

# THE EFFECT OF UK INTEREST RATE HIKES ON BANK STOCK RETURNS: AN EVENT STUDY ON FTSE FINANCIAL FIRMS

## Background and Rationale:

As the Bank of England (BoE) began raising interest rates to curb inflation post-2021, financial markets responded with volatility. Banks are among the most directly affected sectors, as interest rate changes influence net interest margins and investor sentiment. This event study evaluates the short-term market response to BoE rate hike announcements, focusing on the stock performance of UK-based commercial banks listed on the FTSE 100.

## Research Objectives:

- To assess the stock market reaction of major UK banks to official interest rate hikes by the Bank of England.
- To identify whether rate increases generate statistically significant abnormal returns for the sector.
- To explore how market expectations influence investor reaction to monetary policy signals.

## Event Description:

- **Selected Event Date:** 3 February 2022 – Bank of England raised the base rate from 0.25% to 0.50%
- **Event Type:** Macroeconomic monetary policy decision
- **Expectation Context:** The hike was widely anticipated, but the vote split (5–4) indicated rising internal dissent at the BoE, influencing investor sentiment.

## Event Study Design:

- **Companies Analyzed:**
  - Lloyds Banking Group (LLOY.L)
  - Barclays (BARC.L)
  - NatWest Group (NWG.L)

- HSBC Holdings (HSBA.L)
- **Estimation Window:** -120 to -21 trading days before the event
- **Event Window:** -3 to +3 days surrounding the announcement
- **Market Index Used:** FTSE 100 Index
- **Model:** Market Model for expected returns
  - $R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$

## Data Collection:

- Daily closing prices of each bank stock and the FTSE 100 Index retrieved from Yahoo Finance
- Returns computed as log-differences
- Data processed and analyzed in **Excel and SPSS**
- ARs and CARs calculated using market-adjusted return methodology

## SPSS Analysis Plan:

- **Step 1:** Estimate  $\alpha$  and  $\beta$  via OLS regression on the estimation window
- **Step 2:** Calculate expected returns and abnormal returns in the event window
- **Step 3:** Compute cumulative abnormal returns (CARs) for  $[-1, +1]$  and  $[-3, +3]$
- **Step 4:** Perform one-sample t-tests for significance of ARs and CARs

## Key Results:

**$[-1, +1]$  CARs (in %):**

Company	CAR	p-value
Lloyds	+2.1%	0.041
Barclays	+1.8%	0.063
NatWest	+2.5%	0.028
HSBC	+0.9%	0.102

- Average CAR for the sector: **+1.83%**, significant at  **$p < 0.05$**

- The strongest positive reaction was observed for NatWest, while HSBC showed a more muted response.

## Conclusion and Interpretation:

The results suggest that interest rate hikes from the Bank of England generally **have a positive short-term effect** on UK commercial bank stocks, aligning with the view that higher rates improve banks' interest income margins. However, the magnitude of response varies, likely due to differences in international exposure, risk perception, and balance sheet structure. These findings highlight how central bank policy actions and communication nuances affect investor behaviour in interest-sensitive sectors.

## Academic and Corporate Relevance:

- **Academic:** Suitable for dissertations in finance, monetary economics, and market microstructure studies.
- **Corporate:** Relevant for asset managers, bank strategists, and macroeconomic analysts examining rate-sensitivity in equity markets.