ELSEVIER
Journal of Banking & Finance 24 (2000) 1651–1679
Journal of BANKING & FINANCE
www.elsevier.com/locate/econbase

An examination of herd behavior in equity markets: An international perspective

Eric C. Chang [a], Joseph W. Cheng [b], Ajay Khorana [c,*]

[a] *School of Business, The University of Hong Kong, Pokfulam Road, Hong Kong*
[b] *The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong*
[c] *DuPree College of Management, Georgia Institute of Technology, 755 Ferst Drive, Altanta, GA 30332-0520, USA*

Received 21 March 1998; accepted 2 September 1999

Abstract

We examine the investment behavior of market participants within different international markets (i.e., US, Hong Kong, Japan, South Korea, and Taiwan), specifically with regard to their tendency to exhibit herd behavior. We find no evidence of herding on the part of market participants in the US and Hong Kong and partial evidence of herding in Japan. However, for South Korea and Taiwan, the two emerging markets in our sample, we document significant evidence of herding. The results are robust across various size-based portfolios and over time. Furthermore, macroeconomic information rather than firm-specific information tends to have a more significant impact on investor behavior in markets which exhibit herding. In all five markets, the rate of increase in security return dispersion as a function of the aggregate market return is higher in up market, relative to down market days. This is consistent with the directional asymmetry documented by McQueen et al. (1996) (McQueen, G., Pinegar, M.A., Thorley, S., 1996. Journal of Finance 51, 889–919). © 2000 Elsevier Science B.V. All rights reserved.

JEL classification: G15

Keywords: International capital markets; Herd behavior; Equity return dispersion; International finance

* Corresponding author. Tel.: +1-404-894-5110; fax: +1-404-894-6030.
E-mail address: ajay.khorana@mgt.gatech.edu (A. Khorana).

PII: S 0 3 7 8 - 4 2 6 6 (9 9) 0 0 0 9 6 - 5

1. Introduction

Academic researchers have devoted considerable effort in understanding the investment behavior of market participants and its ensuing impact on security prices. The investment behavior of market participants has been linked to factors such as investor's investment horizons, the benchmarks used to measure performance, the behavior of other market participants, the degree of underlying market volatility, and the presence of fads and speculative trading activity in the financial markets.

In this paper, we investigate the investment behavior of market participants within different international markets, specifically with regard to their tendency to mimic the actions of others, i.e., engage in herd behavior. Herding can be construed as being either a rational or irrational form of investor behavior. According to Devenow and Welch (1996), the irrational view focuses on investor psychology where investors disregard their prior beliefs and follow other investors blindly. The rational view, on the other hand, focuses on the principal–agent problem in which managers mimic the actions of others, completely ignoring their own private information to maintain their reputational capital in the market (Scharfstein and Stein, 1990; Rajan, 1994). [1] Bikhchandani et al. (1992) and Welch (1992) refer to this behavior as an informational cascade.

In a recent empirical study, Christie and Huang (1995) examine the investment behavior of market participants in the US equity market. By utilizing the cross-sectional standard deviation of returns (CSSD) as a measure of the average proximity of individual asset returns to the realized market average, they develop a test of herd behavior. In particular, they examine the behavior of CSSD under various market conditions. They argue that if market participants suppress their own predictions about asset prices during periods of large market movements and base their investment decisions solely on aggregate market behavior, individual asset returns will not diverge substantially from the overall market return, hence resulting in a smaller than normal CSSD.

In this paper, we extend the work of Christie and Huang (1995) along three dimensions. First, we propose a new and more powerful approach to detect herding based on equity return behavior. Using a non-linear regression specification, we examine the relation between the level of equity return dispersions (as measured by the cross-sectional absolute deviation of returns, i.e., CSAD), and the overall market return. In the presence of severe (moderate) herding, we

[1] Herd behavior can become increasingly important when the market is dominated by large institutional investors. Since institutional investors are evaluated with respect to the performance of a peer group, they have to be cautious about basing their decisions on their own priors and ignoring the decisions of other managers. In fact, Shiller and Pound (1989) document that institutional investors place significant weight on the advice of other professionals with regard to their buy and sell decisions for more volatile stock investments.