Estimating the discount for lack of liquidity in valuing privately held businesses using trading frictions of stocks in small markets: an econometric model approach

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Abstract
When using trading data to value privately held enterprises, a Discount for Lack of Liquidity (Marketability Discount) has to be deducted to take into account the differences in value between the minority interests of public enterprises and privately held enterprises caused by diverging liquidity. To calculate the Discount for Lack of Liquidity, different streams of either empirical or theoretical research have evolved, among them Benchmarking Studies (Restricted Stock Studies, Pre-IPO Studies, Delisting Studies as well as Cross-Index Studies), Multiple Regression Models, Option Pricing Models and Computational Models. This paper presents an econometric model approach combining either elements of a computational model and impacts of empirical data. The empirical part of the model is based on the distortion in measuring betas with different liquidity due to trading frictions; assuming that privately held businesses are not traded on a stock exchange and therefore their level of liquidity equals zero, in the subsequent computational part of the model the Discount of Lack of Liquidity can be estimated based on this (virtual) beta distortion. This Model addresses the problem of non-availability of data in many countries needed in the already existing methods and is especially based on available data in countries with small stock markets. In practice, this model enables business valuators to calculate a country-specific Discount for Lack of Liquidity even in small markets. Furthermore, it enhances the universe of available models.