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Price discovery in the round-the-clock U.S. Treasury market

Yan He^a, Hai Lin^b, Junbo Wang^{c,d}, Chunchi Wu^{e,*}

^a Indiana University Southeast, New Albany, IN 47150, USA

^b Xiamen University, Xiamen, 361005, China

^c University of Arkansas, Fayetteville, AR 72701, USA

^d City University of Hong Kong, Hong Kong

^e University of Missouri, Columbia, MO 65211, USA

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ABSTRACT

We evaluate the efficacy of price discovery in the round-the-clock U.S. Treasury market. Using a comprehensive intraday database, we explore informational role of trades over the 24-hour day. We find that information asymmetry is generally highest in the preopen period and lowest in the postclose period. Information asymmetry in the overnight period is comparable to that in the regular trading period. However, on days with macroeconomic announcements, information asymmetry peaks shortly after the news release at 8:30. Moreover, information asymmetry is higher on Monday morning and higher immediately before than after the open of U.S. Treasury futures trading. Although volume is low after hours and trading cost is relatively high, overnight trading generates significant price discovery. Results suggest that overnight trading activity is an important part of the Treasury price discovery process.

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1. Introduction

Price discovery—the efficient and timely incorporation of new information into security price—is arguably the most important function of securities markets. Modern technology has dramatically changed the trading mechanisms of secondary markets. It is now relatively easy to trade securities in the U.S. markets after hours. However, trading after hours continues to be dominated by professional

* Corresponding author.

E-mail addresses: yanhe@ius.edu (Y. He), cfc@xmu.edu.cn (H. Lin), jwang@walton.uark.edu (J. Wang), wuchu@missouri.edu (C. Wu).