

**Real Externalities of Fair Value Estimates of Technology-related Intangibles:  
Evidence from Business Combinations**

**Sai Harsha Katuri**

University of Texas at Tyler  
Skaturi@uttyler.edu

**Yinghua Li \***

Arizona State University  
yinghua.li@asu.edu

**Satish Sahoo**

City University of Hong Kong  
ssahoo@cityu.edu.hk

**Jingjing Xia**

Wenzhou-Kean University  
jxia@kean.edu

February 2025

---

\*The authors are grateful for the insightful feedback provided by Chiraz Ben Ali, Emeline Deneuve, Ahmad Hammami, Luo He, Yijing Jiang, Yiran Kang, Oleg Kiriukhin, Yao Li, Yanju Liu, Zhenbin Liu, Alex Lyubimov, Sang Woo Shon, Byron Song, Jing Wen, Mark Yan, Fang Zhang, Liu Zheng, Gaoguang Zhou, and Scott Guernsey (discussant). We also acknowledge the valuable contributions from participants at brown-bag and seminar presentations at the City University of Hong Kong, Concordia University, and Hong Kong Baptist University, as well as attendees at the American Accounting Association Annual Meeting 2024 and the Hawaii Accounting Research Conference 2025. Further, we appreciate the constructive comments from five anonymous referees who served on the Research Grant Council of Hong Kong Panel. We are indebted to Terrence Blackburne for generously providing data on SEC Edgar searches. Satish Sahoo acknowledges the financial support of the City University of Hong Kong and the Research Grant Council of Hong Kong (ECS 21500122). Any errors or omissions are our own.

# **Real Externalities of Fair Value Estimates of Technology-related Intangibles: Evidence from Business Combinations**

## **Abstract**

This study evaluates the decision-usefulness of audited fair value estimates for technology-related intangibles. Using SFAS 141-mandated Purchase Price Allocation (PPA) disclosures, we analyze how these estimates shape innovation strategies among firms with existing technological links to the acquisition target (TLFs). We find that TLFs increase their technological closeness to the target's pre-acquisition technology areas to a greater extent when the acquirer allocates a larger share of the total purchase price to the target's developed technology. This is consistent with TLFs using PPA disclosures to assess the relative profit potential of different technology areas and reallocate their innovation efforts accordingly. This relationship strengthens when the TLFs are more likely to attend to and respond to the acquirer's PPA disclosures. Furthermore, increased technological closeness to the target is associated with improved innovation outcomes for the TLFs, especially when the target's developed technology is assigned a higher fair value. Collectively, our findings suggest that fair value estimates can provide decision-useful information that influences the TLFs' resource allocation across technology areas, despite concerns about their reliability.

**Keywords:** Fair value estimates; Technology; Patent; Externality; Business combinations

JEL Classifications: D62, E22, M41, O31, O32, O33