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The house money effect and local traders on the Sydney Futures Exchange

Alex Frino [a], Joel Grant [b], David Johnstone [a,*]

[a] University of Sydney, Sydney, Australia
[b] University of Wollongong, Australia

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Abstract

The "house money effect" describes the psychological tendency of investors to become increasingly risk-seeking immediately following monetary gains. We observe evidence consistent with this behavioral bias in the trades executed by professional futures traders ("locals") on the Sydney Futures Exchange (SFE). Previous research demonstrates the house money effect among participants in laboratory settings but not among actual traders. By distinguishing qualitatively between gains and losses, rather than treating these as merely positive and negative values of a single psychological driver, we test for loss aversion and the house money effect simultaneously. Contrary to previous studies, no significant evidence is found of loss aversion.

JEL classification: G10; G11; G20
Keywords: Behavioral finance; House money effect; Disposition effect; Futures traders

> He was a bond trader, who had made a killing in the morning and entered the afternoon free of fear. Feeling greedy. Certain that the fear in the market would present him with even more opportunities to exploit. Whatever happened now was not going to be bad. How good could it get? (Lewis, 2004, p.213)

1. Introduction

There is little published evidence of inconsistency or irrationality in professional futures traders' behavior. The only existing studies based on actual in-market trading decisions are Coval and Shumway (2005), Locke and Mann (2004, 2005), and Frino et al. (2004). Other published

* Corresponding author.
E-mail address: d.johnstone@econ.usyd.edu.au (D. Johnstone).

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studies concerning futures traders are experimental. Most recently, a laboratory study by Haigh and List (2003) found that professional CBOT futures traders show apparently greater irrationality than less experienced decision makers (students). The in-markets rather than in-laboratory trading behavior of professional futures traders is yet to be extensively documented.

Thaler and Johnson (1990) note that unlike studies of other behavioral biases, there has been very little real-world empirical study demonstrating the house money effect. Laboratory studies by Thaler and Johnson (1990), Battalio et al. (1990), and Keasey and Moon (1996) document that prior gains lead to increased risk-taking in subsequent periods — the house money effect.[1] This paper contributes to the literature by employing actual trading data to test for the house money effect and related behavioral inconsistencies, particularly loss aversion, among "locals" [2] on the Sydney Futures Exchange (SFE).[3]

Brown et al. (2005) find evidence of the house money effect among a broad population of stock market traders. We add to this study by examining the behavior of professional futures traders. Futures markets offer idealized conditions for the study of biases in one period's trading based on the trader's results in the preceding period. Whereas most market settings provide ambiguous trading horizons, futures trades by locals are most often conducted in short cycles and almost always closed out by the end of trading each day (Duffy et al., 1999; Kuserk and Locke, 1993, 1994; Manaster and Mann, 1996). Other characteristics that make professional futures traders ideal for study are that they trade predominately on their own account, and are therefore not subject to agency biases in their behavior, and can trade in either direction (long or short) at any moment (Locke and Mann, 2004, p.3).

It is plausible in this context of closed daily trading cycles that a trader's risk-taking may be influenced by results recorded earlier in a given day, and less likely to be influenced by profits or losses incurred on previous days (Coval and Shumway, 2005, p.7). In contrast to the Chicago Board of Trade (CBOT) and the Chicago Mercantile Exchange (CME), the SFE closed for lunch during the data period examined. The lunch break in trading provides a natural dividing point in the middle of each trading day (see Frino and Winn, 2001). Its effect is important to this study, not merely because it creates an unambiguous divide within the daily trading cycle, but because it provides traders with time to reflect upon their morning trades. In principle, this "time out" should provide a "cooling off" period and hence relieve any tendency to irrational behavior in the afternoon.

Drawing on the risk-measurement methods developed by Coval and Shumway (2001, 2005), we compare the levels of risk-taking by locals trading in afternoons following morning gains, and morning losses, respectively. Our results suggest that locals on the SFE exhibit a strong behavioral bias consistent with the house money effect. That is, morning profits seem to encourage locals to become risk-seeking in afternoon trading sessions. Whether this bias causes traders to make afternoon losses or reduced profits is less obvious. Our results suggest that up to a point the bravado or feeling of confidence produced by morning profits assists traders to make additional afternoon profits, but that those trades driven most strongly by the house money effect tend to result in significant losses.

[1] Related market-based studies by Odean (1998b, 1999) and Barber and Odean (2000, 2001, 2002) find that amateur traders are overconfident and hence trade excessively. Griffin and Tversky (1992) report that professionals are more likely to be overconfident than others.

[2] Locals are professional futures traders and members of futures exchanges that trade exclusively on their own account and are usually granted trading privileges such as direct access to the trading floor.

[3] Turnover on the SFE ranks it among the top 15 futures exchanges in the world. Four main contracts are currently traded by open outcry including the Share Price Index (SPI) Futures contract — the focus of this study (Frino and Winn, 2001).