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Are all insiders on the inside? Evidence from the initiation of CDS trading and short selling in the financial sector ☆

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We examine the impact of CDS trading and the lifting of short sales restrictions on the profitability of reported insider trades within US financial firms. We find evidence that executive directors possess significant insider knowledge about their firm's risk prior to the initiation of CDS trading. We also find that the profitability of insider trades are only reduced for non-executive directors after short selling is permitted, indicating that the executive directors possess more timely private information than short-sellers. Our results suggest that the introduction of CDS trading and short selling distinctly alters the ability of different types of insiders to extract rent on their private information.

1. Introduction

The role of insider trading continues to receive considerable attention from academics, investors, and policy makers. In particular, the financial industry has been singled out since the International Financial Crisis of 2007–2008 as it is widely recognized that governance problems within financial institutions contributed to the build-up of risks across the financial system in the lead up to the financial crisis. Much light has since been shone on insider trading cases within financial institutions as part of the benchmark interest rate (LIBOR and BBSW) rigging and FX trading investigations worldwide. There is much evidence documented in the literature to suggest that insiders use their superior information about their firms when trading (Seyhun, 1986; Ravina and Sapienza, 2010; Fidrmuc et al., 2006, 2013; Cumming et al., 2015; Cziraki et al., 2016).

With the separation of ownership and control, self-interested managers have long been recognized as having an incentive to extract rents from shareholders (Jensen and Meckling, 1976), and insider trading is one of the channels in which managers can do so (e.g., Baiman and Verrecchia, 1996). Much of the prior literature suggests that insiders are more likely to profit when they trade their firms' shares because they have privy access to material private information (Jaffe, 1974; Finnerty,

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1976; Seyhun, 1986; Podolski et al., 2013). In doing so, they are extracting rents from current shareholders, and their trades may also affect the informational efficiency of the stock market as they are transferring wealth from the uninformed investors to the informed investors, i.e. themselves (Ausubel, 1990; Fishman and Hagerty, 1992).

In this paper, we examine the changes in the profitability of trades by both executive and non-executive directors within financial firms after the introduction of CDS trading and the lifting of short sales restrictions to analyze how the additional institutional investors brought in by these events impact on the extent of rent extraction by the different types of directors. In particular, we choose to analyze firms in the financial sector as there is a large literature documenting that the information asymmetry between insiders and outsiders is the greatest within this sector. Financial firms are more opaque than non-financial firms and are therefore more difficult to assess by outsiders (Morgan, 2002; Adams and Mehran, 2003). Hence, rent extraction amongst directors is of utmost concern as theoretical models of informed trading predict that the profitability of insider trading should increase with the magnitude of information asymmetry existing between insiders and outsiders (Grossman and Stiglitz, 1980; Glosten and Milgrom, 1985; Kyle, 1985). Moreover, given the unique functions of financial firms within the economy it is important from a financial stability perspective to improve the current understanding on how insider trading problems within financial firms can be ameliorated (King and Levine, 1993; Beck et al., 2000). We examine the impact of CDS trading and the lifting of short sales restrictions on the profitability of both executive and non-executive directors' trades in their own financial firm because the prior literature documents that the trading patterns of executive and non-executive directors are different. For example, Seyhun (1986) shows that cumulative abnormal returns (CARs) following trades by executive officers are significantly higher than those by non-executive officers and Lin and Howe (1990) find that trades by the chairman and executive directors contain more information than those made by large shareholders.

The introduction of credit default swaps (CDS) is one of the major financial innovations of the past two decades. In a CDS contract, the seller agrees to make a payout to the protection buyer an amount corresponding to the difference between the nominal and the market value of the debt outstanding issued by the underlying reference entity in a credit (default) event.[1] In exchange for this promised payment, the seller receives a periodic premium from the buyer. Essentially, holding a CDS contract provides insurance on a firm's debt. Due to this relationship, the market pricing of credit risk in traded CDS contracts provides sophisticated investors with a good indication of a firm's default risk and effectively improves transparency in equity markets and reduces the information advantage of insiders over the market. It is conceivable that after CDS trading is initiated, sophisticated investors would be able to alter their trading strategies within equity markets based on their new understanding of the firm's inherent risks or purchase both equity and CDS contracts for hedging purposes. In effect, this previously hidden firm risk information only known by insiders becomes available to sophisticated investors once CDS contracts become available, meaning that the insiders will no longer be able to profit from sophisticated investors based on their knowledge of firm's risk. Hence, we postulate in our 'sophisticated CDS trader hypothesis' that directors will profit less on their trades after the introduction of CDS trading as they can no longer profit on their inside knowledge of the firm's true risk. We also expect the effect to be stronger for the executive directors as they are more likely to know more about the firm's risk than the non-executive directors before their firm's CDS is traded.

At face value, the introduction of short-sellers into equity markets is similar to the initiation of CDS trading in a sense because both of these developments bring more sophisticated institutional investors into the market. However, unlike the institutional investors previously mentioned who are mainly in the equity market to invest and hedge, the short-sellers, have the exact same motive as potentially unethical insiders - they utilize their private information to make abnormal profits in the stock market. Therefore, knowing the exact motive of the short-sellers, the unethical insiders should then be able to beat the short-sellers to the trades as those insiders have the first-hand private information. In fact, this is exactly what Massa et al. (2015) find as they show that the presence of short sellers induces insiders to sell more and trade faster. Based on their findings, our 'competitive short seller hypothesis' predicts that the presence of short sellers will not affect the profitability of trades made by the true insiders (the executive directors) as they would have the more timely private information to beat the short-sellers to the trades, but on the other hand short-sellers would take a slice out of the profits made by the non-executive directors who have less private information.

We test these two hypotheses in this study by examining the changes in the cumulative abnormal returns (CARs) for financial firms before and after the introduction of CDS trading and the lifting of short selling restrictions on their stocks. To test our sophisticated CDS trader hypothesis, we utilise a sample of 25,423 insider transactions for 144 North American financial firms made from 2001 to 2011. Our first finding, after controlling for the fundamental determinants of insider trading profitability, is that the profitability of all types of executive directors' trades and some types of non-executive directors' trades are reduced after the initiation of CDS trading. However, unobservable omitted variables may drive both the changes in insider trading profitability and the selection of firms for CDS trading. Hence, we address this concern by using propensity score matching techniques and we find that the negative relationship between CDS trading and insider trading returns remains statistically and economically significant. For example, abnormal stock returns are 15.9% lower in the 60-day period following executive directors' purchases and 13.4% lower in the 60-day period following non-executive directors' purchases after the introduction of CDS trading in financial firms with insider trading.

[1] A credit event triggering a payout may include a missed debt payment, debt restructuring or outright default.