## Stock Split Decisions: A Synthesis of Theory and Evidence

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This paper reviews various studies of forward and reverse stock splits in the areas of motives for splits, split practices, split effects on firm value, and changes in market activities around splits. It focuses on three hypotheses and their extended evidence. As our analysis shows, the optimal price/tick hypothesis is widely supported and applied; the signaling hypothesis is supported by limited empirical results; and the procedure/structure hypothesis, backed up by some evidence, complements the first and second hypotheses.

■Recently, a stock split event captured the attention of the business world. In January 2010, Berkshire Hathaway declared a 50-for-1 split in its Class B stock shares in order to acquire a railroad company.¹ Such an event, together with the mounting research findings on stock splits during the 1990s and 2000s, rekindles the interest on stock splits for decision makers and practitioners such as corporate financial managers, equity investors, dealers/traders, and regulators.

Most existing studies focus on forward splits because these are far more common than reverse splits. A forward split allows one share to split into a number of shares, resulting in more shares but a lower price per share. Financial instruments other than stocks, such as mutual funds, closedend funds, and exchange-traded funds (ETFs), can also split

<sup>1</sup> The split, which occurred before Berkshire Hathaway bought Burlington Northern Santa Fe, reduced the B-share price of Berkshire Hathaway from \$3,381 to \$67 in order to match the price of Burlington shares (see Section I.A.7 of this paper).

Yan He is an Associate Professor of Finance at Indiana University Southeast in New Albany, IN. Junbo Wang is an Associate Professor of Finance at City University of Hong Kong in Hong Kong, China. into more shares. A reverse split combines several shares into one share, resulting in a higher price per share and fewer shares outstanding. For purposes of studying the effects of splits, a "split event" is said to start with the announcement of the intention to split. The actual split occurs about two months later when the stock price and the number of shares are adjusted accordingly. Thus, the "announcement day" and the "ex-split day" are two important events separated by about 52 days (French and Foster, 2002). Usually, the pre-split period is defined as the time period before the announcement day; the in-between period comprises the announcement day to the ex-split day; and the post-split period is the time period following the ex-split day.

Researchers have observed and analyzed various corporate and market activities before, during, and after splits. They have explored issues such as the motives for splits, split practices in relation to motives, splits' effect on firm value, and changes in market activities around splits. This paper provides a review and summary of stock split literature and addresses the following questions:

- Why do firms split their stocks? Is the rationale to lower share price or to signal good news? Do other corporate events such as mergers and acquisitions (M&As) and seasoned equity offerings (SEOs) or external factors such as a change in market regulation affect the split decision? What makes a fund or an American Depository Receipt (ADR) split its shares?
- Do split practices such as the frequency of splits, the split factor, and signal credibility relate to the split motives? If so, how?
- Does a split event affect firm value? Does the positive