of the variables.

Table 2. Empirical Result of Regression of Islamic Banks Financing on Interest Rate and other Explanatory variables (Using Policy Rate as Proxy for Interest Rate)

Explanatory Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Interest Rate (Policy Rate)	-0.0735151 (0.346)	-0.0702932 (0.292)	-0.1218636 (0.387)	-0.6568117 (0.002)	
Deposit	0.1137954 (0.008)	0.1139481 (0.006)	0.6199302 (0.000)		0.6415234 (0.000)
Total Assets	1.176687 (0.000)	1.176766 (0.000)			
Inflation	-0.0031052 (0.920)				
GDP Growth Rate	-0.0022587 (0.863)				
Constant	-4.3545 (0.000)	-4.355034 (0.000)	5.092334 (0.000)	13.04434 (0.000)	4.712806 (0.000)
R-squared	0.9397	0.9397	0.6499	0.0925	0.6459
Hausman Test					
Chi2(5)	10.71	11.25	10.71	10.71	10.71
Chi2	0.0575	0.0105	0.0575	0.0575	0.0575

Source: Authors' elaboration



Finally, Table 3 presents the results of the estimation of model 6. We find a negative and statistically significant relationship between conventional interest rates and Islamic bank deposits. This conforms with expectations.

Table 3. Empirical Result of Regression of Islamic Banks Deposit on Interest Rate

Interest	-0.930674 (0.000)
Constant	12.9387
R-Squared	0.1656
Hausman Test	
Chi2(5)	10.71
Chi2	0.0575

Source: Authors' elaboration

5. Discussion

From the result of our analysis presented in Table 2 above, model 1, which is our baseline model, reveals a negative but statistically insignificant relationship between the bank rate and Islamic bank financing. It means that a 1% increase in interest rate causes Islamic banks' financing to decline by 0.07%. This result aligns with the findings of Ali, A. O. (2021), Zulkhibri (2018), Khalidin (2017) and Šeho et al. (2020), all of those who found evidence of a statistically significant negative relationship between Interest rates and Islamic banks' financing. This is perhaps because rising interest rates have been found to cause Islamic banks to lose deposits (Rosly, 1999; Hakan & Gülümser, 2011), which constitute the primary source of "loanable" funds for them (Sukmana & Ibrahim, 2017). The decline in Islamic banks' financing may also indicate an increase in the rate of return they demand from customers, leading customers to shun requests for financing. Thus, contrary to the impression that Islamic Banks are insulated from interest rate shocks just because they operate non-interest banking, our findings, corroborated by similar studies, have proved otherwise. Our result, however, contradicts what was theorised by Rosly (1999) and corroborated by the empirical studies of Hakan & Gülümser (2011) and Ergeç & Arslan (2013).

Furthermore, we found evidence of a statistically significant positive relationship between Islamic banks' financing and deposits. This result is expected as the bulk of funds for financing in an Islamic bank comes from customers' deposits, as noted earlier. A 1% increase in deposits is associated with about a 0.11% increase in financing. Šeho et al. (2020b) found a similar relationship between deposit and risk-based financing in cross-country panel data. The total assets of Islamic banks also exhibit a statistically significant positive relationship with their funding, which confirms Zulkhibri's finding of Zulkhibri (2018) in his study on Malaysia. A coefficient of 1.177 means that a 1% increase in total assets causes a 1.17% increase in Islamic banks' financing in the UK. This result underscores the importance of an Islamic bank's size in determining its funding.

Regarding the macroeconomic variables used in the model, the result shows that Islamic banks financing declines as the inflation rate rises. This is consistent with the findings of other studies, including (M. H. Ali et al., 2020) and (Zulkhibri, 2018). This outcome is not unexpected, considering that when inflation rises, monetary authorities usually respond by raising interest rates. The rise in interest rate, in turn, causes Islamic banks' financing to decline, as we have seen from the estimation of model 1. Surprisingly, financing also drops as the GDP growth rate increases. This finding diverges from that of (Zulkhibri, 2018), who showed evidence of a positive relationship between Islamic banks' financing and real GDP growth rate. Both



coefficients of inflation and GDP growth rates are, however, statistically insignificant. The R-square value shows that this model explains 93.97% of variations in Islamic bank financing. It is also instructive to note that the result of the Hausman test confirms the validity of using the random effect technique.

The estimation of model 6, which regresses Islamic Banks' Deposits on interest rates, reveals a statistically significant negative relationship between Islamic banks' deposits and interest rates. An increase of 1% in interest rate is associated with a 0.93% decrease in Islamic bank deposits. This aligns with expectations and consonance with the findings of (Ergeç & Arslan, 2013) and (Aysan et al., 2018). The result, however, contradicts what was found by M. H. Ali et al. (2020). An increase of 1% in interest rate is associated with a 0.93% decrease in Islamic bank deposits. This means that some depositors of Islamic banks in the UK are profit-driven. The patronage of Islamic banking services by these customers is highly elastic (Saeed et al., 2023); they easily switch between Islamic banks and conventional banks as interest rates gyrate (Aysan et al., 2018).

Hence, when the interest rate goes up, they move their deposits to conventional banks to take advantage of the higher interest rate on deposits. This is unlike religiously inclined customers whose demand for Islamic banking services is inelastic (Saeed et al., 2023), regardless of movements in conventional interest rates. For them, it is about adhering strictly to the dictates of their religion. This finding supports the proposition of Rosly (1999) and the empirical findings of Hakan & Gülümser (2011) and (Ergeç & Arslan, 2013). Furthermore, it corroborates IFSB's (2017) report, which finds that Islamic bank deposits in Malaysia declined by 10.28% in response to a 2% rise in interest rate. It also explains why Islamic banks' financing drops as their primary source of loanable funds experience contraction. The decline in financing is inevitable, given that this reduction in deposits cannot be compensated for through any other means (Zulkhibri, 2018), as their access to alternative funding sources is greatly limited (Farooq & Zaheer, 2015). Overall, we argue that Islamic banks' deposits drop in response to an increase in interest rate because a sizable number of depositors with these banks are "rational" investors who are only seeking returns maximisation. They move their funds between conventional and Islamic banks at every opportunity, depending on when their motive is best served.

6. Conclusion

The co-existence of Islamic Banks side-by-side with conventional banks in a dual banking system is the reality in most countries where Islamic banking is practised. This has resulted in fierce competition among these two types of banking systems seeking to attract customers. As a necessary consequence, the line of distinction between the duo has continued to fade out as Islamic banks compete for space with their conventional counterparts. Rather than maintain their distinct Identity, Islamic banks have been found to emulate traditional banks in their product offerings, which seems to jeopardise the whole essence of Islamic banking: to eliminate interest-based transactions and replace them with a shari'ah-compliant PLS model.

The influence of interest rates on Islamic bank financing is becoming more glaring with each passing day. This has necessitated various studies seeking to quantify the impact of interest rates on Islamic bank financing and deposits.

Accordingly, this study also examines the impact of interest rates on Islamic banks' financing in the UK, the hub of Islamic Finance in Europe in the West. We modelled Islamic Financing against interest rate, proxied by the Bank of England Rate, the UK's policy rate. The influence of Islamic banking in the United Kingdom has experienced an upward swing in the last decade, mainly due to the increasing population of migrants from Muslim countries and the growing number of students



coming to the government to pursue higher education. This has meant an increase in demand for Shari'ah-compliant banking services.

Our finding confirmed the existence of a negative, though statistically insignificant, relationship between Islamic Banks' financing and interest rates in the UK. This is because as the interest rate goes up, conventional banks' lending rate also goes up, and so does the deposit rate. Considering that the return rate on Islamic Bank Investment Accounts is fixed rather than variable, non-religiously inclined depositors, acting in consonance with the Rational Choice Theory, move their funds to conventional banks to maximise their returns. This action effectively causes Islamic bank deposits to nosedive. With declining deposits, Islamic banks' financing also takes a downward turn due to a shortage of loanable funds. This finding supports the theoretical postulation of Rosly (1999), the empirical findings of Ergeç & Arslan (2013), and that of Hakan & Gülümser (2011). It is also consistent with the findings of A. O. Ali (2021) and Šeho et al. (2020b).

We also modelled Islamic banks' deposits against interest rates separately, and the result confirms a statistically significant negative relationship between the two. This suggests that the channel through which changes in interest rates affect Islamic banks' financing is the deposit. Further analysis shows that the size of an Islamic bank, as proxied by total assets, is an essential determinant of total funding, considering our result's positive and statistically significant relationship. Inflation and GDP growth rate are both found to harm financing.

An important implication of our finding is that as long as Islamic banks operate in a dual banking system and are patronised by customers whose patronage is driven strictly by profit considerations, it will be difficult, if not outrightly impossible, to disentangle them from the influence of conventional interest rate. In our opinion, not even enforcing regulations seeking to dissuade Islamic banks from acting in tandem with traditional banks, as suggested by Al-Jarhi (2017), can reverse the trend. This situation, however, has implications for customer perception and trust. Many customers may soon become disinterested in Islamic banks if they perceive that their operations are not insulated from interest rates. They may feel let down and betrayed, resulting in their deposits being withdrawn and refusing to transact business with the banks.

To address this problem, the banks should promote increased awareness through campaigns to strengthen the value proposition of Islamic banking, emphasising not just profitability but also ethical and religious values that appeal to the inelastic, religiously inclined customer base. Scaling-up efforts to expand their customer base among religiously conscious adherents of the Islamic faith may help neutralise the influence of profit-driven customers, whose activities tend to put the Islamic banks' operations under intense pressure.

It may also be helpful for Islamic banks in the UK to develop strategic customer segmentation approaches, making it possible for them to, for instance, offer competitive Islamic investment products with attractive risk-adjusted returns that match conventional products.

Our findings also have significant policy implications for regulators and other stakeholders in the UK financial system. For example, Islamic banks could be incentivised to explore alternative funding sources, such as Sukuk or other forms of equity-based financing, thereby reducing their reliance on customers' deposits, which is often volatile. The Bank of England may also consider Islamic liquidity management tools to enforce compliance. Additionally, in recognition of the vulnerabilities Islamic banks face during periods of monetary tightening, regulatory authorities should consider implementing stress tests specific to interest rate shocks. A framework that will compel Islamic banks to devote a sizeable percentage of their funds to participatory financing, with the return strictly tied to the performance of underlying investments rather than some conventional rates, can



also help reduce the influence of interest rates on Islamic banks' operations. Also, governments and regulators should consider providing tax incentives for customers who remain with Islamic banks during periods of high interest rates to ensure the stability of the fragile Islamic banking sector.

Finally, the result of our analysis may have been limited by the use of annual data rather than monthly panel data, which could have given a better picture of the relationship between the dependent variable and the explanatory variables. It is hoped that future studies can use higher-frequency data for better analysis and results.

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