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Bolsa or NYSE: price discovery for Mexican shares☆

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Abstract

Is price discovery and the calibration of news through American (A) or global (G) depositary receipts (DR) or depositary shares (DS), traded in central markets, superseding local discovery in peripheral markets? This question remains very much open as the evidence we present on the durability of price innovations in two major Mexican stocks provides little support for the view that the demise of local markets is inevitable. Rather it appears that such markets may have some advantage in information efficiency that may compensate for their extra costs.

JEL classification: F36; G14

Keywords: Emerging stock markets; ADR; Information efficiency

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1. Introduction

As ADR/ADS, and GDR/GDS programs become increasingly available for more and more foreign issues, the question arises whether the weight of market-making has shifted away from their home stock market to a central market, as often claimed. The common presumption to that effect has been supported mostly by pointing to economic inefficiencies in peripheral stock exchanges and not by assessing the informational efficiency of the transactions conducted on them. Such an assessment will be attempted in this paper by comparing the durability of price innovations in two major Mexican stocks registered in different forms both on the New York Stock Exchange (NYSE) and the Bolsa Mexicana de Valores (BMV).

Section 2 provides basic information on the cross-listed shares whose price relations are the subject of a preliminary data analysis in Section 3. Section 4 models the price discovery and reconciliation process, and Section 5 estimates how that process of error correction is shared between the two stock exchanges. Section 6 discusses the significance of the most critical coefficient estimates, and Section 7 concludes.

2. Shares that are cross-listed in local and central markets

Considering only economic efficiency, it is natural to surmise that a local market will be at a competitive disadvantage in stock trading if it is small[1] and denominating its trades in a minor currency. And indeed, trading costs itemized in Section 1 of the Appendix available upon request are about twice as high on the BMV as on the NYSE. Thus equity markets in a number of developing countries have been presumed endangered or on the brink of extinction. The reasons commonly cited are illiquidity, high transaction costs, and falling volume as foreign acquisitions of leading domestic companies soon after they had gone public leave few securities to trade in such markets. A large part of trading in the remaining domestic shares may then be shifted to New York causing a further deterioration of the economics of local stock markets (Moel, 2001).

For instance, in the case of Teléfonos de México “L” (Telmex-L) shares, the most widely traded share on the Bolsa Mexicana de Valores, only 23% of total volume was traded in Mexico City on average for 1996–2000 (28% from February 2001 to February 2002) and all the rest as ADS on the New York Stock Exchange (NYSE). This volume percentage was derived by adjusting for an ADS ratio of 20 domestic shares per ADS and for the fact that the domestic shares were split 2:1 four trading days before the ADS were split at the start of trading 7 February 2000. Grupo Televisa S.A. de C.V. is the other major company considered that, like Telmex, is known to almost every Mexican individual and business from daily contact with its services. For “TV”, the percentage of the total volume of trading that occurred in Mexico was even smaller than for Telmex but rising from 13

[1] With regard to economic efficiency, economies of scale in effecting stock market transactions and the liquidity of deep markets may leave small exchanges disadvantaged on both the supply and demand sides. Hasan and Malkamäki (2001) have provided evidence of scale and scope economies for stock exchanges. See also the comments by S.A. Andersen, President and CEO of Oslo Børs (Andersen, 2002, pp. 5–8).