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Intraday futures market behaviour around major scheduled macroeconomic announcements: Australian evidence ☆

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Abstract

This paper examines intraday futures market behaviour around major scheduled macroeconomic information announcements on the Sydney Futures Exchange (SFE). Prior literature analysing intraday price behaviour around announcements is extended to trading volume and quoted bid–ask spreads. The analysis of price volatility, trading volume and quoted bid–ask spreads indicates that the majority of adjustment to new information occurs rapidly, within 240 seconds of the scheduled time for major announcements, with some evidence of abnormal activity prior to announcements. Analysis of quoted bid–ask spreads suggests that they significantly widen in the 20 seconds *prior* to announcements and remain significantly wider for 30 seconds following announcements. The increase in quoted spreads is related to both expected and unexpected volatility, implying that market participants increase quoted spreads around information announcements as a consequence of adverse selection costs. © 2001 Elsevier Science B.V. All rights reserved.

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1. Introduction

This paper examines intraday market behaviour around major scheduled information announcements on the Sydney Futures Exchange (SFE). Prior literature on how futures markets process information around macroeconomic announcements on an intraday basis has examined volatility and returns in US and London futures markets (see Ederington and Lee, 1993, 1995; Crain and Lee, 1995; Leng, 1996; Becker et al., 1996). [1] Ederington and Lee (1993) find that the bulk of price adjustment occurs within the first minute following major releases, with volatility substantially higher than normal for approximately fifteen minutes and slightly elevated for several hours. Ederington and Lee (1995) find that the price adjustment is rapid and basically complete within 40 seconds of the release. Leng (1996) finds that the impact of major announcements lasts for at least an hour whereas the impact of minor announcements is relatively short lived. Crain and Lee (1995) also find that most of the price adjustment occurs within the first hour, with some evidence that volatility remains higher than normal for several hours. Prior literature concerning intraday market adjustment around announcements has been limited to analysis of price behaviour. In this paper, intraday price behaviour around major macroeconomic announcements is re-examined for the SFE. This analysis is also extended to trading volume and quoted bid–ask spreads in order to more completely examine market behaviour around major announcements. While no prior research has examined intraday trading volume and quoted bid–ask spreads in futures markets, research concerning these variables in the US treasury (cash) market and around stock specific information releases has yielded additional insight into market adjustment processes (e.g. Morse, 1981; Jennings, 1994; Fleming and Remolona, 1999).

There are a number of methodological refinements implemented in re-examining trading behaviour around major macroeconomic announcements on the Australian market. First, Ederington and Lee (1993); Crain and Lee (1995) and Leng (1996) find that information releases with the greatest impact in the US are those occurring at 8:30 am Eastern Time, 10 minutes following market opening. Although these releases consist of some of the major US announcements, it is difficult to distinguish the effects of market opening from the impact of information announcements. [2] The SFE allows a cleaner intraday experiment as macroeconomic announcements generally occur at 11:30 am, almost

[1] Crain and Lee (1995) also examine volume on a daily basis.

[2] For example, Crain and Lee (1995) find that both announcement and nonannouncement day volatility is the highest during the first hour (8:00–9:00 am) of trading in Eurodollar futures.