

CEO Inside Debt Incentives and Corporate Tax Sheltering

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Compliance with Data Policy for the Journal of Accounting Research

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1. A description of which author(s) handled the data and conducted the analyses

All authors were involved in the data collection. Sabrina Chi collected some data, merged all the data, and conducted the regression analyses. The details of our data collection and analyses are provided below (please see #2).

2. A detailed description of how the raw data were obtained or generated, including data sources, the date(s) on which data were downloaded or obtained, and the instrument used to generate the data (e.g., for surveys or experiments). We recommend that more than one author is able to vouch for the stated source of the raw data.

- a) The data for our primary analyses are from four sources: Compustat Fundamentals Annual database (for financial statement variables), CRSP database (for stock return variables), the Compustat ExecuComp database (for compensation-related variables), and tax shelter scores estimated based on Lisowsky's (2010) model confidentially shared by the anonymous referee. We used the ExecuComp data in March 2015 to construct CEO and CFO inside debt holdings (i.e., present values of accumulated pension and deferred compensation), CEO and CFO age, and equity-based and cash compensation variables. Juan Manuel Sanchez calculated the CEO and CFO compensation variables, including inside debt, total equity holdings, delta, vega, and cash compensation (salary + bonus).¹ The tax shelter score dataset based on Lisowsky's (2010) model was downloaded on November 6, 2015, the date on which the referee made the dataset available to us.

¹ The *delta* and *vega* were calculated following the Core and Guay (1999; 2002) approximation approach. The resulting estimates were compared against the estimates provided by Coles et al. (2013), and the correlation between our estimates and those provided by Coles et al. (2013) are in excess of 95%.

- b) Sabrina Chi downloaded the lists of “Best Companies to Work for” from the website of *Fortune* magazine on February 11, 2015.²
- c) We hand collected pension freezing data from the Department of Labor Form 5500 (<http://www.dol.gov/ebsa/foia/foia-5500.html>). Juan Manuel Sanchez received the data in April 2015. The data collection was handled by Laurie Corradino, a PhD student at Texas Tech University.
- d) We used SEC’s EDGAR database and ISYS DirectEDGAR to hand collect the results of “say on pay” votes in the SEC Form 8-K, Item 5.07: Submission of Matters to a Vote of Security Holders. Sabrina Chi received the data on July 12, 2016. The data collection was handled by Blair Marquardt, a PhD student at Texas Tech University.
- e) The remaining control variables (BM , $CAPEX$, $\sigma(RET)$, $\sigma(ROA)$, and $LimitedCFO$) and Altman Z-Scores required data from the Compustat and CRSP Databases. Sabrina Chi downloaded the raw data to compute these variables on May 1, 2015. Sabrina Chi conducted all statistical analyses.
- f) Sabrina Chi downloaded bond ratings from Standard & Poor’s on May 5, 2015.
- g) Sabrina Chi received the data of the probability of covenant violation in private debt contracts from Ed Owens on August 4, 2016.
- h) Sabrina Chi downloaded fines imposed by the Internal Revenue Service (IRS) from the Tax Footnote dataset in the Audit Analytics database on August 28, 2015.
- i) We obtained the data on clawback provisions from two sources. The GMI Rating Database provided the data on clawback provisions 2008 onwards. Juan Manuel Sanchez downloaded the data on June 11, 2015. For the period 2006-2007, the data on clawback provisions were hand-collected from proxy statements (DEF14A and/or 10-Ks). Juan Manuel Sanchez received the hand-collected data on July 22, 2015. The data collection was handled by Hal Elkins, a PhD student at Texas Tech University.
- j) We obtained the data on cash-out provisions in pension plans, particularly supplemental executive retirement plans (SERP), from proxy statements.³ Juan Manuel Sanchez

² http://archive.fortune.com/magazines/fortune/bestcompanies/2006/full_list/
http://archive.fortune.com/magazines/fortune/bestcompanies/2007/full_list/
http://archive.fortune.com/magazines/fortune/bestcompanies/2008/full_list/
http://archive.fortune.com/magazines/fortune/bestcompanies/2009/full_list/
http://archive.fortune.com/magazines/fortune/bestcompanies/2010/full_list/
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http://archive.fortune.com/magazines/fortune/bestcompanies/2012/full_list/
http://archive.fortune.com/magazines/fortune/bestcompanies/2013/full_list/

³ We used the SEC analytics suite to identify whether a SERP had a cash-out provision. We then verified the cash-out provision by accessing the firm’s actual documents on EDGAR and reading about the detailed description of the SERP. After we located the section where the cash-out provision was mentioned, we compared the language in the document (e.g., DEF 14a) with the text in the SEC analytics suite to see if the same language was used over multiple years. If we were able to verify that the exact language was used over multiple years, we would use the SEC

received the hand-collected data on August 31, 2015. The data collection was handled by Min Kim (a PhD student at Arizona State University), and Jason Talakai and Savannah Guo (PhD students at Texas Tech University).

- k) Shawn Huang downloaded the raw data from RiskMetrics to compute the percentage of independent board members (Ind_Board) and determine whether a CEO holds a position of board chair (CEO_Chair) on August 29, 2015.

All authors vouch for the stated sources of the raw data.

3. If the data are obtained from an organization on a proprietary basis, the authors should privately provide the editors with contact information for a representative of the organization who can confirm data were obtained by the authors. The editors would not make this information publicly available. The authors should also provide information to the editors about the data sharing agreement with the organization (e.g., non-disclosure agreement, any restrictions imposed by the organization on the authors with respect to publishing certain results).

The tax shelter score dataset constructed based on Lisowsky's (2010) model was confidentially shared by the anonymous referee.

4. A complete description of the steps necessary to collect and process the data used in the final analyses reported in the paper. For experimental papers, we require information about subject eligibility and/or selection, as well as any exclusion criteria.

The data description is provided in sections 3 and 4.1 of the paper. #2 above and our SAS file "CHS_Code" provide additional details of the steps involved in collecting and processing the data.

5. Prior to final acceptance of the paper, the computer program used to convert the raw data into the dataset used in the analysis plus a brief description that enables other researchers to use this program. Instead of the program, researchers can provide a detailed step-by-step description that enables other researchers to arrive at the same dataset used in the analysis. The purpose of this requirement is to facilitate replication and to help other researchers understand in detail how the sample was formed, including the treatment of outliers, Winsorization, truncation, etc. This programming is in most circumstances not proprietary. However, we recognize that some parts of the data generation process may indeed be proprietary or otherwise cannot be made publicly available. In such cases, the

analytics suite data to code the cash-out provision variable in the years after the first observation. If different (or inconsistent) language was used, we would just use the EDGAR filing to define whether a cash-out option was included in the SERP for each year. During the process, we did notice that some of the firms had missing data. In such cases, we read the missing year's proxy statement or 10-K in EDGAR and coded the cash-out provision variable accordingly.

authors should inform the editors upon submission, so that the editors can consider an exemption from this requirement.

We used SAS to work on the raw data. In the SAS file “CHS_Code” we merged the data from ExecuComp, Compustat, and CRSP with tax shelter scores constructed based on Lisowsky’s (2010) model and generated our primary sample for the empirical analysis.

6. Data and programs should be maintained by at least one author (usually the corresponding author) for at least six years, consistent with National Science Foundation guidelines.

We will maintain all data and SAS programs for at least six years except for the tax shelter score measure constructed based on Lisowsky’s (2010) model.

References

Core, J. E., and W. R. Guay, 1999. The Use of Equity Grants to Manage Optimal Equity Incentive Levels. *Journal of Accounting and Economics* 28: 151–84.

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Coles, J. L.; N. D. Daniel; and L. Naveen, 2013. Calculation of Compensation Incentives and Firm-Related Wealth Using ExecuComp: Data, Program and Explanation, *Working Paper*, Drexel University. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2296381

The data associated with the paper above is available at: <https://sites.temple.edu/lnaveen/data/>