CEO Inside Debt and Earnings Management*

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ABSTRACT: In this study, we investigate the effects of CEO inside debt, that is, deferred CEO
compensation, on financial reporting practice. We find a positive relationship between CEO inside debt
and earnings management. Our results support the hypothesis that CEO inside debt provides incentives
for upward earnings management. The results from additional tests also show that firms whose CEOs
hold high inside debt balances are more likely to attain earnings targets through accruals management.
Finally, we provide evidence that such debt is associated with lower accruals quality after controlling
for other types of compensation. Our findings suggest that inside debt may increase agency costs
by providing incentives for earnings management rather than discouraging it as a means of reducing
firm risk. Our findings provide valuable implications for various financial market entities. They suggest
that shareholders need to consider the impact of inside debt in determining optimal CEO compensation
contracts and that regulators and auditors should also be interested in CEO inside debt as part of
their monitoring role in financial reporting. This study extends the scope of existing literature on CEO
inside debt to financial reporting practice (Key Words: Inside debt, earnings management, accruals
quality, meet-or-beat earnings targets, CEO).

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I. Introduction

Many firms defer payment of their CEOs’ compensation for reasons such as tax saving
purposes or cash shortage. Bloomberg reported that roughly 79 percent of Fortune 100 companies

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offered their CEOs deferred cash compensation in 2010. Deferred compensation is of three types, namely, (i) narrowly defined deferred compensation, (ii) pension benefits, and (iii) equity compensation. Equity compensation can be regarded as deferred compensation in a broad sense because it involves a vesting period until CEOs can liquidate their equity or requires certain conditions to be met in the future. All three types of deferred compensation are the same in the sense that CEOs are compensated for their past work with future cash inflow.

However, equity compensation has significantly different properties from the other two types of deferred compensation, which are referred to as inside debt. Inside debt is a debt-like form of compensation. While equity compensation provides CEOs with shareholder positions, inside debt makes them debt holders. In cases of equity grants, the interests of CEOs are aligned with those of shareholders, but with inside debt, the interests of CEOs are aligned with those of debt holders. Inside debt represents ownership of a firm’s debt because the properties of such forms of compensation are similar to those of debts held by outside debt holders. The difference in interest alignment means that CEOs receive a fixed amount of cash pay from inside debt unless firms default, while total cash payments from equity compensation are volatile and depend on firm performance. The different characteristics of these compensation types may lead CEOs to engage in different behaviors in managing their firms.

Prior studies have explored the effect of CEO compensation type on firm risk taking. Sundaram and Yermack (2007) show that CEOs with higher debt-to-equity compensation ratios are relatively conservative in managing their firms. Tung and Wang (2011) find that higher CEO inside debt compensation relative to equity compensation is negatively associated with risk taking in the banking industry. Balachandran et al. (2010) provide evidence that equity-based compensation increases firm default probability and non-equity compensation decreases it. Beatty et al. (2005) find that firms whose managers own more options are less likely to purchase insurance for product liability. These results are consistent with the intuition that CEOs with high inside debt aim to secure their debt-like compensation by managing their firms conservatively and that CEOs with high equity compensation tend to maximize the value of their equity holdings by taking risks.

Another set of empirical studies has examined the influence of CEO equity compensation on earnings management but with mixed results. While Armstrong et al. (2009) find that CEOs with high equity incentives are less likely to engage in earnings manipulation, no study has explored whether CEO inside debt has an influence on managerial decisions about earnings management. Prior research on domestic firms also mainly focuses on the relationship between the type of CEO compensation and accounting policy decisions. For example, Park and Lee (2009) find that accruals are positively related to CEO’s cash compensation. Other research investigates the impact of stock option compensation on earnings management. Kho et al. (2007) find that managers increase accruals before exercising stock options. The result supports that managers use earnings management opportunistically to increase their compensation level. On the contrary, Jeon et al. (2005) fail to find managers’ opportunistic behav-