

# Earnings Management through Transaction Structuring: Contingent Convertible Debt and Diluted Earnings per Share

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## ABSTRACT

In this article we examine whether firms structure their convertible bond transactions to manage diluted earnings per share (EPS). We find that the likelihood of firms issuing contingent convertible bonds (COCOs), which are often excluded from diluted EPS calculations under Statement of Financial Accounting Standard (SFAS) 128, is significantly associated with the reduction that would occur in diluted EPS if the bonds were traditionally structured. We also document that firms' use of EPS-based compensation contracts significantly affects the likelihood of COCO issuance and find weak evidence that reputation costs, measured using earnings restatement data, play a role in the structuring decision. These results are robust to controlling for alternative motivations for issuing COCOs, including tax and dilution arguments. In addition, an examination of announcement returns reveals that investors view the net benefits and costs of COCOs as offsetting one another. Our results contribute to the literature on earnings management, diluted EPS, financial reporting costs, and financial innovation.

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Ayers, B.; C. Lefanowicz; AND J. Robinson. Do Firms Purchase the Pooling Method? *Review of Accounting Studies* 7 (2002): 5–32.DOI: 10.1023/A:1017941313169

[Google Scholar](#)

Bayless, M., and S. Chaplinsky. Is There a Window of Opportunity for Seasoned Equity Issuance? *Journal of Finance* 51 (1996): 253–78.

[Web of Science®](#) | [Google Scholar](#)

Bens, D.; V. Nagar; D. Skinner; AND M. Wong. Employee Stock Options, EPS Dilution, and Stock Repurchases. *Journal of Accounting and Economics* 36 (2003): 51–90.

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Billingsley, R., and D. Smith. Why Do Firms Issue Convertible Debt? *Financial Management* 25 (1996): 93–99.

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Bloomfield, R., and R. Libby. Market Reactions to Differentially Available Information in the Laboratory. *Journal of Accounting Research* 34 (1996): 183–207.

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Bushee, B. The Influence of Institutional Investors on Myopic R&D Investment Behavior. *The Accounting Review* 73 (1998): 305–33.

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Carter, M., and L. Lynch. The Consequences of the FASB's 1998 Proposal on Accounting for Stock Option

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Core, J.; W. Guay; AND S. P. Kothari. The Economic Dilution of Employee Stock Options: Diluted EPS for Valuation and Financial Reporting. *The Accounting Review* 77 (2002): 627-52.

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Coxe, T. Convertible Structures: Evolution Continues,"in *Handbook of Hybrid Instruments*, edited by I. Nelken. New York : Wiley, 2000: 15-60.

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Davis-Friday, P.; L. Folami; C. Liu; AND H. Mittelstaedt. The Value Relevance of Financial Statement Recognition vs. Disclosure: Evidence from SFAS No. 106. *The Accounting Review* 74 (1999): 403-24.

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Desai, H.; C. Hogan; AND M. Wilkins. The Reputational Penalty for Aggressive Accounting: Earnings Restatements and Management Turnover."Working paper, Southern Methodist University , 2004.

[Google Scholar](#)

Dietrich, J.; S. Kachelmeier; D. Kleinmuntz; AND T. Linsmeier. Market Efficiency, Bounded Rationality, and Supplemental Business Reporting Disclosures. *Journal of Accounting Research* 39 (2001): 243-68.DOI: 10.1111/1475-679X.00011

[Web of Science®](#) | [Google Scholar](#)

Dunn, K., and K. Eades. Voluntary Conversion of Convertible Securities and the Optimal Call Strategy. *Journal of Financial Economics* 23 (1989): 273-301.DOI: 10.1016/0304-405X(89)90059-7

[Web of Science®](#) | [Google Scholar](#)

Dye, R. Classifications Manipulation and Nash Accounting Standards. *Journal of Accounting Research* 40 (2002): 1125-62.DOI: 10.1111/1475-679X.00084

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---

Finnerty, J. An Overview of Corporate Securities Innovation. *Journal of Applied Corporate Finance* 4 (1992): 23–39.

[Google Scholar](#) 

---

Gompers, P.; A. Metrick; AND J. Ishii. Corporate Governance and Equity Prices. *Quarterly Journal of Economics* 118 (2003): 107–55.DOI: 10.1162/00335530360535162

[Web of Science®](#)  | [Google Scholar](#) 

---

Graham, J. Debt and the Marginal Tax Rate. *Journal of Financial Economics* 41 (1996a): 41–73.DOI: 10.1016/0304-405X(95)00857-B

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---

Graham, J. Proxies for the Corporate Marginal Tax Rate. *Journal of Financial Economics* 42 (1996b): 187–221.DOI: 10.1016/0304-405X(96)00879-3

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---

Graham, J.; C. Harvey; AND S. Rajgopal. The Economic Implications of Corporate Financial Reporting.”Working paper, Duke University , 2003.

[Google Scholar](#) 

---

Greene, W. *Econometric Analysis*. New York : MacMillan, 2003.

[Google Scholar](#) 

---

Healy, P.; S. Kang; AND K. Palepu. The Effect of Accounting Procedure Changes on CEOs' Cash Salary and Bonus Compensation. *Journal of Accounting and Economics* 9 (1987): 7–34.DOI: 10.1016/0165-4101(87)90015-2

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Huson, M.; T. Scott; AND H. Wier. Earnings Dilution and the Explanatory Power of Earnings for Returns. *The Accounting Review* 76 (2001): 589–612.

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Imhoff, E., and J. Thomas. Economic Consequences of Accounting Standards: The Lease Disclosure Rule Change. *Journal of Accounting and Economics* 10 (1988): 277–310.DOI: 10.1016/0165-4101(88)90006-7

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Ingersoll, J. A Contingent-Claims Valuation of Convertible Securities. *Journal of Financial Economics* 5 (1977a): 289–322.DOI: 10.1016/0304-405X(77)90004-6

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Ingersoll, J. An Examination of Corporate Call Policies on Convertible Securities. *Journal of Finance* 53 (1977b): 463–78.

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Jennings, R.; M. LeClere; AND R. Thompson. Evidence on the Usefulness of Alternative Earnings Per Share Measures. *Financial Analyst Journal* (NovDec 1997): 24–33.

[Google Scholar](#)

Judge, G. G.; W. E. Griffiths; R. Carter Hill; H. Luetkepohl; AND T. Lee. *Regression Diagnostics*. New York : Wiley, 1985.

[Google Scholar](#)

Lewis, C.; R. Rogalski; AND J. Seward. Industry Conditions, Growth Opportunities, and Market Reactions to Convertible Debt Financing Decisions. *Journal of Banking and Finance* 27 (2003): 153–81.DOI: 10.1016/S0378-4266(01)00212-6

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Matsunaga, S.; T. Shevlin; AND D. Shores. Disqualifying Dispositions of Incentive Stock Options: Tax Benefits Versus Financial Reporting Costs. *Journal of Accounting Research* (Supplement 1992): 37–68.

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---

Mikkelson, W., and M. Partch. Valuation Effects of Security Offerings and the Issuance Process. *Journal of Financial Economics* 15 (1986): 31–60. DOI: 10.1016/0304-405X(86)90049-8

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---

Murphy, K. Executive Compensation, "in *Handbook of Labor Economics* Vol. 3, edited by O. Ashenfelter and D. Card. New York North Holland, 1999: 2485–2563.

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---

Nelson, M.; J. Elliott; AND R. Tarpley. Evidence from Auditors about Managers' and Auditors' Earnings Management Decisions. *The Accounting Review* 77 (2002): 175–202.

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---

Ohlson, J., and B. Juettner-Nauroth. Expected EPS and EPS Growth as Determinants of Value."Working paper, Arizona State University , 2003.

[Google Scholar](#)

---

Palmrose, Z.; V. Richardson; AND S. Scholz. Determinants of Market Reactions to Restatement Announcements. *Journal of Accounting & Economics* 37 (2004): 59–89. DOI: 10.1016/j.jacceco.2003.06.003

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---

Plesko, G. An Evaluation of Alternative Measures of Corporate Tax Rates. *Journal of Accounting and Economics* 35 (2003): 201–26. DOI: 10.1016/S0165-4101(03)00019-3

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Stein, J. Convertible Bonds as Back Door Equity Financing. *Journal of Financial Economics* 32 (1992): 3–40. DOI: 10.1016/0304-405X(92)90022-P

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---

Tufano, P. Financial Innovation and First-Mover Advantages. *Journal of Financial Economics* 25 (1989): 213–40. DOI: 10.1016/0304-405X(89)90082-2

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Wallace, W. Adding Value Through Accounting Signals. *California Management Review* 46 (2004): 120–37.

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Watts, R., and J. Zimmerman. *Positive Accounting Theory*. Englewood Cliffs, NJ : Prentice Hall, 1986.

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