

Contents lists available at [SciVerse ScienceDirect](http://SciVerse.Sciencedirect.com)

## Journal of Financial Economics

journal homepage: [www.elsevier.com/locate/jfec](http://www.elsevier.com/locate/jfec)

## Do foreigners facilitate information transmission in emerging markets? ☆

Kee-Hong Bae <sup>a,\*</sup>, Arzu Ozoguz <sup>b</sup>, Hongping Tan <sup>c</sup>, Tony S. Wirjanto <sup>c</sup>

<sup>a</sup> *Schulich School of Business, York University, North York, Ontario, Canada M3J 1P3*

<sup>b</sup> *University of Texas at Dallas, Richardson, TX 750803021, USA*

<sup>c</sup> *University of Waterloo, Waterloo, Ontario, Canada N2L 3G1*

## ARTICLE INFO

## Article history:

Received 11 May 2009

Received in revised form

11 April 2011

Accepted 19 May 2011

Available online 8 January 2012

## JEL classification:

F36

G14

G15

## Keywords:

Foreign investors

Information diffusion

Investibility

Price delay

Emerging stock markets

Financial liberalization

## ABSTRACT

Using the degree of accessibility of foreign investors to emerging stock markets, or investibility, as a proxy for the extent of foreign investments, we assess whether investibility has a significant influence on the diffusion of global market information across stocks in emerging markets. We show that greater investibility reduces price delay to global market information. We also find that returns of highly investible stocks lead those of noninvestible stocks because they incorporate global information more quickly. These results are consistent with the idea that financial liberalization in the form of greater investibility yields informationally more efficient stock prices in emerging markets.

© 2012 Elsevier B.V. All rights reserved.

☆ We thank an anonymous referee for many suggestions that greatly improved the paper. We are grateful for comments from seminar participants at McGill University, National University of Singapore, Singapore Management University, Queen's University, Seoul National University, University of Alabama, University of Arkansas, University of Hong Kong, University of North Carolina, University of Northern British Columbia, University of Waterloo, York University, and participants at the American Finance Association meeting, China International Conference in Finance, European Finance Association meeting, Financial Management Association meeting, Northern Finance Association meeting, sixth Annual Darden Conference on Emerging Markets at the New York Stock Exchange, and the Centre for Economic Policy Research European Summer Symposium. We also thank Warren Bailey, Jennifer Conrad, Stephen Christophe, Paul Gao, Kewei Hou, Christian T. Lundblad, Kumar Ventakamaran, Mathijs A. van Dijk, James Weston, Kathy Yuan, and Dinghai Xu for helpful discussion. Hongping Tan gratefully acknowledges research support from the Social Science and Humanities Research Council of Canada. All errors are our own.

\* Corresponding author.

E-mail address: [kbae@schulich.yorku.ca](mailto:kbae@schulich.yorku.ca) (K.-H. Bae).

### 1. Introduction

Market integration is central to the international finance literature. Economists have long studied its welfare gains in terms of risk-sharing benefits (Karolyi and Stulz, 2003) and, more recently, have focused on investment and growth benefits associated with financial market integration (Bekaert, Harvey, and Lundblad, 2001, 2005, 2009). Since the opening of many emerging markets to foreign equity investors in the late 1980s and early 1990s, there has been debate about the role of foreign portfolio capital in emerging markets. On the one hand, episodes of financial crises have prompted many to question the benefits of the liberalization process. On the other hand, a growing body of empirical evidence suggests that opening a market to foreign investors is beneficial. This evidence indicates that stock market liberalizations lower the cost of capital (Henry, 2000b; Bekaert and Harvey, 2000), increase real investment

(Henry, 2000a; Mitton, 2006; Chari and Henry, 2008; Bae and Goyal, 2010), and spur productivity and growth (Bekaert, Harvey, and Lundblad, 2005, 2009).

In this paper, we propose another benefit of stock market liberalizations: improved informational efficiency of prices in local stock markets. We posit that foreign investors are likely to have an advantage in processing global information and, therefore, contribute to the incorporation of such information into stock prices. An important feature of emerging markets is that not all stocks are accessible to foreign investors and the level of limits on foreign ownership varies widely across different stocks. We exploit this variation in foreign equity ownership restrictions across different stocks to study the impact of liberalization on the speed of information diffusion. Specifically, by examining the relation between a stock's accessibility to foreigners, or its investibility, and its stock return dynamics, we show that foreign investors facilitate faster diffusion of global market information among investible stocks in emerging markets.

Our motivation for this study comes from a number of theoretical models that consider how the frictions in investors' information environment affect market prices. Albuquerque, Bauer, and Schneider (2009), for example, consider a model in which global investors have global private information that is valuable for trading in many countries at the same time. The key assumptions in their model are that stock returns are driven by both local and global factors and that global investors receive signals regarding the global factors about which local investors know less. In this setting, they show that the information asymmetry between local and foreign investors with respect to global private information can lead local investors to underreact to movements in global factors. Because local investors underreact to global news, stocks that global investors cannot trade are not likely to incorporate global information promptly into their prices.

Similarly, models employed by Merton (1987), Basak and Cuoco (1998), Shapiro (2002), and Hou and Moskowitz (2005) suggest a link between the speed of information diffusion and limited stock market participation. These models argue that institutional forces, information costs, or transactions costs can delay the process of information incorporation for firms with severe market frictions. We argue that market frictions such as restrictions on foreign equity investments in emerging markets are likely to impede swift processing of global market information, and we test the hypothesis that the removal of these restrictions improves the informational efficiency of stock prices in emerging markets.

We obtain our data on firm characteristics and returns from the Standard & Poor's (S&P) Emerging Markets Database (EMDB). Our final sample includes weekly returns from 21 emerging markets for a total of 4,840 distinct stocks over the period from 1989 to 2008. The key variable for our analysis is a variable called the *degree open factor*, a measure constructed by the EMDB to measure the extent to which a stock is accessible to foreigners. The *degree open factor* allows us to proxy for the degree of foreign investibility. Using this measure, we classify stocks into three investibility groups: noninvestible (foreigners may not own any share of the stock), partially investible (foreigners may own up to 50%

of the stock), and highly investible (foreigners may own more than 50% of the stock).

Our main hypothesis is that the diffusion of global market information is faster for investible stocks than it is for noninvestible stocks. We refer to this hypothesis as the investibility-effect hypothesis. We design our experiment to test this hypothesis against the null of no-investibility-effect hypothesis in two ways. First, we test whether price delay to global market information is related to the degree of a stock's investibility. We measure price delay to global market information as the proportion of stock returns explained by the lagged world market returns in the regression of stock returns on contemporaneous and lagged world market and local market returns (Hou and Moskowitz, 2005). Intuitively, a larger value of this delay measure means that greater return variation is explained by lagged world market returns and, thus, is indicative of a sluggish response to global market information. To the extent that foreign equity investment restrictions bind and hamper the incorporation of value-relevant global information into the pricing of emerging market stocks, we should observe a negative relation between price delay measures and the degree of investibility in support of our investibility-effect hypothesis.

Second, we examine whether a lead-lag pattern exists in the return dynamics between investible and noninvestible stocks. If investible stocks are faster at incorporating global information, which then slowly diffuses to noninvestible stocks, we should expect the returns on investible stocks to lead those on noninvestible stocks. Therefore, a lead-lag pattern between investible and noninvestible stock returns would be evidence in favor of the investibility-effect hypothesis.

A difficulty we face in testing the investibility-effect hypothesis is that investibility could be correlated with other firm characteristics that might also affect the speed of information diffusion. To alleviate the concern that firm fundamentals could be correlated with investibility, we examine a subset of sample firms for which we can identify two types of ordinary shares issued: A shares and B shares. The distinction between these shares is that A shares can be traded only by domestic traders, whereas B shares are traded by foreign investors. Because the fundamentals of these two share classes are exactly the same, any difference in the speed of adjustment to global market information between A shares and B shares can be attributed only to the difference in their investibility, and any such evidence would be taken as evidence to refute the no-investibility-effect hypothesis.

The empirical evidence supports the investibility-effect hypothesis. First, we show that the price delay to global market information is negatively associated with a stock's degree of investibility. In contrast, we find no relation between price delay to local market information and investibility. The absence of such a relation suggests that the degree of investibility is important only for the processing of global market information for which global investors can be especially instrumental. These findings are robust to the choice of different proxies for market information as well as to a variety of alternative regression specifications and control variables.

Second, we find that the returns on highly investible stocks lead returns on noninvestible stocks, but not vice

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

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