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The Quarterly Review of Economics and Finance
48 (2008) 708–724

The QUARTERLY REVIEW of ECONOMICS And FINANCE

www.elsevier.com/locate/qref

The effect of macroeconomic news on German closed-end funds

Sanjay Ramchander[a,*], Marc W. Simpson[b], Harold Thiewes[c]

[a] *Department of Finance & Real Estate, Colorado State University, Fort Collins, CO 80523-1272, United States*
[b] *Department of Economics & Finance, University of Texas-Pan American, Edinburg, TX 78539, United States*
[c] *Finance Department, 150 Morris Hall, Minnesota State University at Mankato, Mankato, MN 56001, United States*

Received 7 February 2006; received in revised form 12 July 2006; accepted 20 July 2006
Available online 26 September 2006

Abstract

This paper examines how investors assimilate information obtained from a set of German and U.S. macroeconomic news releases, and register their response on German closed-end fund net asset values (NAVs) and share prices. Specifically, three German Funds traded in the NYSE are chosen and their response to five common types of macroeconomic announcements is investigated. The results indicate that there are systematic differences in the way German and U.S. investors react to information about the two respective economies. We find some commonality in the response of NAV and share price to certain types of announcements, notably industrial production and PPI releases in Germany and the U.S., but a strong divergence is documented when examining other common news releases. The results lead us to believe that the time-varying behavior of fund discounts is most likely attributable to the divergent assessments held by German and U.S. investors, and are in turn, influenced by the security composition and objective of the fund itself.

JEL classification: G15; F36

Keywords: International financial markets; Financial aspects of economic integration

1. Introduction

One of the long-standing empirical anomalies in finance concerns the apparent divergence of closed-end fund share prices (SP) from their net asset values (NAV). This phenomenon has come to be known as, “the closed-end fund puzzle”. What makes this puzzle intriguing is that it appears

* Corresponding author. Tel.: +1 970 491 6681; fax: +1 970 491 7665.
E-mail address: Sanjay.Ramchander@mail.biz.colostate.edu (S. Ramchander).

1062-9769/$ – see front matter
doi:10.1016/j.qref.2006.07.004

to be a violation of one of the most intuitively appealing theories within finance and economics: i.e., the law of one price.

While many hypotheses have been proffered to explain the closed-end fund puzzle (see literature review), one hypothesis that has attracted a good deal of attention is that the difference between the market price of a fund and its NAV is a reflection of the differences in sentiment, or expectations, between investors in the fund and investors in the underlying assets. Among closed-end funds, country closed-end funds (or, simply *country funds*) are particularly well suited to the study of such differential sentiment hypotheses. This is due to the fact that the investors in the underlying assets, and the investors in the funds, themselves, are readily identifiable. The differential sentiment hypothesis, as applied to country funds, posits that the investors in the fund's home-country determine the fund's NAV, while the investors in the country where the fund is traded determine the fund's *price* of the closed-end fund (see Bodurtha, Kim, & Lee, 1995; Hardouvelis, La Porta, & Wizman, 1994). How these two groups of investors react to new information, then, may be enlightening not only as a study of market integration and international information flows, but, may also be at the crux of understanding the closed-end fund puzzle itself. This, in brief, is the overarching objective of this study.

This paper evaluates the impact of German and U.S. macroeconomic news (or surprises) on the SP and underlying NAV of three German country funds (the Germany Fund, the Emerging Germany Fund and the New Germany Fund) traded on the New York Stock Exchange (NYSE). Five common types of macroeconomic announcements are chosen—Industrial Production, the Producers Price Index (PPI), Retail Sales, the Trade Balance, and the Unemployment Rate for the period spanning April 1990–May 1999. Such an investigation is significant for at least three compelling reasons.

First, the study highlights the magnitude and direction of information flows between two closely related securities and two closely related markets. At least nominally, the NAV and the SP of a country fund are simply two different price quotations of the same underlying asset; in this case, a portfolio of securities traded in the German stock market. Naturally, we may expect that information pertaining to both Germany and the U.S. should influence the value of assets in the German market. It is our hypothesis that there may be systematic differences in the way in which local (German) and foreign (U.S.) investors react to information about the two respective economies. Based on the empirical findings regarding other anomalies, such as the home-country bias, we may expect that, should these systematic differences exist, local investors may be more sensitive to information about the German economy while U.S. investors may be more sensitive to information about the U.S. economy, even when evaluating German investments. Further, our investigation of three separate German country funds, with contrasting investment objectives and asset composition, allows us to examine which portfolio of German securities is more responsive to macroeconomic news releases.

Second, an examination of the interaction between the SP and NAV will help us understand the time-series behavior of the funds' discounts or premiums surrounding the release of macroeconomic surprises. In this regard, some prior studies have suggested that the discounts of closed-end funds are mean-reverting. Gasbarro, Johnson, and Zumwalt (2003), who examine domestic bond and equity closed-end funds, attribute the mean reversion in discounts to changes in SP and NAVs. Their conclusion seems almost tautological. What is of additional importance here, and which is the focus of this study, is to examine the underlying reasons for the change in SP and NAV, and how they are incorporated in the fund discounts. This is crucially important if one wishes to develop an understanding of the time-varying nature of the discounts observed on closed-end funds. Moreover, studies on international capital market relationships overwhelmingly support