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Insider trading restrictions and corporate risk-taking☆

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ABSTRACT

This paper examines the effect of insider trading restrictions on corporate risk-taking. Using a cross-country sample of 38 countries over the 1990 to 2003 period, we find that corporate risk-taking is positively related to insider trading restrictions. This finding is robust to alternative regression specifications and sample periods, to the use of alternative measures of insider trading restrictions and risk-taking incentives, and to controls for possible endogeneity. Further investigation suggests that the relation between insider trading restrictions and corporate risk-taking is influenced by cross-sectional differences in stock market development and legal origin, and that the increase in risk-taking is beneficial to firms. In conclusion, this paper highlights the role of insider trading restrictions as an important determinant of corporate risk-taking.

1. Introduction

Recent studies in the accounting and finance literature examine the real and economic effects of insider trading restrictions among firms around the world. Some of the benefits obtained by firms in countries that have enforced insider trading laws include a lower cost of raising external equity capital (Bhattacharya and Daouk, 2002); increases in analyst following (Bushman et al., 2005); less concentrated equity ownership and increases in market liquidity (Beny, 2007); higher firm value (Beny, 2008); increases in the information

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contained in stock prices (Fernandes and Ferreira, 2009); more efficient investment decisions and subsequent improvements in accounting performance (Chen et al., 2013); and increases in timely-loss recognition (Jayaraman, 2012). Moreover, firms in countries with more restrictive insider trading regulations tend to have a lower stock market volatility (Du and Wei, 2004), higher executive compensation and a better equity-based component of the compensation package (Denis and Xu, 2013).

There are also a growing number of studies that explore the role of corporate governance in corporate risk-taking activities (John et al., 2008; Bargeron et al., 2010; Acharya et al., 2011; Boubakri et al, 2013). Specifically, these studies examine the effects of shareholder rights, accounting disclosure rules, law and order indices, regulation change (in the form of the Sarbanes–Oxley Act), creditor rights, and political institutions on corporate risk-taking. However, there is still no empirical study that examines the effect of insider trading restrictions on managerial risk-taking incentives.

A change in insider trading restrictions is described as an exogenous "shock to enforcement" (Jayaraman, 2012, pp. 77) and to the overall level of corporate governance in a particular country. The literature yields mixed findings on the relationship between corporate governance and corporate risk-taking, and thus examining whether insider trading restrictions influence corporate risk-taking is an interesting empirical exercise.[1] This is the main research question that this study seeks to address. We use financial data for non-financial firms across 38 countries for the sample period from 1990 to 2003 and follow existing studies (Du and Wei, 2004; Denis and Xu, 2013) in using the cross-country survey data from the Global Competitiveness Report on the prevalence of insider trading as the measure of insider trading restrictions. Our measure of corporate risk-taking incentives is the volatility of earnings, which is calculated as the country and industry-adjusted standard deviation of the return on assets over 5-year overlapping periods.

The main empirical evidence reveals that firms in countries with more restrictive insider trading regulations exhibit higher earnings volatility than their counterparts in countries with less restrictive regulations. In terms of economic magnitude, a one standard deviation increase in the value of the insider trading restriction index leads to an increase in the value of earnings volatility by about 6.6% relative to the mean value of earnings volatility for the entire sample. This finding corroborates the broader results that studies such as John et al. (2008) and Boubakri et al. (2013) document that more effective corporate governance (in the form of stronger insider trading restrictions) encourages managers to engage in projects that involve more risk-taking and could potentially add to shareholder value. Additional results suggest that our finding is relatively robust to changes in empirical specifications and sample periods.

We further employ two alternative proxies for insider trading restrictions: the insider trading law index (Beny, 2004) and the strictness of the insider trading law index (Durnev and Nain, 2007) and find that the positive relation between insider trading restrictions and corporate risk-taking continues to hold for both alternative measures. Moreover, we also use two alternative measures of managerial risk-taking incentives, namely, the difference between the maximum and minimum return on assets over a 5-year interval and the ratio of research and development expenditure to total assets. The results from these robustness tests do not alter the conclusion that insider trading restrictions are positively associated with both measures of corporate risk-taking.

We also address the issue that our main results could be affected by endogeneity by implementing two separate tests: exploiting an exogenous change in the insider trading restriction index and estimating a two-stage least squares (2SLS) regression model. Both approaches produce robust and consistent results and reinforce the notion that corporate risk-taking incentives are positively related to insider trading restrictions.

Finally, the results of extant studies suggest that the main finding of a positive relationship between insider trading restrictions and managerial risk-taking incentives is not uniform across countries. As a result, we further investigate whether the main result is influenced by cross-sectional differences in stock market development and legal tradition. Our results show that the positive relationship between insider trading restrictions and corporate risk-taking only exists for firms in countries with a high level of stock market development and common law countries, that is, countries with a strong institutional infrastructure. Interestingly, we document the opposite finding for firms in countries with a weak institutional infrastructure, with insider trading restrictions being negatively associated with corporate risk-taking for firms in these countries. These

[1] While John et al. (2008) document that corporate governance has a positive effect on risk-taking, Bargeron et al. (2010) and Acharya et al. (2011) find opposite results.