International Review of Economics and Finance 27 (2013) 497–513

Contents lists available at SciVerse ScienceDirect

International Review of Economics and Finance

journal homepage: www.elsevier.com/locate/iref

An analysis of stock repurchase in Taiwan

Li-Hsun Wang [a,*], Chu-Hsiung Lin [b], Hung-Gay Fung [c], Hsien-Ming Chen [d]

[a] *Department of International Business Administration, Wenzao Ursuline College of Languages, Taiwan, 900 Mintzu 1st Rd, Kaohsiung City 80793, Taiwan*
[b] *Department of Risk Management and Insurance, National Kaohsiung First University of Science and Technology, Taiwan, 2 Jhuoyue Rd, Kaohsiung City 81164, Taiwan*
[c] *College of Business Administration, University of Missouri-St. Louis, One University Blvd, St. Louis, MO 63121, USA*
[d] *Department of Finance, Chang Jung Christian University, Taiwan, 396 Sec. 1, Changrong Rd, Tainan City, 71101, Taiwan*

ARTICLE INFO

Article history:
Received 28 December 2011
Received in revised form 30 December 2012
Accepted 16 January 2013
Available online 23 January 2013

JEL classification:
G30
G32
G14

Keywords:
Long-term price performance
Retired shares
Stock repurchases

ABSTRACT

We show that the specific regulation in Taiwan requiring firms to repurchase shares explicitly to resolve the information ambiguity does not prevent market underreaction by the evidences of positive short-term and long-term abnormal return. In addition, firms that retire their buybacks show a superior long-term performance than those that reissue the buybacks. Our results show that the long-term price performance is positively related to firms' operating performance and dividend payouts in the post-repurchase period. Further analysis indicates that the market reacts asymmetrically to the changes of firms' operating performance and dividend payout level.

1. Introduction

Three major theories in the finance literature explain why firms buy back their own shares (Grullon & Michaely, 2004; Ikenberry, Lakonishok, & Vermaelen, 1995; Kahle, 2002; Nohel & Tarhan, 1998). First, the undervaluation hypothesis suggests that firms repurchase their shares when the share prices are too low. Second, the signaling hypothesis asserts that the repurchase decision signals valuable information about better future prospects for earnings, profitability, or operating performance. Third, the free cash-flow hypothesis argues that firms tend to buy back their shares in order to reduce agency costs. A firm with high agency costs implies a high free cash flow and a low investment opportunity.

In light of these three motivations behind stock repurchases, many studies confirm the favorable market reaction to repurchases, with abnormal returns ranging from 3% to 5% on average around the time of the stock repurchase announcements (Chang, Chen, & Chen, 2010; Ikenberry et al., 1995; Lie, 2005; Rau & Vermaelen, 2002; Zhang, 2002). In addition, a long-term (e.g., three years or more) positive price performance after stock repurchase announcements was also seen, implying that the market may underreact to the stock repurchase information in the short term and thus challenges the efficient market hypothesis that the share price has adjusted information instantaneously in a unbiased way (Fama, 1998). Many studies, such as Ikenberry et al. (1995), Ikenberry, Lakonishok, and Vermaelen (2000), Chan, Ikenberry, and Lee (2004), Grullon and Michaely (2004), and Zhang (2005) document positive long-term price performance following the stock repurchases. They argue that the market underreacts to the repurchase announcement in the short term because the market treats the share repurchase announcements with skepticism and reacts slowly to the announcement. Thus, we observe the long-term positive price performance after the repurchase announcement.

* Corresponding author.
E-mail addresses: 97027@mail.wtuc.edu.tw (L.-H. Wang), chusiung@mail.nkfust.edu.tw (C.-H. Lin), fungh@msx.umsl.edu (H.-G. Fung), alvin@mail.cjcu.edu.tw (H.-M. Chen).

1059-0560/$ – see front matter
http://dx.doi.org/10.1016/j.iref.2013.01.007

One plausible explanation for share repurchase skepticism is that a stock repurchase announcement in many countries, such as the United States, conveys to the market an intention rather than a commitment to repurchase shares (Ikenberry & Vermaleln, 1996; Lie, 2005; Stephens & Weisbach, 1998). When investors are unable to differentiate whether the buyback program will be exercised after the announcement, they cannot react properly to the stock repurchase announcement. As a result, a lagged price response to repurchases is expected over time only after confirmation that firms actually buy back their shares. To shed light on this argument, Lee, Jung, and Thornton (2005) use Korean firms, which are required by law to complete the announced repurchases within three months, to investigate price performance following the repurchase announcements. They do not find any long-term abnormal returns for those Korean firms, concluding that the market is efficient and the specific regulations in Korea can resolve the uncertainty of the repurchase announcements.

If regulation is indeed the key to ensuring market efficiency on stock repurchases, we would expect that other countries/markets facing a similar regulation would have insignificant abnormal returns in the long run. In this paper, we use stock repurchase data in Taiwan to investigate both short-term and long-term price performance. Our study examining Taiwanese firms that engage in stock repurchase is of interest for two reasons. First, the regulation in Taiwan is essentially similar to that in Korea (such as the disclosure of the stock repurchase plan, the intended percentage of shares to be repurchased, and the execution period) while the Taiwanese stock repurchase data are unique and highly transparent, compared with the data for the United States (Chang, Lai, & Yu, 2005; Lo, Wang, & Yeh, 2008).

Second, the regulations in Taiwan classify repurchase firms into two groups: those that buyback for reissuing the repurchased shares to employees (i.e., the reissuing firms) and those that buyback for retiring the repurchased shares to maintain firms' credit and shareholder equity (i.e., the retiring firms). Lo et al. (2008) argue that agency problems affect the motives for stock repurchases and the effects of their announcement. That is, the agency problems of firms that buy back their shares in order to transfer them to employees differ from those of firms that buy back their shares to maintain their credit and shareholder equity. Thus, the two types (i.e., the reissuing firms and the retiring firms) of repurchasing firms in Taiwan offer us an opportunity to investigate the argument that different motives of stock repurchases trigger different long-term price performances by stock repurchases. When the retiring firms buy back shares, they are likely to signal to the market that their shares are undervalued because these firms are profitable. Managers of the reissuing firms, compared to the retiring firms, are more likely to reap benefits for themselves from the stock repurchase. Thus, we expect the retiring firms to have fewer agency problems than the corresponding reissuing firms. As a result, the retiring firms are expected to have higher long-term abnormal returns than firms.

Using stock repurchase data in Taiwan from August 2000 to December 2010, we are able to show several interesting results. First, we find that the cumulative abnormal daily returns for six days, $CAR(-1, 5)$, around the announcement period are 2.7%, which is similar to the findings in other studies, while the long-term abnormal returns, average three-year buy-and-hold abnormal returns, are about 38.8% when the market index is used and 44.3% when the market model used for the analysis. These results different from Lee et al. (2005) indicate that the disclosure requirements and strict regulations in Taiwan requiring repurchasing firms to complete the stock repurchase programs reported to the market within two months of the announcements do not eliminate market underreaction. The market underreacts to the share repurchase announcements in the short term and the long-term price performance is positive, implying that market still treats the share repurchase announcements with skepticism. Because there is substantial variations in earnings among the stock-repurchase Taiwanese firms and their following financial performance after the repurchase, investors have reasons to be skeptical, leading to underreaction. Our study rules out the strict regulation to be the key factor in resolving investor skepticism.

Second, we show that the long-term abnormal returns are positive and higher for retiring firms than for reissuing firms, and the difference is sizable and statistically significant. This result is consistent with our argument that the retiring firms are more likely to perform better than reissuing firms in the post-repurchase period. The different results for the two types of firms in Taiwan enable us to understand better how market reacts to stock repurchases in different motives of firms.

Third, our descriptive statistics and regression results indicate that the positive long-term performance cannot be completely explained by the undervaluation hypothesis, free cash-flow hypothesis, and dividend substitution hypothesis for the repurchasing firms. Our results are largely consistent with the signaling hypothesis with a new finding for the retiring firms. We have identified two important factors (i.e., operating performance and dividend payouts) that explain the positive long-term abnormal returns of these stock repurchased firms in the post-repurchase period. In particular, the long-term price performance for firms that increased the dividends or their operating performance after share repurchases is much higher than those that decrease their dividends. Our results contribute to the literature by providing sound economic reasons for the long-term positive price performance following the stock repurchase.

The rest of this paper is organized as follows. Section 2 provides a brief overview of stock repurchase in Taiwan. Section 3 describes the sample selection and methodology. Results are reported in Section 4. The final section is the conclusion.

2. Stock repurchase in Taiwan

Before 2000, the Securities and Exchange Act (SEA) in Taiwan strictly prohibited stock repurchases because the government would protect small investors from exploitation by large shareholders through insider trading. However, several political events occurred that led to a slump in the Taiwan stock market. To rescue the declining stock market, the legal reform of share repurchase deregulated open market share repurchases in August 2000, allowing firms to buy back their shares to help bolster prices.