Emerging Markets Review 13 (2012) 381–409

Contents lists available at SciVerse ScienceDirect

Emerging Markets Review

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

The interaction between foreigners' trading and emerging stock returns: Evidence from Turkey

Numan Ülkü [a,b,*], Deniz İkizlerli [c]

[a] Central European University, Hungary
[b] American University in Bulgaria, Bulgaria
[c] Durham University, UK

A R T I C L E   I N F O

Article history:
Received 29 June 2011
Received in revised form 19 March 2012
Accepted 4 June 2012
Available online 16 June 2012

JEL classification:
G11
G14
G15

Keywords:
Foreign equity portfolio flows
Emerging stock markets
Foreigners' trading behavior
Feedback trading
Information content of trading

A B S T R A C T

Using monthly foreign flows data on Istanbul Stock Exchange (ISE) and employing a structural VAR model, we analyze the interaction between foreigners' trading and emerging stock returns. In contrast to most of the available theory and repeated previous findings on other markets, foreign investors negative-feedback-trade with respect to past local returns in ISE, however only in rising markets and especially under macroeconomic instability. Net foreign flows forecast future market returns, but not individual stock returns. Price impacts are permanent, suggesting that foreigners' trading incorporates information. Overall, results reject previous conclusions that foreigners are uninformed positive feedback traders: rather, they are a heterogeneous group dominated by sophisticated investors able to rationally adjust their trading style in line with the market's prevailing characteristics.

1. Introduction

Many emerging economies have been dependent on international portfolio capital inflows, sudden reversals of which have been associated with severe destabilizing effects. Hence, policy makers and researchers are interested in understanding the nature of those flows and their impact on domestic financial markets. One strand of this literature studies the interaction between foreign investors' trading and equity returns, as foreign investors as a group are believed to behave differently and to have a strong impact on emerging stock markets. Foreign flows data compiled at the destination market enable a reliable analysis of foreign investors' trading behavior, the impact and forecast ability of their trades on stock

* Corresponding author at: American University in Bulgaria, Bulgaria. Tel.: + 359 73 888 493.
E-mail address: nulku@aubg.bg (N. Ülkü).

1566-0141/$ – see front matter
doi:10.1016/j.ememar.2012.06.002

returns. Specifically, recent research using such data (e.g. Dahlquist and Robertsson, 2004; Dvořák, 2005; Griffin et al., 2004; Richards, 2005) has addressed the following questions: i) Do foreign investors pursue positive feedback trading strategies? ii) What is the impact of foreign flows on domestic stock returns? Is the contemporaneous impact explained by price pressure or by information? iii) Does foreigners' trading contain superior information (i.e., forecast ability)? Empirical answers to these questions, in turn, provide tests of theories of foreign investor behavior (Albuquerque et al., 2007; Brennan and Cao, 1997; Dvořák, 2003; Griffin et al., 2004; Hau and Rey, 2004).

EEMENA (Eastern Europe, Middle East, North Africa) region has been surprisingly neglected in this literature,[1] despite it hosts those emerging economies that are most dependent on foreign capital inflows. The current empirical characterization of the interaction between foreign flows and emerging stock returns in the extant literature is incomplete as it excludes emerging economies with large external deficits in the EEMENA region. These markets differ from Asian markets extensively studied in the literature in that foreign investor participation is much higher: for example, the ratio of market capitalization held by foreigners has ranged between 60% and 75% in Turkey (as in many other EEMENA markets) in recent years, whereas the same ratio stands between 25 and 35% in Asian markets. While several panel studies include emerging markets from the EEMENA region, they use data either from one source country or one custodian.[2] Such data have been shown to contain measurement errors as they do not include all foreign flows (Pavabutr and Yan, 2007). Indeed, the correlation between our actual and complete foreign flows series on Turkey and that derived from the Treasury International Capital (TIC) dataset is merely +14.9% during our sample period. An exclusive branch of the literature has been emerging using complete data compiled at the destination market (Dahlquist and Robertsson, 2004; Griffin et al., 2004; Richards, 2005; Kim et al., 2008; Samarakoon, 2009; Reis et al. 2010). The current paper contributes to this literature by presenting the first major study on an EEMENA market using complete foreign flows data compiled at the destination, both at the marketwide level and for individual stocks. The empirical evidence presented in this study offers an illuminating out-of-sample test of the aforementioned theories of international investor behavior.

Istanbul Stock Exchange (ISE), the largest and deepest stock market in the EEMENA region, is an interesting avenue to add to this literature, as detailed foreign flows data are compiled in a centralized manner. Our comprehensive search process indicated that ISE offers one of the cleanest foreign flows data in the EEMENA region and the only publicly available data on foreigners' trading individual stocks.[3] ISE is ranked seventh among all world emerging markets in terms of the total value of shares traded. Moreover, Turkish markets possessed some interesting characteristics such as persistent high inflation, very high real interest rates, political turnover and volatility during the first half of our sample period. A dramatic improvement in political and macroeconomic stability in the second half enables a comparison of foreign flows dynamics under different conditions (see Panel B of Table 1). Turkey removed all restrictions on foreign portfolio investments in August 1989. Available data on foreign flows starts from January 1997, therefore our analysis is not blurred by the initial impact of liberalization (i.e.; one-time portfolio rebalancing by international investors) as documented in Bekaert et al. (2002) and Dahlquist and Robertsson (2004). Finally, partial restrictions (e.g. Korea, Taiwan, Thailand) could distort the results in previous studies. Since 1989, Turkey has never implemented any (partial) restrictions on foreigners' trading in the stock market. Therefore, ISE offers an opportunity to document the true behavior of foreign investors free of any restrictions and post-liberalization effects, thus this study provides a major out-of-sample test of previous findings.

Employing one of the longest (14 years) samples in this line of literature, we present a comprehensive exploration of the interaction between foreign flows and equity returns, including several

[1] The only exception is Slovenia included in Griffin et al. (2004). However, the Slovenia market is so small that the authors ignored it in reaching their main conclusions.

[2] Froot et al. (2001) cover a large number of host countries, but their data are limited to only one particular custodian (State Street). Brennan and Cao (1997), Bekaert et al. (2002) and Lin and Swanson (2008) use data from one source country (TIC data from US). Jinjarak et al. (2011) use mutual fund flows data from a research firm (EPFR Global).

[3] Within a research project supported by OTKA (the Hungarian National Scientific Research Fund), we performed a comprehensive search for data on foreign investors' trading. Most European emerging stock exchanges (e.g. Prague, Budapest, Warsaw) do not collect any such data except for asking member brokers for a rough estimate of foreign clients' annual total trading volume.