



Price rounding and bid–ask spreads before and after the decimalization

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Abstract

We investigate price rounding before and after the pilot decimalization on the NYSE. We find that although rounding exists in transaction, bid, and ask prices in both the pre- and postdecimalization periods, it becomes less salient after the decimalization. The cross-sectional relationship between rounding and trading variables is similar before and after the decimalization, and so is the relationship between execution costs and rounding when trading variables are held constant. More importantly, the quoted and effective bid–ask spreads decrease after decimal trading, and this decrease can be ascribed to the decrease in rounding frequency after controlling for the changes in trading variables.

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1. Introduction

In security trading, prices are often constrained to a limited set of observations by minimum tick size. Previous studies document that prices are frequently rounded to multiples of the minimum tick. Osborne (1962) first recognizes the tendency for transaction and quote prices to cluster on their fractions. Harris (1991) provides evidence on the rounding of quote and transaction prices for NYSE- and AMEX-listed equities. He reports that stock prices cluster on round fractions: integers are more common than halves; halves are more common than odd quarters; odd quarters are more common than odd eighths; and other

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