

Corporate financial leverage and asset pricing in the Hong Kong market

Ron Yiu Wah Ho^{a,*}, Roger Strange^b, Jenifer Piesse^b

^aCity University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong

^bKing's College London, University of London, London, UK

Received 18 April 2006; received in revised form 15 November 2006; accepted 15 May 2007

Abstract

Our earlier paper [see Ho, R. Y.-W., Strange, R., & Piesse, J. (2006). On the conditional pricing effects of beta, size, and book-to-market equity in the Hong Kong market. *Journal of International Financial Markets, Institutions and Money*, 16, 124–199] reported evidence supporting significant conditional pricing effects of beta, size, and book-to-market equity in the Hong Kong market. This study attempts to extend our earlier work by examining the pricing of beta in the presence of another commonly hypothesized risk factor, namely financial leverage, conditional on market situations, i.e. whether the market is up or down. Evidence indicates that market leverage (but not book leverage) exhibits conditional pricing relationship with returns. The study yields important results on a non-US market, which lend strong support to the conditional relationship hypotheses originally developed by Pettengill, Sundaram, and Mathur [(1995). The conditional relation between beta and returns. *Journal of Financial and Quantitative Analysis*, 30, 101–116; and (2002). Payment for risk: Constant beta vs. dual-beta models. *The Financial Review*, 27, 123–136] for the US market. The findings enrich our understanding of capital market behaviour, and should prove helpful to corporate managers and investors in their financial decision making.

© 2007 Elsevier Ltd. All rights reserved.

Keywords: Corporate financial decisions; Financial leverage; Asset pricing

1. Introduction

Empirical tests of the CAPM to date have invariably employed ex post realized returns over a long historical period as a proxy for the ex ante expected returns for a future holding period, and hence the validity of the CAPM might not have been properly examined (see classic studies by Fama and MacBeth (1973) and Fama and French (1992) as examples of key works using ex post realized return data over long historical periods to test the CAPM; and see also Roll's (1977) and Roll and Ross' (1994) critique on the testability of the CAPM in general given the difficulties in identifying the ex ante efficient market portfolio). These prior studies attempted to test for an unconditional, systematic and positive trade-off between average returns and beta, and failed to take into account the fact that the relationship between realized returns and beta is

*Corresponding author.

E-mail address: cmron@cityu.edu.hk (R.Y.W. Ho).

conditional on the relationship between realized market returns and the risk-free rate. The results of these studies using realized returns but ignoring the conditional relationship might be biased against finding a systematic relationship, due to aggregation of positive and negative excess market return periods.

Following the pioneering work of Pettengill, Sundaram, and Mathur (hereafter “PSM”) (1995, 2002) in the US, we examined in an earlier paper the conditional relationships between returns and beta, size, and book-to-market equity in the Hong Kong market (see Ho, Strange, & Piesse, hereafter “HSP”, 2006). Similar to PSM (1995, 2002), HSP (2006) reported strong evidence in support of the hypotheses that beta, size, and book-to-market equity proxy for risks that are systematically priced by the market, but are conditional on market situations, i.e. whether the market is up or down. Similar results supporting the conditional pricing of beta were also reported in other non-US markets, e.g. Fletcher (1997), Isakow (1999), Hodoshima, Garza-Gomex, and Kunimura (2000), and Elsas, El-Shaer, and Theissen (2003) in the UK, Swiss, Japanese, and German markets, respectively. The findings from these studies enrich significantly our knowledge of capital market behavior, which in turn has far-reaching implications for financial decisions.

The vast majority of these studies focused their work on conditional pricing of beta only. PSM (2002) and HSP (2006), on the other hand, enquired into the systematic pricing effects of other risk variables (namely size, and book-to-market equity) in addition to beta. However, it seems that the leverage effect of Bhandari (1988), conditional on market situations, is lacking in the literature. This study therefore extends our earlier work (see HSP, 2006) to look into the conditional pricing of beta and financial leverage in the Hong Kong market, based essentially on the same data set and methodology.

If the CAPM is valid, beta should have captured the financial risk arising from financial leverage, and hence leverage should not explain stock returns in tests that include beta. Bhandari (1988) found that market leverage (total asset to market equity) but not book leverage (total asset to book equity) helped explain the cross-section of average returns in the US in tests that included size and beta: higher leverage is associated with higher returns than that predicted by the CAPM, and vice versa. This result is also supported by Fama and French (1992) in the US. If the securities market is efficient, and if the CAPM is mis-specified, then asset attributes other than beta, such as financial leverage, should contribute to explain cross-sectional variations in returns and be priced by the market.

In the following sections, the data, methodology, empirical results and their interpretation, and conclusion are discussed in turn.

2. Data

The sample data set contains 117 common stocks traded on the Hong Kong market during the sample period from January 1980 to December 1998. The market value of the data sample accounted for over 90% of the total market capitalization (i.e. total market value of all stocks listed and traded on the Hong Kong stock market) continuously throughout the sample period. Given such large market capitalization coverage, it is believed that sample bias, if any, is minimal. This data set is the same as that used in our earlier study (see HSP, 2006) to allow for consistency of analysis and to facilitate comparison of results so as to arrive at more meaningful conclusions.

Market and financial data of these sample firms are retrieved from the Pacific-Basin Capital Markets (PACAP) databases compiled by the University of Rhode Island, and are used to compute the variables used in the tests, namely market leverage (Total Assets/Market Equity, or A/ME), and book leverage (Total Assets/Book Equity, or A/BE). Financial firms are excluded from the sample for the reasons that they are typically much more highly leveraged than non-financial firms and that some of their financial ratios (e.g. A/ME and A/BE) may carry different information content as many of their assets are recorded at market value. In addition, monthly value-weighted market returns with cash dividends reinvested are used to proxy for the returns on the market portfolio (i.e. the market portfolio comprises all stocks listed and traded on the Hong Kong stock market, and hence the market returns are market value-weighted average returns on all stocks listed and traded on the Hong Kong stock market). The Hong Kong inter-bank offer rates on one-month HK\$ deposits are used to proxy for the risk-free interest rate.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات