

## Chapter 5

# Market Pricing of Bank M&As and Efficiency in Europe

**Sailesh Tanna**

 <https://orcid.org/0000-0002-2243-3857>

*Coventry University, UK*

**Hodian Urrio**

*Mount Meru University, Arusha, Tanzania*

**Ibrahim Yousef**

 <https://orcid.org/0000-0001-5042-0685>

*University of Petra, Jordan*

### **ABSTRACT**

*This study investigates the impact of bank mergers and acquisitions (M&As) on bank efficiency and how such efficiencies are expected to influence bank shareholder value upon merger announcements. It employs stochastic frontier analysis and event study methods along with regression analysis to account for the influences of pre-merger and post-merger efficiencies of bidders and targets in assessing their impact on bidder abnormal returns. Using data for a sample of large commercial bank M&As from 22 European countries, the authors find that bank bidders achieve short-term shareholder value gains from merger announcements, and this could be associated with the perceived efficiencies of bidders and targets. More generally, the evidence supports the view that bank profit efficiency has a positive influence on bidder returns from merger announcements, and therefore markets do take into account the importance of efficiency in value creation. This suggests that stock markets price operational efficiency of banks in predicting value gains from European Bank M&As.*

DOI: 10.4018/978-1-7998-5083-0.ch005

## INTRODUCTION

‘Under the semi-strong efficient market hypothesis, stock prices react positively (negatively) to public events and announcements that informed market participants expect will increase (decrease) long-run firm value. However, realized long-run outcomes need not be consistent with short-run market reactions’ (Gayle DeLong and Robert DeYoung, 2007).

According to the well-known Efficient Market Hypothesis (EMH), a firm’s stock price reflects all available information. As such, investor can predict that the market would take into account the firm’s record of efficiency in evaluating its impact on shareholder value following an event. This paper investigates whether a bank’s efficiency is assimilated into its stock price when it seeks to acquire, or merge with, another bank. More precisely, consistent with EMH, the authors investigate whether the pre-merger and post-merger efficiency of bank targets and bidders at the time of merger announcement are reflected in the bidder’s stock price abnormal returns.

The analysis that a firm’s stock price reaction from merger announcements reflects its pre-merger and/or post-merger efficiency is based on two assumptions that are common in the finance literature. The first, grounded in the semi-strong EMH, posits that information not publicly available is perceived by the market. As implied by the above quote from DeLong and DeYoung (2007), it is likely that market participants, some of them with insider information, may influence the firm’s stock price through trading. This possibility culminates in markets being able to predict a firm’s future performance, one indicator of which is efficiency. The second assumption is that the stock price reflects future earnings performance of the firm, which again may be predicted by its record of efficiency.

We develop several hypotheses relating the impact of bidder and target efficiencies to bidder shareholder value and conduct our empirical analysis using accounting and financial data for a sample of 56 large commercial bank mergers that took place in 22 European countries between 2010 and 2017. Efficiency is estimated using stochastic frontier analysis (SFA), while event study methodology is employed to calculate shareholder returns upon merger announcements. To determine whether efficiency has significant impact on announcement period shareholder returns, we perform numerous cross-sectional and panel regressions relating bidder cumulative abnormal returns (CARs) to various proxies for the efficiency variables while controlling for a number of bank specific, deal specific and environmental factors. We contribute to the literature by combining different methodologies and multiple datasets to study the impact of efficiency on shareholder value. In doing so, we build upon a few previous studies (e.g. Chronopoulos *et al.*, 2010, 2013; Kohers *et al.*, 2000; Aggarwal *et al.*, 2006) which use similar but slightly differentiated methodologies. Importantly, we test several distinct hypotheses and provide recent evidence relating to Europe.

The main finding of this paper is that bank bidders achieve short-term shareholder value gains from merger announcements and this could be associated with the perceived efficiencies of bidders and targets. For example, evidence is found that both pre- and post-merger profit efficiency has a positive effect on shareholder value, whereas target cost efficiency is negatively associated with value creation of bidders. On balance, the results of this study are supportive of the view that bank mergers in Europe are value-creating for the bidding firms and this could be attributed to perceived efficiency gains from mergers (De Young *et al.*, 2009; Urio and Tanna, 2012). If market reaction to bank merger announcements reflects the perceived efficiency of bidder and targets, investors may be able to use such information in predicting short-term performance gains.

18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/market-pricing-of-bank-mas-and-efficiency-in-europe/260897](http://www.igi-global.com/chapter/market-pricing-of-bank-mas-and-efficiency-in-europe/260897)

## Related Content

---

### Planning for Hurricane Isaac using Probability Theory in a Linear Programming Model

Kenneth David Strang (2013). *International Journal of Risk and Contingency Management* (pp. 51-66).

[www.irma-international.org/article/planning-hurricane-isaac-using-probability/76657](http://www.irma-international.org/article/planning-hurricane-isaac-using-probability/76657)

### Risks Analysis and Mitigation Technique in EDA Sector: VLSI Supply Chain

Lokesh Pawar, Rohit Kumar and Anurag Sharma (2018). *Analyzing the Role of Risk Mitigation and Monitoring in Software Development* (pp. 256-265).

[www.irma-international.org/chapter/risks-analysis-and-mitigation-technique-in-eda-sector/204113](http://www.irma-international.org/chapter/risks-analysis-and-mitigation-technique-in-eda-sector/204113)

### An Analysis of the Relationship Between Maintenance Engineering and Knowledge Management

Francisco Javier Cárcel-Carrasco, Elisa Peñalvo-López, Maria Carmen Carnero and Vicente López-Mateu (2021). *Advanced Models and Tools for Effective Decision Making Under Uncertainty and Risk Contexts* (pp. 36-63).

[www.irma-international.org/chapter/an-analysis-of-the-relationship-between-maintenance-engineering-and-knowledge-management/261310](http://www.irma-international.org/chapter/an-analysis-of-the-relationship-between-maintenance-engineering-and-knowledge-management/261310)

### Digital Risk Analytics Using Smart Feature Reduction and Deep Classification

Usharani Bhimavarapu (2026). *Risk Management and Corporate Governance in Unpredictable Business Environments* (pp. 57-82).

[www.irma-international.org/chapter/digital-risk-analytics-using-smart-feature-reduction-and-deep-classification/385330](http://www.irma-international.org/chapter/digital-risk-analytics-using-smart-feature-reduction-and-deep-classification/385330)

### Auditing an Agile Development Operations Ecosystem

Aishwarya Subramanian, Priyadarsini Kannan Krishnamachariar, Manish Gupta and Raj Sharman (2018). *International Journal of Risk and Contingency Management* (pp. 90-110).

[www.irma-international.org/article/auditing-an-agile-development-operations-ecosystem/212560](http://www.irma-international.org/article/auditing-an-agile-development-operations-ecosystem/212560)