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Liquidity of emerging markets ☆

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Abstract

Emerging markets are characterized by volatile, but substantial returns that can easily exceed 75% per annum. Balancing these lofty returns are liquidity costs that, using the bid–ask spread as a basis, range from 1% for the Taiwanese market to over 47% for the Russian market. However, the paucity of bid–ask spread information across countries and time requires the use of liquidity estimates in emerging markets even though little is known about the efficacy of these estimates in measuring bid–ask spread costs. Using firm-level quoted bid–ask spreads as a basis, I find that price-based liquidity measures of Lesmond et al. [Review of Financial Studies 12 (1999) 1113] and Roll [Journal of Finance 39 (1984) 1127] perform better at representing cross-country liquidity effects than do volume based liquidity measures. Within-country liquidity is best measured with the liquidity estimates of either Lesmond, Ogden, and Trzcinka or, to a lesser extent, Amihud (2002). Examining the impact of legal origin and political institutions on liquidity levels shows that countries with weak political and legal institutions have significantly higher liquidity costs than do countries with strong political and legal systems, even to the exclusion of legal origin or insider trading enforcement. Higher incremental political risk is associated with a 10 basis point increase in

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transaction costs, using the Lesmond, Ogden, and Trzcinka estimate, or a 1.9% increase in price impact costs, using the Amihud estimate.

JEL classification: G15; N20

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1. Introduction

Emerging markets are experiencing explosive growth. Not only did the total value of shares traded increase from $15 billion in 1991 to over $200 billion in 2000, but the total market capitalization also rose from $306 billion in 1991 to over $1.4 trillion in 2000. The growth in emerging markets is, in part, fueled by foreign investments that the World Bank estimates exceeded $47 billion in 2000 from a mere $0.1 billion in 1985 (World Bank, 2001). The increasing investment interest in emerging markets can yield spectacular returns that can easily exceed 90% in any given year. These returns, while substantial, are subject to increased risk and volatility; they are significantly reduced by the increased illiquidity of trading stocks in emerging markets relative to more developed markets. While risk, return, volatility, and correlation (Bekaert and Harvey, 1995, 1997; Harvey, 1995) have been analyzed for emerging markets, few studies have attempted to address the liquidity of emerging markets. The importance of estimating liquidity in emerging markets is underscored by Bekaert et al. (2003), who find that models that account for liquidity risk outperform other models that incorporate only market risk factors in predicting future returns. The substantial investment interest lured by equally substantial returns highlights the importance of addressing liquidity concerns and determinants of emerging markets.

Liquidity, by its very nature, is difficult to define and even more difficult to estimate. Kyle (1985) notes that "liquidity is a slippery and elusive concept, in part because it encompasses a number of transactional properties of markets. These include tightness, depth, and resiliency," (p. 1316). Empirical liquidity definitions span direct trading costs (tightness), measured by the bid–ask spread (quoted or effective), to indirect trading costs (depth and resiliency), measured by price impact. However, the lack of obtainable bid–ask quotes or intraday trading information makes the use of proxies standard procedure in estimating emerging market liquidity. But little consensus exists regarding the applicability or efficacy of any of the most commonly used liquidity proxies that span the Roll (1984) measure, the Amivest measure, and the ubiquitous turnover measure. Given the uncertainty surrounding liquidity estimation in emerging markets, these liquidity measures are augmented with the Amihud (2002) measure and the (Lesmond et al., 1999) LOT measure to provide a menu of liquidity measures. These five liquidity measures are tested against the quoted bid–ask spread, where available, to determine each measure's efficacy in estimating the underlying liquidity, in addition to analyzing the