



ELSEVIER

Contents lists available at [SciVerse ScienceDirect](#)

## Emerging Markets Review

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

# Evaluating the performance of global emerging markets equity exchange-traded funds

David Blitz <sup>a,1</sup>, Joop Huij <sup>a,b,\*</sup><sup>a</sup> Robeco, Coolingsingel 120, 3011 AG, Rotterdam, The Netherlands<sup>b</sup> Erasmus University Rotterdam School of Management, Burg. Oudlaan 50, 3000 DR, Rotterdam, The Netherlands

## ARTICLE INFO

## Article history:

Received 14 September 2011

Received in revised form 13 January 2012

Accepted 28 January 2012

Available online 4 February 2012

## Keywords:

Exchange-traded funds

Performance evaluation

Tracking error

## ABSTRACT

We examine the performance of passively managed exchange-traded funds (ETFs) that provide exposure to global emerging markets equities. We find that the tracking errors of these funds are substantially higher than previously reported levels for developed markets ETFs. ETFs that use statistical index replication techniques turn out to be especially prone to high tracking errors, and particularly so during periods of high cross-sectional dispersion in stock returns. At the same time, we find no convincing evidence that these funds earn higher returns than ETFs that rely on full-replication techniques.

© 2012 Elsevier B.V. All rights reserved.

## 1. Introduction

A large number of studies have investigated the performance of actively managed equity mutual funds. The main conclusions of these studies are that the average active fund underperforms the market portfolio by the magnitude of its expenses, and that only a relatively small number of active funds show persistent outperformance (see, e.g., [Bollen and Busse, 2005](#); [Carhart, 1997](#); [Elton et al., 1996](#); [Hendricks et al., 1993](#)). These findings have had significant implications for developments in the investment management industry. Perhaps most importantly, it has contributed to the increasing popularity of investing in passively managed funds, which aim to replicate broad market indexes at minimal costs. Because passive funds typically have lower costs than active funds, one might expect passive funds to outperform active funds on average. This proposition seems to appeal to a large group of investors.

Exchange-traded funds (henceforth, ETFs) are passive investment vehicles which have become increasingly popular in a relatively short period of time. An important difference with conventional index

\* Corresponding author at: Erasmus University Rotterdam School of Management, Burg. Oudlaan 50, 3000 DR, Rotterdam, The Netherlands. Tel.: +31 10 4081276.

E-mail addresses: [d.c.blitz@robeco.nl](mailto:d.c.blitz@robeco.nl) (D. Blitz), [jhuij@rsm.nl](mailto:jhuij@rsm.nl) (J. Huij).

<sup>1</sup> Tel.: +31 10 2242079.

funds is that, similar to individual stocks, ETFs can be bought and sold throughout the trading day. For more detailed information on the origin and characteristics of ETFs we refer to [Haslem \(2003\)](#). Over the past two decades the number of ETFs has grown from zero to over 2000 funds, with aggregate assets under management in excess of \$1000 billion ([Blackrock, 2010](#)). Studies that have examined the performance of ETFs that track U.S. equity indexes conclude that ETF performance is predictable to a high degree of accuracy: ETFs generally manage to stay close to their benchmark indexes with low levels of tracking error, and there seems to be a one-to-one negative relation between fund returns and their expenses (see, e.g., [Agapova, 2011](#); [Elton et al., 2004](#); [Gastineau, 2004](#); [Poterba and Shoven, 2002](#)). The latter result is extended by [Blitz et al. \(forthcoming\)](#), who show that passive equity funds which invest outside their country of incorporation suffer from an additional drag on performance from missed dividend income, as a result of withholding taxes imposed by foreign tax authorities. For their sample of passive funds listed in Europe they find that the explanatory power of dividend withholding taxes as a determinant of underperformance is at least on par with fund expenses. [Svetina and Wahal \(2008\)](#) also investigate the performance of ETFs that track international equity indexes and find that the tracking error levels of these funds are more than double those of ETFs that track domestic U.S. equity indexes.

The focus of the existing literature is on the performance of ETFs designed to mimic indexes for the U.S. or other developed equity markets. To the best of our knowledge, no study has specifically investigated the performance of ETFs that aim to mimic global emerging markets (GEM) equity indexes.<sup>2</sup> Global emerging markets comprise countries such as South Korea, China, India, Brazil, South Africa and Russia, which have become increasingly important to investors due to their fast growing economies. This trend is also reflected in the composition of the MSCI All Countries index, in which the weight of emerging markets has grown from roughly 1% in 1988 to around 14% today. [Klapper et al. \(2004\)](#) also document an explosive growth of emerging market funds since the 1990s. Not surprisingly, GEM ETFs have become increasingly popular as a result of these developments. A comprehensive analysis of the performance of GEM ETFs is relevant because it is unclear if results found in the academic literature for U.S. and European equity ETFs carry over directly to GEM ETFs.

The first objective of this paper is to evaluate the overall performance of GEM ETFs. A priori, there are good reasons to expect that it is more complicated to closely track benchmark indexes in emerging than developed markets. An example of a complicating factor with which GEM ETFs need to cope is that many of the underlying markets are geographically located in time zones which are different from the ones in which the ETFs trade. For example, many Asian markets are closed during NYSE opening hours. [Johnson \(2009\)](#) examines the tracking performance of U.S.-listed ETFs on individual foreign countries and finds significantly higher tracking errors when the opening hours of the foreign markets do not overlap with the stock exchanges on which the ETFs are traded. Another complicating factor is foreign exchange-rate volatility. [Shin and Soydemir \(2010\)](#) find that a higher exchange-rate volatility is generally accompanied by a higher tracking error for U.S.-listed ETFs on individual foreign countries.

Moreover, even without the complications arising from time zone differences and exchange-rate volatility, we argue that tracking errors of GEM ETFs are likely to be higher than for their developed market counterparts. The reason is that, as we will show in this paper, the cross-sectional dispersion in stock returns is structurally larger in emerging markets than in developed markets. As a consequence, similar-sized deviations between portfolio and index weights typically result in larger return deviations for a GEM ETF than for a developed markets ETF.

Another issue that arises with emerging markets is that stocks in these markets are less liquid and have higher trading costs than stocks in developed markets. For example, [Domowitz et al. \(2001\)](#) estimate that transaction costs for stocks in emerging markets are twice as high as transaction costs for U.S. stocks, and argue that this is even more than one would expect based on the smaller average market capitalization and higher average volatility of stocks in emerging markets. [Bekaert et al. \(2002\)](#) and [Chiyachantana et al. \(2004\)](#) also report significant price pressure effects in emerging markets.

The second objective of this paper is to investigate the implications of the higher trading costs and lower liquidity of emerging markets stocks on the techniques that ETFs have at their disposal to track their benchmark indexes. Generally speaking, passive funds apply two techniques to track their

<sup>2</sup> The literature on the performance of actively managed emerging market equity funds is also scarce. Studies that investigated this subject include [Abel and Fletcher \(2004\)](#), [Gottesman and Morey \(2007\)](#), [Huij and Post \(2011\)](#), and [Hayat and Kraeusl \(2011\)](#).

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