

Contents lists available at SciVerse ScienceDirect

### **Emerging Markets Review**

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

## Size, value and liquidity. Do They Really Matter on an Emerging Stock Market? $\overset{\backsim}{\succ}$

Judith Lischewski<sup>a,\*</sup>, Svitlana Voronkova<sup>b</sup>

<sup>a</sup> Department of Economics, Am Stadtgraben 9, D-48143 Münster, Germany
 <sup>b</sup> Centre for European Economic Research (ZEW), L 7, 1 68161 Mannheim, Germany

#### ARTICLE INFO

Article history: Received 10 November 2010 Received in revised form 17 September 2011 Accepted 20 September 2011 Available online 28 September 2011

Keywords: Liquidity Size effect Value effect Expected stock returns Eastern Central European stock markets Emerging markets

#### ABSTRACT

The paper extends the evidence on factors determining stock prices on emerging markets by focusing on the most advanced stock market in Central and Eastern Europe, the Polish market. Besides market, size and value factors, we investigate whether liquidity is a priced risk factor, addressing the hypothesis of its particular relevance in emerging markets. Our results support existing evidence for developed markets regarding market, size, and value factors. Contrary to the expectation that liquidity is a priced factor on emerging markets, we do not find evidence supporting this hypothesis. Analyzing specific market characteristics, we consider possible explanations behind these findings.

© 2011 Elsevier B.V. All rights reserved.

EMERGINO MARKETS REVIEW

#### 1. Introduction

There is substantial empirical evidence that stock returns can be better explained by a combination of risk factors rather than by a single-factor model. Starting in the late seventies and early eighties a number of factors contributing to the explanation of the cross-section of average returns have been detected. These include size (Banz, 1981; Fama and French, 1992; Keim, 1983; Reingaum, 1981), price–earnings ratio (Basu, 1977; Reingaum, 1981) and momentum effect (Brennan et al., 1998; Jagadeesh and Titman, 1993). The seminal studies by Fama and French (1992, 1993, 1998) show that a combination of size and book-to-market effect is better able to capture the cross-section of stock returns than the market beta

1566-0141/\$ – see front matter 0 2011 Elsevier B.V. All rights reserved. doi:10.1016/j.ememar.2011.09.002

<sup>&</sup>lt;sup>A</sup> Part of the paper was completed when Svitlana Voronkova was in the School of Business, Trinity College Dublin, Ireland. We are indebted to participants of the 6th Portuguese Finance Network conference, the "Xth Doctoral Meetings in International Trade and International Finance" organized by the network RIEF, the Conference "Heterogeneous Nations and Globalized Financial Markets: New Challenges for Central Banks", the 2nd International Conference "Economies of Central and Eastern Europe: Convergence, Opportunities and Challenges", and the research seminar of the Westfälische Wilhelms-University, especially to Martin Bohl, Crina Pingulescu, Christian Salm and Michael Schuppli for helpful comments and suggestions.

<sup>&</sup>lt;sup>k</sup> Corresponding author at: Breitlacherstr. 75, D-60489 Frankfurt am Main, Germany. Empil address indith list analysis da (L. List analysis).

E-mail address: judith.lischewski@web.de (J. Lischewski).

alone. The results of these studies have not remained uncontested, with a number of papers suggesting explanations behind the size and book-to-market factors and extensions to the original Fama-French three-factor model (Bauer et al., 2010; de Groot and Verschoor, 2002; Ferson and Harvey, 1999; Griffin, 2002; Hyde and Sherif, 2010; Liew and Vassalou, 2000; Llewellen, 1999; Malkiel and Jun, 2009; Shum and Tang, 2005). In particular, the seminal paper of Amihud and Mendelson (1986) paved the way to numerous studies suggesting that liquidity may be the relevant factor that explains stock returns after the three Fama-French factors have been accounted for. The rationale behind is that illiquidity can be measured as costs of immediate execution and an investor willing to transact at a favorable price faces a trade-off: he may either wait to transact at a favorable price or insist to execute a transaction immediately at a current bid or ask price (Amihud and Mendelson, 1986). Transaction costs therefore represent a cash outflow that reduces future returns. Additionally, Brennan and Subrahmanyam (1996) and Glosten and Milgrom (1985) note that a primary cause of illiquidity in financial markets is the adverse selection, which arises from the presence of informed traders. If a marginal investor is uninformed, he may demand higher rates of return when the adverse selection problem is more severe. Since then a number of studies examined the relevance of liquidity as a driver behind asst prices, producing conflicting results. For developed equity markets, the influence of liquidity on stock returns has predominantly been studied for the US market, and also for Japan and other mature international markets. The studies include among others, those by Acharya and Pedersen (2005), Amihud (2002), Chang et al. (2010), Garleanu (2009), Keene and Peterson (2007), Limkriangkrai et al. (2008), Liu (2006), Marcelo and del Mar Miralles Quiros (2006), Nguyen et al. (2007), and Pastor and Stambaugh (2003). A recent analysis by Lam and Tam (2011) shows that liquidity is indeed an important factor for asset pricing even after accounting for other well-established risk factors. The recent findings by Hearn (2011b) suggest a less clear effect of liquidity on asset pricing, depending on characteristics of the surveyed stock market. Studying the relationship between liquidity and asset pricing in an international setting Lee (2011) finds that liquidity is priced even after controlling for market, size and value factors. In addition, the study illustrates the link between market liquidity and liquidity of individual securities.

Dey (2005) shows that the notion of risk differs between emerging and developed markets, which has to be considered in asset pricing analyses.<sup>1</sup> Bekaert et al. (2007) point out that liquidity risk is particularly important for the less sophisticated markets where the number of both securities and investors is scarce. The findings by Lee (2011) indicate that stocks listed in emerging markets are generally characterized by a high liquidity risk compared to developed markets. So far, however, the empirical studies analyzing the influence of the above mentioned risk-factors on stock returns have concentrated on the more developed markets. However, as investments in emerging markets play an increasing role in asset allocation, related asset pricing studies gain importance. So far related literature (among others Bekaert et al., 2007; Brown et al., 2008; Dey, 2005; Hearn, 2010a,b, 2011a; Hearn and Piesse, 2009, 2010; Jun et al., 2003; Lee, 2011) either omitted Central and Eastern European emerging markets altogether or included only very limited sets of data.<sup>2</sup> Central and Eastern European emerging stock markets are gaining importance, however, necessitating corresponding empirical research. Since investments in those markets are typically associated with substantial risk premia and consequently with high costs, the present findings are of interest for fund managers and investment professionals. Being the most advanced stock market in the region, the WSE is a clear leader in terms of development and financial integration in Eastern and Central Europe. Its market capitalization, trading volume, the number and variety of traded securities make the Polish market the leading stock exchange in the region, satisfying all necessary conditions for reasonable empirical research. The regulatory environment, which is compliant with EU standards, and the well-developed infrastructure make the WSE particularly attractive to foreign investors (Warsaw Stock Exchange, 2011). Due to the pioneering role of the Polish market in Eastern and Central Europe, our empirical results are of relevance for the other closely related emerging markets of this region. The present findings allow conclusions for those markets and might therefore be of

<sup>&</sup>lt;sup>1</sup> See also Bruner et al. (2002) for an extensive overview of the differences in characteristics and valuation approaches between developed and emerging markets.

<sup>&</sup>lt;sup>2</sup> Lee (2011) studies the relationship between liquidity and asset pricing for a wide range of international equity markets. The underlying dataset includes developed as well as emerging equity markets, including Central and Eastern European markets. However, the study does not allow making conclusions regarding the role of liquidity on the CEE markets, because only aggregate results for broader regions are provided and specific findings on the CEE markets are not reported in the paper.

# دريافت فورى 🛶 متن كامل مقاله

- 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
- ISIArticles مرجع مقالات تخصصی ایران