



## Investigating the role of illiquidity in explaining the UK closed-end country fund discount



Richard Davies, Mary Fletcher, Andrew Marshall \*

Department of Accounting & Finance, University of Strathclyde, Curran Building, 100 Cathedral Street, Glasgow G4 0LN, United Kingdom

### ARTICLE INFO

#### Article history:

Received 12 December 2011

Received in revised form 17 April 2013

Accepted 9 July 2013

Available online 27 July 2013

#### JEL classification:

G14

G12

#### Keywords:

Closed-end country funds

Investment trusts

Illiquidity

Sentiment

### ABSTRACT

In this paper we examine whether the UK closed-end country fund premium is related to the illiquidity of the UK fund or the illiquidity of the country in which the fund invests. We also consider whether emerging market country funds behave differently in terms of their premium and illiquidity to developed market country funds, and in particular whether they offer more stability during the period of the recent financial crisis. We find that country illiquidity plays a significant role in the premium of emerging market funds. However, in developed market funds country illiquidity is not significant. Fund illiquidity, in contrast, is significant for developed market funds but not for emerging market funds. The recent financial crisis has had a marked effect on the premium and illiquidity across both developed and emerging market funds, but emerging market funds seem to have recovered to pre-crisis levels more quickly than funds investing in developed markets.

© 2013 Elsevier Inc. All rights reserved.

### 1. Introduction

Naes, Skjeltorp, and Odegaard (2011) state that ‘investor participation is related to market liquidity.’ (p139). In this paper we argue that investor participation is also related to market *illiquidity*. The aims of the study are as follows. Firstly, we ask whether the UK closed-end country fund premium<sup>1</sup> is affected by the illiquidity of the UK fund, the illiquidity of the foreign market, or other factors. Secondly, we compare emerging and developed market closed-end funds to examine if country and fund illiquidity has a different influence on the premium between the two groups. Thirdly, we consider how the recent financial crisis affected the UK country fund premium, fund and country illiquidity.

Our research adds to our understanding of the key role played by illiquidity in the pricing of UK closed-end country funds. In particular, it shows the different impacts that fund and country illiquidity have on the premium. It considers if the roles played by fund and country

illiquidity change, depending on whether the fund invests in an emerging or developed market.<sup>2</sup> We also add to the literature examining the impact of monetary shocks and analyse what happens to the premium and fund illiquidity when a crisis affects the home market, and how these effects can differ in severity, depending on whether the fund invests in an emerging or developed market.

Despite the fact that UK closed-end funds form a very important part of the financial sector,<sup>3</sup> there are no published studies of UK closed-end single country funds, in contrast to the larger number of studies of US closed-end country funds. In studying UK funds there are institutional differences between US and UK closed-end funds that could give rise to different findings. One major difference is that of share ownership: between 1998 and 2008 private individuals held less than 20% on average of UK closed-end fund shares (Office for National Statistics, 2009), whereas Hardouvelis, LaPorta, and Wizman (1994) find that over 80% of investors in US closed-end funds are private individuals. This implies that there is potentially less noise trading in UK trading and therefore

\* Corresponding author. Tel.: +44 141 548; fax: +44 141 552 3547.

E-mail address: a.marshall@strath.ac.uk (A. Marshall).

<sup>1</sup> Closed-end funds, known as investment trusts in the UK, have both a share price on the stock market, and a net asset value (NAV) per share, the value of the shares invested in by the company. Although both are claims to the same assets, they rarely have the same value. A share price above the NAV gives rise to a premium, while a share price below the NAV gives rise to a discount (negative premium). In this study we follow Chan et al. (2008) and use the one term ‘premium’ to refer to both positive and negative premiums (discounts).

<sup>2</sup> In this study we examine 55 UK funds. 14 of these invest in emerging markets (Thailand, Indonesia, the Philippines, India, China, Russia, Taiwan, South Africa, Turkey and South Korea). The remaining funds invest in Japan, the US, Germany, France, Ireland, New Zealand, Australia or Canada.

<sup>3</sup> The total asset sector value of UK closed-end funds is approximately 16.8% that of the total funds under management of UK unit trusts (IMA, 2010). In contrast, the US closed-end fund sector has a sector value of only just over 2% of US mutual funds, even when we include bond funds (Investment Company Institute, 2010). The UK also has a relatively large number of funds: there are currently 26 single closed-end country funds in the UK as compared with 21 in the US.

less volatility. A further reason for focusing on the UK is that the UK closed-end fund sector is much more important relative to the UK economy than the US closed-end fund sector is to the US economy.

The main finding of the paper is that both country and fund illiquidity play highly significant roles in the UK closed-end country fund premium. We also find that the role played by illiquidity in the premium alters during the financial crisis. In emerging market funds, country illiquidity is significantly positively related to the premium, even in the presence of control variables. This suggests that UK investors are willing to pay more for access to illiquid emerging markets perhaps because of their growth potential. However, for developed market funds, the illiquidity of the fund itself is significantly negatively related to the premium, showing that investors are deterred by fund illiquidity in this sector. In addition, we find that the average domestic fund premium, frequently associated with investor sentiment, is a highly significant factor in both the developed and emerging market fund premium. We also find a strong and significant relation between the average premium of the funds in the sample and average fund illiquidity, suggesting that the common movement in the premium could be related to fund illiquidity. Over the financial crisis period, the developed market fund premium drops steeply, but emerging market funds show more stability. This shows that investors could have had more confidence in these markets, despite the research showing that all markets were affected by the financial crisis (Bartram & Bodnar, 2009). The illiquidity of all developed markets (but one) increases significantly, but emerging markets are affected more gradually as only one of the emerging markets shows an increase in illiquidity over the period under study. During the crisis, developed market illiquidity becomes significantly negatively associated with the premium, suggesting that investors are unwilling to pay for access to developed illiquid markets.

Surveys of research into closed-end funds show that there is little agreement as to the nature and causes of the closed-end fund premium.<sup>4</sup> One strand of research principally associated with Lee, Shleifer, and Thaler (1991) suggests that irrational noise trader sentiment is the cause, while another strand identifies rational factors. Bodurtha, Kim, and Lee (1995) find evidence to support the noise-trader sentiment model in relation to country funds. They argue that the premium captures the difference in sentiment between the US and foreign market investors. Pontiff (1996) takes a rational limited arbitrage approach and argues that deviations from pricing equilibrium can particularly affect US country funds which are more difficult to arbitrage. In one of the few studies of UK closed-end funds, Gemmill and Thomas (2002) suggest that the negative premium (discount) of UK funds also arises because of limitations to arbitrage, but that discount fluctuations are due to noise-trader sentiment. In a similar study Flynn (2012) finds contrasting results for US and UK funds. He points to the possibility of greater irrationality in US pricing due to the greater proportion of retail investors in the US. UK closed-end fund ownership, in contrast, is dominated by institutional shareholders who are less likely to be irrational noise traders. Gemmill and Thomas (2011) further confirm this difference between investor groups in the two countries.

Another line of research argues that liquidity plays a role in the closed-end fund premium. Datar (2001) argues that closed-end fund discounts and premiums result from liquidity differences between the closed-end fund and the underlying assets. When the fund share is more liquid than the assets, a premium will result; when the underlying assets are more liquid, a discount (negative premium) will result. Cherkes, Sagi, and Stanton (2009) argue that US closed-end funds offer small investors a liquidity benefit for which they are prepared to pay a premium at the time of the IPO, which is then traded off against the fees charged by the fund managers, resulting in a discount (negative premium). They find that liquidity, rather than sentiment, provides the explanation for the closed-end fund premium. In their analysis of US

country funds, Chan, Jain, and Xia (2008) suggest that relative market illiquidity explains part of the variation in closed-end country fund premium. If capital markets are segmented, it follows that the closed-end country fund premium will be positively affected by asset illiquidity but negatively affected by share price illiquidity. In other words, investors will pay more for a share that invests in an illiquid asset which they cannot otherwise invest in (increasing the premium) but less if the share itself becomes illiquid (reducing the premium). This study deals with similar issues to Chan et al. (2008) but considers UK funds over a longer and more recent period. We also examine the behaviour of developed and emerging country funds during a crisis affecting developed markets and carry out additional robustness tests to examine the impact of volatility and exchange rate fluctuations during the crisis.

The remainder of this paper is organised as follows. Section 2 describes the data and introduces the research method. Section 3 provides the empirical results and Section 4 examines the funds during the recent financial crisis. Section 5 concludes.

## 2. Data and research method

We collect data on UK closed-end funds that invest in single foreign countries from a range of sources. Datastream, the London Share Price Database, Investment Trust Yearbooks and the periodical 'Money Management' provide return data and information on fund investment objectives. These sources provide us with a complete sample of 55 single country funds<sup>5</sup> from 31 December 1992 to 31 December 2009. We include funds that ceased trading between these dates as well as funds that were active during the whole sample period to avoid survivorship bias. 14 of these funds invest in 10 emerging markets (Thailand, Indonesia, the Philippines, India, China, Russia, Taiwan, South Africa, Turkey and South Korea). The remaining 41 funds invest in 8 developed markets. Most funds invest in Japan (18) and the US (12), and the others invest in Germany, France, Ireland, New Zealand, Australia or Canada.

We collect monthly data from Datastream on the sample of 55 UK traded closed-end country funds from 31 December 1992 to 31 December 2009. Data includes the monthly closing price from the last trade and the monthly diluted net asset value (NAV) of each fund. The difference between the natural log of the NAV and natural log of the share price is the premium (PREM):

$$PREM \equiv \ln SharePrice - \ln NAV. \quad (1)$$

To calculate fund illiquidity we collect the daily return on each fund from the return index and aggregate this to give the absolute monthly return on the fund. We collect monthly turnover from the London Share Price Database. To calculate country illiquidity we collect the daily return on each country index to which the funds correspond and aggregate this to give the absolute monthly return for the index. We also collect monthly turnover for each country index.

Studies have shown that closed-end funds typically begin at a premium to the NAV and within a few months fall into a discount i.e. a negative premium (see Weiss Hanley, Lee, and Seguin (1996) for US funds and Lewis and Thomas (1995) for UK funds). We therefore exclude the first six months from the fund IPO. If the fund merely changes objective and becomes a single country fund, the first six months are not excluded as the fund has already been through the IPO process. We also exclude the month before the fund is liquidated, open-ends or changes in objective. In most cases the birth month of the fund corresponds to the date on which both the price and NAV of the fund are provided on Datastream.<sup>6</sup>

<sup>5</sup> The sample consists of conventional funds. Split capital funds are excluded as their shares can behave differently.

<sup>6</sup> There are seven cases in which the NAV is not published until the following month and so the first entry of the fund is taken to be when both price and NAV are available.

<sup>4</sup> Dimson and Minio-Kozerski (1999) provide a comprehensive review. See also Cherkes (2012) for a more recent review.

Download English Version:

<https://daneshyari.com/en/article/5084946>

Download Persian Version:

<https://daneshyari.com/article/5084946>

[Daneshyari.com](https://daneshyari.com)