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DaimlerChrysler AG, the first truly global share

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Abstract

On November 17, 1998, trading commenced in DaimlerChrysler ordinary shares, a single global registered share (GRS) certificate, on stock exchanges around the world. The GRS quotes, trades and settles in U.S. Dollars on the New York Stock Exchange and in Deutschemarks/Euros on the Frankfurt Stock Exchange through a new global share registrar linking German and U.S. registrars and clearing facilities. This study critically evaluates the new share structure and asks whether it is associated with an improvement in market quality. I find that the initiation of the program was associated with greater trading activity and enhanced liquidity overall, but there was a significant migration of its order flow back to Frankfurt during the first 6 months. While return volatility also increased significantly, this increase was not associated with the changes in trading activity, the changes in liquidity or the flow-back to Frankfurt. I argue that this new share structure to date has not improved the quality of the trading environment relative to other share structures.

JEL classification: F30; G32; G15
Keywords: International finance; Market microstructure; Multi-market trading

This study examines the capital market reactions to the introduction of the first-ever global registered share (GRS) by DaimlerChrysler (symbol: DCX) on November 17, 1998. The GRS was launched simultaneously in 21 markets around the world, including the New York and Frankfurt Stock Exchanges, following completion of the $68 billion merger between Daimler Benz, a German automaker and industry group, and Chrysler. It was designed to be distinct from an American Depositary Receipt (ADR), which is the most popular cross-border share-trading facility used by non-U.S. companies. While an ADR is

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a separate certificate issued by U.S. depositary banks as a claim against home-market shares deposited with a local custodial bank, the GRS involves only one security globally. It required the establishment of a single "global" share registrar, the coordination of transfer agents and an electronic linking of clearing corporations, all in order to facilitate its trading, settlement and seamless, fungible transfer from one market to another. The shares are quoted, traded and settled in U.S. Dollars in New York and Euros in Frankfurt. The creation of this facility was hailed as a landmark event for global equity markets.[2]

There are two contributions of this clinical study of DaimlerChrysler's GRS.[3] Firstly, it is the first to study an important new financial innovation for cross-border trading of shares for global companies.[4] Secondly, and more importantly, it provides us as researchers with a unique experiment in which to evaluate the impact of international cross-listings on the liquidity and return volatility of the shares, a subject of increasing interest among policymakers around the world. While corporations see cross-listings as value-enhancing, the changes in liquidity, volatility and the cost of trading associated with potential order flow migration can adversely impact the quality of the domestic equity market. There have been dozens of studies that examine this question with mixed results (see Karolyi, 1998 for a survey). One consistent finding, however, is that the impact of cross-listing on liquidity and volatility depends on the extent of price/quote transparency across markets or the strength of intermarket informational linkages (Pagano, 1989; Chowdhry and Nanda, 1991; Domowitz et al., 1998). These studies show that if price information is freely available across markets, cross-listing results in an improvement in market quality; where information linkages are poor, however, cross-listing reduces liquidity and increases volatility in the domestic market. The GRS and its seamless global registration, transfer and settlement procedures was designed to provide a more "transparent" trading environment than a traditional ADR facility. The central hypothesis of this study is whether market quality improvements were observed with the introduction of DaimlerChrysler's GRS.

I specifically investigate changes to two measures of market quality. First, I evaluate the impact of the introduction of the GRS on trading activity and liquidity. I compare the dollar value of trading and underlying bid-ask spreads in DCX to that of Daimler Benz and

[2] *Investment Dealer's Digest* (December 14, 1998) announced the DaimlerChrysler merger as the Deal of The Year "Top Award Goes to DaimlerChrysler: Impact is likely to be Long-Lived" (p. 19). *Individual Investor* headlined with "A Stock Heard Round the World—Is DaimlerChrysler's Global Share the start of a revolution?" (March 1999, p. 20). The cover story of *International Financial Law Review* pronounced "The DaimlerChrysler Revolution" (January 1999, p.19) and *M&A Lawyer*, "DaimlerChrysler: Global Shares for a Global Market" (January 1999, p. 2). See also, *Wall Street Journal* (September 22, 2001) "What in the World? Global Shares May Leave Obscurity."

[3] There are other recent studies of the DaimlerChrysler merger, but both focus on different interesting issues. Blasko et al. (2000) study value creation and cross-border transactions and Gordon (1999) addresses the impact of the merger event on shareholder capitalism in Germany. There are also two studies of the microstructure of trading in DCX shares by Grammig et al. (2001) and Harris et al. (2001). See also *The Economist* "The DaimlerChrysler Emulsion" (July 29, 2000, p. 67) and Vlasic and Stertz (2000).

[4] As of May 2002, there are now four GRS securities. Celanese, a German chemical firm (symbol: CZZ), adopted the structure on October 25, 1999, as did UBS (symbol: UBS), the Swiss financial services firm, on May 18, 2000. On October 8, 2001, Deutsche Bank created a GRS.