

Value relevance of return, risk and strategy: evidence from the Indian banking sector

Abstract

In the extant literature (Anandarajan, Francis, Hasan, & John, 2011; Ball & Brown, 1968), an accounting variable is considered value relevant if it predicts equity market values. Accounting information on return & risk like return on assets (ROA), non-performing assets (NPA) and loan loss provisions (LLP) reflects prior portfolio decisions, credit quality, and explains market values of banks (W. H. Beaver, Ryan, & Wahlen, 1997; Liu & Ryan, 1995; Donald P. Morgan & Stiroh, 2001).

While differentiation across asset allocation strategies relates to accounting rates of return (Deepphouse, 1999), recent research has also associated banks' asset allocation strategies of focus versus diversification with their market performance (Baele, De Jonghe, & Vander Vennet, 2007; Stiroh, 2006). Further, post financial crisis the regulators across the globe have been emphasizing on systemic risk and its impact on the stability of banking system. An argument regarding systemic risk: it is a function of asset allocation strategies (De Jonghe, 2010).

The last two decades of reform in Indian banking sector provides an opportunity to examine the impact of accounting information and asset strategic choices on equity market return and the impact of asset allocation on systemic risk. In this regard, this study uses a unique dataset of Indian banks' quarterly revenues by segment (Corporate, Retail, and Treasury).

This work organizes into six chapters. The first chapter is an introduction to the thesis. The second chapter of the thesis provides an overview of the Indian banking sector in the context of performance, strategy, value relevance and systemic risk. The third, fourth, and fifth chapter presents empirical work, and finally, the sixth chapter summarizes the thesis work.

In the third chapter of the thesis, this study examines whether accounting information on return and risk impacts banks' market prices. The chapter examines the value relevance of accounting information on return and risk using data from 39 scheduled commercial banks in India over a 29quarter period (2008 to 2015). Following Agusman, Monroe, Gasbarro, and Zumwalt (2008), panel data regressions are employed to test the hypothesis. The results show that equity prices negatively react to an increase in NPAs reported by banks and positively to a rise in reported accounting returns. In spite of higher accounting returns reported by private sector banks,

market assigns more importance to their risk-related information resulting in low equity prices. On further investigation, the study also observes that this relationship considerably varies with reference to ownership of banks.

In the fourth chapter, this study explores the role of banks' strategic choices in explaining their market prices. The fundamental strategic decisions of a commercial bank are the selection of assets and liabilities. As banks earn revenues from different business operations, distinction on bank revenue flows is relevant to analyze strategic decisions. This study uses a unique dataset of 39

Indian scheduled commercial banks' quarterly segmented revenues for a 29-quarter period (2008 to 2015) and associate that revenue information with their choices related to business strategies.

The literature (Deephouse, 1999; Roberts & Amit, 2003) notes that firms differ because of differing histories of strategic choices. Also, it was argued that strategies selected and implemented by competing firms lead to some variation in realized strategic positions. Using multivariate analysis of variance, this study finds that for any state-owned bank, strategies are differentiated over time. The study also concludes that strategic choices are different even across state-owned banks at any time.

Further this study examines strategic choices from the perspective of focus, diversification, and differentiation. Focus strategy associates with the proportion of revenue a bank generates by focusing on corporate, retail or treasury business segments. Diversification strategy measures the level of diversification a bank has across its business segments (Viral V Acharya, Hasan, & Saunders, 2006). Differentiation strategy relates to the degree of deviance a bank has of its competing banks concerning its mix across business segments (Deephouse, 1999).

The study provides evidence in the case of state-owned and old private sector banks that market does not react to the strategic choice by a bank regarding focus on corporate or retail business segments. Additionally, the study observes the positive impact of diversification on equity market returns under new private sector banks. However, the study also supports a negative effect of diversification strategy under all state-owned banks. Interestingly, in old private sector banks which constitute approximately 15 percent of banking assets, the impact of any strategic choice on equity returns is insignificant. Finally, this chapter does not see any impact of differentiation strategy on equity market returns under any ownership type.

In the fifth chapter, this study examines the effects of banks' strategic choices on systemic risk. Not all banks contribute equally to the risk of the banking system: differences in risk may arise from their strategic choices. Even though the extent of regulatory limits, oversight, and capital charges is common to all banks, strategic choices may impact systemic risk. In particular, since there has been a broad-based rise in the proportion of risky assets in the total assets of Indian banks, the question addressed in this chapter is important. Based on the same data as in Chapter four, this study associates information on banks' revenues by segment with their strategic choices and consider its impact on the CoVaR (Adrian & Brunnermeier, 2011) measure of systemic risk.

Using panel data regressions, this study finds that systemic risk reduces if public sector banks focus less on corporate segments, consistent with theoretical arguments proposed in Besar, Booth, Chan, Milne, and Pickles (2011) and RBI (December 2013). This study also finds that diversifying across business segments by a private sector bank, reduces systemic risk, which is in contrast to the international evidence (Wagner, 2010). Further, this study does not find any impact of differentiation strategy on systemic risk, which is again in contrast to theoretical arguments proposed in Calmès and Théoret (2014).