



ELSEVIER

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

Journal of Banking & Finance 28 (2004) 1043–1067

Journal of
BANKING &
FINANCE

www.elsevier.com/locate/econbase

The market liquidity of DIAMONDS, Q's, and their underlying stocks

Shantaram P. Hegde ^{a,*}, John B. McDermott ^{b,1}

^a *Department of Finance U-41F, School of Business Administration, University of Connecticut,
368 Fairfield Road, Storrs, CT 06269-2041, USA*

^b *Department of Management, United States Coast Guard Academy, New London, CT 06320, USA*

Received 18 March 2002; accepted 13 January 2003

Abstract

We investigate the market liquidity effects of the introduction of index-tracking stocks for the Dow Jones Industrial Average (DIAMONDS) and the NASDAQ 100 index (Q's). Our main finding is liquidity of the underlying DJIA 30 index stocks improves after the introduction of the exchange-traded fund, largely because of a decline in the cost of informed trading. Further, we find the DIAMONDS has significantly lower liquidity costs over the first 50 days of trading as compared to the portfolio of its component stocks, again primarily because of lower adverse selection costs. Finally, we find weaker but qualitatively similar results for the Q's.

© 2003 Elsevier B.V. All rights reserved.

JEL classification: G10

Keywords: Liquidity; Asymmetric information; Exchange-traded funds

1. Introduction

How liquid are the markets for “basket” securities and how do they affect the market liquidity of underlying securities? There has been a virtual explosion in the introduction of index-based products known as exchange-traded funds (ETFs) developed by the Nasdaq-Amex Group. The first exchange-traded fund, Standard and Poor's

* Corresponding author. Tel.: +1-860-486-5135.

E-mail addresses: hegde@uconnvm.uconn.edu (S.P. Hegde), jbmcdermott@exmail.uscga.edu (J.B. McDermott).

¹ Tel.: +1-860-444-8339.

Depository Receipts (i.e., SPDRs®), was introduced in 1993. Other products based on the Dow Jones Industrial Average (DIAMONDS®), NASDAQ 100 Index (a.k.a. Q's), S&P MidCap 400 Index (MidCap SPDRs®), major industry sectors (Select Sector SPDRs®), and the Morgan Stanley Capital International Indexes (iShares®) followed. ETFs are the recent innovations in basket securities. While the promoters of these new instruments highlight their tax efficiency, diversification benefits and transaction cost advantages, there is little empirical evidence on the liquidity of the new instruments nor on the effect of their introduction on the market liquidity of underlying stocks. Whether the recent proliferation of index-based products enhances or robs liquidity of trading from the underlying component stocks is of importance to investors and regulators alike. The introduction of DIAMONDS (DIA) on January 20, 1998 and the NASDAQ 100 Index-tracking stock (Q's) on March 10, 1999 and the availability of transaction level data allows us an opportunity to gain some insight into these issues.

The DIA and Q's provide ownership in equity investment trusts that track the performance of their respective indices. Large investors and institutions create the index-tracking shares by depositing a portfolio of stocks that closely resembles the composition of the index and a specified amount of cash if necessary. The index-tracking stocks trade in essentially the same manner as individual equity securities on the floor of American Stock Exchange (AMEX). A notable difference between the baskets and their component stocks is that the two baskets accumulate dividends paid by underlying stocks and distribute them quarterly to their investors.

Like SPDRs (see Ackert and Tian, 2000, 2001; Poterba and Shoven, 2002), both the DIA and Q's have proven especially popular. In the first 50 days from the introduction of the DIA, average daily trading volume was 826,000 shares and average daily dollar volume was \$68.4 million. It ranks consistently as one of the 10 most active issues on the AMEX. Trading activity in the DIA security is comparable to the median trading volume in the underlying component stocks. For example, in March 1998, the median daily average NYSE trading for the 30 DJIA stocks was roughly 1.481 million shares worth \$110 million, whereas the median DIA daily average trading volume is 592,000 shares worth \$52 million. Similarly, the initial trading activity in Q's compares very favorably with the median trading volume in the NASDAQ 100 component stocks. In the first 20 days of May 1999, the average daily trading volume in Q's was 177% (312%) of the median trading volume in shares (dollars) for the underlying stocks. At the end of 2001, assets held by the DIA and Q's trusts stood at \$3 and \$22 billions, respectively, as compared with \$30 billions held by the SPDR trust.

The popularity of ETFs is attributed to the ease with which investors can obtain portfolio diversification benefits at low transaction costs as compared to trading a portfolio of underlying stocks. The relatively small price per share of ETF shares allows small investors to more easily take positions in the entire index as compared to buying and holding a portfolio of the component securities.² Another advantage to

² The price of the DIA was initially set to be approximately 1/10 the value of the DJIA index while the price of a Q share was set at 1/20 of the value of the NASDAQ 100 index. The Q's subsequently split and now trade at 1/40 of the value of the NASDAQ 100 index.

متن کامل مقاله

دریافت فوری ←

ISIArticles

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